Major Transport Projects Facilitation Act 2009

East West Link (Eastern Section) Project

Assessment Committee Report

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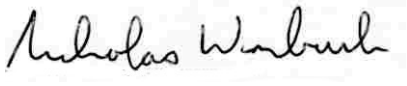
Planning Panels Victoria

Major Transport Projects Facilitation Act 2009

Assessment Committee Report pursuant to Section 73 of the Act

East West Link (Eastern Section) Project

Kathryn Mitchell, Chair

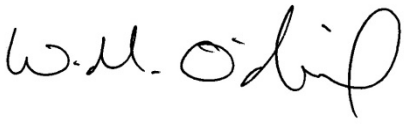


Nick Wimbush, Deputy Chair

Lyn Denison, Member

Des Grogan, Member

Jim Holdsworth, Member



William O'Neil, Member

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Abbreviations and Acronyms

AADT	Annual Average Daily Traffic Volume
AAQ NEPM	Ambient Air Quality NEPM
AAWDT	Annual Average Week day Traffic Volume
ACH	Aboriginal Cultural Heritage
AILA	Australian Institute of Landscape Architects
AQM	Air Quality Management
ASC NEPM	Assessment Site Contamination NEPM
AWDT	Average Weekly Daily Traffic
BAGs	Biodiversity Assessment Guidelines
BIA	Business Impact Assessment
CBD	Central Business District
CCG	Combined Community Groups
CEMP	Construction Environment Management Plan
CHMP	Cultural Heritage Management Plan
CIS	Comprehensive Impact Statement
CLC	Community Liaison Committee
CO	Carbon Monoxide
Committee	Assessment Committee appointed to consider the CIS under Terms of Reference issued by the Minister for Planning
CoM	City of Melbourne
CSL	Commonwealth Serum Laboratories
DART	Doncaster Area Rapid Transit
DDI	Diverging Diamond Interchange
DDO	Design and Development Overlay
DEPI	Department of Environment and Primary Industry
dB	Decibel – measurement of noise
dBA	Expression of the relative loudness of sound in air as perceived by the human ear
DBH	Diameter at Breast Height
DNRE	Department of Natural Resources and Environment
DSE	Department of Sustainability and Environment
DSEWPaC	Department of Sustainability Environment Water

	Populations and Communities
DTPLI	Department of Transport, Planning and Local Infrastructure
ECG	Essendon Community Garden
ESCAPE	European Study of Cohorts for Air Pollution Effects
Eddington Report	The report entitled *"Investing in Transport – East West Link Needs Assessment*" A Study prepared by Sir Rod Eddington, March 2008
EES	Environment Effects Statement
EMF	Environmental Management Framework
EMP	Environmental Management Plan
EMS	Environmental Management System
EPA	Environment Protection Authority
EP Act	*Environment Protection Act* 1970
EPBC Act	*Environment Protection and Biodiversity Conservation Act* 1999
EVC(s)	Ecological Vegetation Class(es)
EWL	East West Link
EWLNA	East West Link Needs Assessment
FBTT	Fishermans Bend 220 kV Transmission Tower
FFG Act	*Flora and Fauna Guarantee Act* 1988
Full East West Link	The 18 kilometre length of road extending from the Eastern Freeway at Hoddle Street to the Western Ring Road at Sunshine West
ha	hectares
Hha	Habitat hectares
HCV	Heavy Commercial Vehicles
Hearing	Public Hearing conducted by the Assessment Committee
HO	Heritage Overlay
IMP	Impact Management Plan
IMPA	Inner Melbourne Planning Alliance
IARC	International Agency for Research into Cancer
km	kilometre or kilometres
kph	kilometre(s) per hour
kV	kilovolt

L_{A10}	Noise level exceeded for 10% of a specified time period
L_{Aeq}	Equal to the average noise over a specified period
LCVs	Light Commercial Vehicles
LMA	Linking Melbourne Authority
LOT	Large Old Tree
LPPF	Local Planning Policy Framework
m	metre or metres
Mapbook	The mapbook which forms part of the CIS
MOT	Medium Old Tree
MoU	Memorandum of Understanding between the LMA and City of Melbourne
MPCCC	Moonee Ponds Creek Coordination Committee
MSS	Municipal Strategic Statement
MTPF Act	*Major Transport Projects Facilitation Act* 2009
MVCC	Moonee Valley City Council
NEPC	National Environment Protection Council
NEPM	National Environment Protection Measure
NO_2	Nitrogen Dioxide
OHS	Occupational Health and Safety
P&E Act	*Planning and Environment Act* 1987
PAHs	Polycyclic Aromatic Hydrocarbons
Part A	The part of the Project that extends from the western end of the Eastern Freeway in Clifton Hill and connects to CityLink in Parkville, and which includes the Ormond Road off ramp
Part B	The part of the Project comprising the elevated viaduct along the western side of CityLink from Mount Alexander Road to Footscray Road
PB	Parsons Brinkerhoff
PEM	Protocol for Environmental Management
PIARC	Permanent International Association of Road Congress
PIW	Prescribed Industrial Waste
$PM_{2.5}$	Particulate matter with an equivalent aerodynamic diameter of 2.5 microns or less
PM_{10}	Particulate matter with an equivalent aerodynamic diameter

	of 10 microns or less
Proposed Project Boundary	The Proposed Project Boundary delineated as a blue dotted line on each of the detailed road alignment plans contained within the Map Book, being drawings EWL-DES-DR-1100 - EWL-DES-DR-1130
PPP	Public Private Partnership
PPV	Planning Panels Victoria
PTV	Public Transport Victoria
RACV	Royal Auto Club Victoria
RATs	Residents Against the Tunnels
Reference Project	The Reference Project as described in the CIS
RFI	Request for Further Information
s	Section (of an Act)
s57(4) response	The response of the LMA to the request of the Committee for further information pursuant to Section 57(4) of the MTPF Act
Scoping Directions	The scoping direction for the Project published by the Minister for Planning on 27 May 2013
SEPP	State Environment Protection Policy
SEPP (AAQ)	State Environment Protection Policy (Ambient Air Quality)
SEPP (AQM)	State Environment Protection Policy (Air Quality Management)
SEPP N-1	State Environment Protection Policy (Control of Noise from Industry, Commerce and Trade)
SEPP (PMCL)	State Environment Protection Policy (Prevention and Management of Contaminated Land)
SEPP (WoV)	State Environment Protection Policy (Waters of Victoria)
SIA	Social Impact Assessment
SIDRA	Signalised Intersection Design and Research Aid
SPPF	State Planning Policy Framework
SNRP	Safety Net for Royal Park
SRV	Sport and Recreation Victoria
Terms of Reference	Terms of Reference issued by the Minister for Planning to the Committee on 21 October 2013
The Project	The East West Link (Eastern Section) declared by the Premier of Victoria pursuant to s10 of the MTPF Act on 20 December

	2012
TIA	Traffic Impact Assessment
TI Act	*Transport Integration Act* 2010
TBM	Tunnel Boring Machine
UDF	Urban Design Framework
USEPA	United States Environmental Protection Agency
VHT	Vehicle hours travelled
VKT	Vehicle kilometres travelled
VLC Model	The Zenith Strategic Transport Model developed by Veitch Lister Consulting, used to model traffic impact for the purpose of informing the CIS
VOC	volatile organic compounds
vpd	Vehicles per day
VPP	Victoria Planning Provisions
VTNP	VicRoads Traffic Noise Policy
WHO	World Health Organisation
WMTS	West Melbourne Terminal Station
YCAN	Yarra Climate Action Now

NOTE: The Committee has accessed a number of tables and plans from the LMA in this report. The following disclaimer is provided by the LMA:

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Executive Summary and Recommendations

EXECUTIVE SUMMARY

1. On 20 December 2012, the Victorian Premier declared the "*Proposed freeway standard link between the Eastern Freeway and the Tullamarine Freeway generally along the Alexandra Parade corridor, with a further southerly connection to the Port of Melbourne area*" to be a declared project pursuant to the *Major Transport Projects Facilitation Act* 2009. This Project is known as the East West Link (Eastern Section) Project.
2. The Project comprises two parts. Part A of the link extends from the Eastern Freeway near Hoddle Street to CityLink, and Part B extends from CityLink through to the Port of Melbourne, along a parallel viaduct with CityLink. Ultimately it is proposed that Part B will link to the Western Ring Road (this Project is known as WestLink).
3. It is the policy position of the State Government to build the East West Link, which is included in the State policy *Plan Melbourne*, the Government's new metropolitan strategy, adopted and released on 19 May 2014.
4. The East West Link (Eastern Section) Project Assessment Committee was appointed by the Minister for Planning on 21 October 2013 under the provisions of sections 35 and 235 of the *Major Transport Projects Facilitation Act* 2009 to assess the East West Link (Eastern Section) Comprehensive Impact Statement and to make recommendations to the Minister for Planning in accordance with section 73 of the Act. On the same date, the Minister for Planning signed Terms of Reference for the Committee (Appendix A).
5. The proponent for the East West Link Project is the Linking Melbourne Authority.
6. The catalyst for this Project came from a study by Sir Rod Eddington in 2008 *Investing in Transport – East West Link Needs Assessment.* The Eddington Report reviewed a range of transport options, and provided twenty recommendations, two of which related directly to the Eastern Freeway corridor:
    - *Planning work should commence on the staged construction of a new 18 kilometre cross city road connection extending from the western suburbs to the Eastern Freeway.*
    - *Public transport to the Doncaster region is best provided by rapid, high quality bus services, additional bus priority measures and a major new bus-rail interchange at Victoria Park.*
7. The proposal under review by this Committee is more than a link between the Eastern Freeway and CityLink. It provides for a flyover structure at Hoddle Street, partial access and egress at Elliott Avenue in Royal Park, an off ramp to Ormond Road and widening of parts of both CityLink and the Eastern Freeway. All works are included within a Proposed Project Boundary.
8. The Comprehensive Impact Statement provides the basis for consideration of the impacts of the Project. The Comprehensive Impact Statement contains a Reference Project as one possible option on how the Project can be delivered, but the Reference Project has no formal status. As such, there is no definitive Project before the Committee for evaluation. Rather, what is before the Committee is essentially a freeway

reservation in a Proposed Project Boundary, with ancillary features (such as ramps) to support this proposal.

9. The Committee supports linking the Eastern Freeway to CityLink/Tullamarine Freeway, predominantly via a tunnel.

10. There is demonstrated merit in removing through traffic from the Eastern Freeway which uses the Alexandra Parade/Princes Street/Cemetery Road/Macarthur Avenue and Elliott Avenue route to get to CityLink and vice versa. The tunnel should reduce the volume of surface traffic along that route in the short to medium term and provide opportunities for road enhancements and public amenity improvements, as well as improvement to public transport levels of service and pedestrian and cycling links.

11. The Committee accepts there are State and metropolitan economic and community benefits in linking the Eastern Freeway with CityLink, but considers the direct impacts on local communities need to be better resolved.

12. To facilitate the Reference Project, some 105 residential properties and 35 commercial properties are proposed to be acquired within the Proposed Project Boundary. In addition, there are 258 properties affected through below ground strata acquisition. The direct and indirect impacts are broader than this, and adjacent communities will be adversely affected by both the construction and operation of this Project.

13. Much of the Comprehensive Impact Statement and the accompanying Technical Reports dealt with evaluating Part A of the Project, with significantly less evaluation of Part B.

14. In providing its support for linking the Eastern Freeway to CityLink, the Committee makes the following findings about Part A and the Reference Project. The alignment for the link between the Eastern Freeway and the northbound connection to CityLink and the Tullamarine Freeway is supported, subject to the revisions recommended in this report. Some of the key modifications include:

    (a) The eastern portal and ventilation stacks should be relocated east of Hoddle Street and the Hurstbridge/South Morang Railway Line.

    (b) The proposed flyover at Hoddle Street should not be constructed as it is shown in the Reference Project, due to the:
        - Significant predicted reduction in peak hour and daily traffic volumes travelling north on Hoddle Street turning east onto the Freeway.
        - Heritage values of the Bendigo Street area and the Shot Tower.
        - Social impacts of acquisition (and on those living nearby).
        - Amenity impacts associated with the flyover.

        More work needs to be undertaken to determine the appropriate interchange design to cater for this east-bound movement on to the Eastern Freeway from Hoddle Street.

    (c) Bored tunnel construction should be extended at least as far east as Wellington Street and if necessary, the alignment of the proposed tunnels should be relocated to manage the construction process to avoid the need for the proposed sidetrack. This is due to unacceptable, and on the material presented to the Committee, unnecessary, impacts on existing residents and businesses (not only those to be acquired, but those in close proximity).

(d) There should be no interchange at Elliott Avenue in Royal Park, however, there should be further investigation of other options to connect the East West Link to Flemington Road.

(e) Contaminated spoil is not to be stored within Royal Park, Manningham Parklands, Ross Straw Field or the former Fitzroy Gasworks site.

(f) The location of the western portal should be further investigated. Consideration should be given to an area adjacent to Oak Street north of the Manningham Street intersection.

15. The Committee considers that the impacts of the southbound connection of Part A to CityLink, and its connection to Part B of the Project have not been adequately addressed. The Committee concludes further work should be undertaken to better resolve these connections through the identification of a more appropriate location outside the Proposed Project Boundary. This further work should occur in association with identifying an appropriate Part B alignment.

16. The Committee makes the following findings about Part B and the Reference Project. Part B has not been adequately assessed, and should be set aside until the proposed widening of CityLink and the Tullamarine Freeway, and the proposed WestLink connection is better understood and resolved. This should take into account a number of key issues, including:

(a) Resolution and development of Part B with greater integration with the Arden-Macaulay Structure Plan.

(b) Key locational impacts such as the Vision Australia premises, SP AusNet site, the Flemington Housing estate (and its playgrounds, gardens and the community centre), and the apartments at 18 Bent Street.

(c) The alignment of the Moonee Ponds Creek and the potential to enhance its function as an open space corridor as part of the Arden-Macaulay redevelopment.

(d) The reservation of the proposed WestLink alignment.

17. This may require a new or supplementary Comprehensive Impact Statement, but it could be undertaken as part of the WestLink and the CityLink/Tullamarine Freeway upgrade planning processes.

18. All such reviews for the southbound connection of the East West Link to CityLink and Part B should be undertaken in conjunction with the Cities of Melbourne and Moonee Valley, and other relevant agencies, including the EPA, Port of Melbourne Corporation, VicTrack, VicRoads, the Office of Housing and others, as well as landholders and affected community organisations.

19. Subject to these findings, the Committee supports Part A of the East West Link (Eastern Section) Project providing an important road link from the Eastern Freeway to CityLink/Tullamarine Freeway northbound, in accordance with its recommended and modified Applicable Approvals, the Incorporated Document, Performance Requirements and revised Planning Scheme Amendment GC2.

20. While the Committee is critical of aspects of the Comprehensive Impact Statement and the position of the LMA, it recognises that all parties involved in this process, including

the LMA and its consultants retained to prepare the background studies, have been working under challenging timeframes to undertake investigations and produce documentation for the Project.

21. The reliance on the Reference Project as the key expression of how the Project might be delivered has created angst and confusion in the community. In essence, the Reference Project, while not a real project, has been considered and assessed as such, and it has failed to deliver an appropriate outcome.

22. The Committee considers that the process of reaching the design that is the Reference Project has not been one that follows a logical path of identifying viable options, evaluating them, engaging the community in the process at an early stage when such input can be incorporated, testing the preferred option against robust criteria, adjusting it and then proposing it with supporting justification.

23. The Committee is concerned that the Reference Project has preceded the Urban Design Framework and the Urban Design Principles, and that it is not an evident response to them. While the Urban Design Principles include many unquantifiable statements, they collectively represent a set of objectives against which any design for the Project should be assessed. The Reference Project fails to meet these objectives on many levels. The Committee does not consider the Reference Project should be used as the template for the final design of the Project. The Urban Design Principles, in particular s1.1, aspire to a level of design excellence that require this Project to be more than an "*acceptable outcome*". The cost and disruption to the community through which it is to be constructed warrant best practice.

24. Further, the Committee is concerned about the intended reliance on the successful contractor to deliver the Project and to be accountable for managing all aspects of the design, planning, environmental and construction framework.

25. The Committee is required by section 73 of the *Major Transport Projects Facilitation Act* 2009 to make recommendations to the Minister for Planning to grant all, or some of the applicable approvals that it is necessary for the declared Project or part of the declared Project; or refuse to grant all of the applicable approvals that are necessary for the declared Project or a part of the declared Project.

26. Section 69 of the *Major Transport Projects Facilitation Act* 2009 enables the Committee in exceptional circumstances to recommend to the Minister for Planning that the Minister directs the Project Proponent to undertake a supplementary assessment. The Committee has concluded that some elements of Part A require change, and that Part B of the Project is unresolved and should be set aside at this stage. The Committee has considered whether it should make a recommendation pursuant to section 69. It has however, concluded that the circumstances and announcements made subsequent to the close of the Hearing affecting Part B take matters beyond the scope of the criteria set out in section 69(1) that would warrant the recommendation for a supplementary assessment.

27. Section 73(3) of the *Major Transport Project Facilitation Act* 2009 provides that if the Committee were to recommend the grant of all or some of the applicable approvals required, it must specify, inter alia, the conditions applicable to such approval.

Accordingly, the Committee recommends that a modified Part A be approved subject to conditions specified in this Report.

28. Whilst the Committee has recommended that Part B be set aside at this stage, in the event that this recommendation is not accepted, the Committee has outlined conditions that should be adopted in taking Part B forward.

RECOMMENDATIONS

For the reasons outlined in this report, the Committee makes the following recommendations, grouped as follows:

- Primary Recommendations, numbered 1 to 4.
- Issue-Specific Recommendations, numbered 5 to 36.
- Further recommendations if the Primary Recommendations are not supported and Part B proceeds, numbered 37 to 43.

Primary Recommendations

1. Issue the Applicable Approvals for Part A, subject to Primary Recommendations 2 and 3, and Issue-Specific Recommendations 5 to 36 for:

a) Works Approval for the tunnel ventilation system under the provisions of section 19B of the *Environment Protection Act* 1970.

b) Planning Scheme Amendment GC2, under the provisions of sections 8, 29 and 35 of the *Planning and Environment Act* 1987.

c) Permit under section 74 of the *Heritage Act* 1995 to carry out works or activities in relation to five registered heritage places.

d) Consent under section 129 of the *Heritage Act* 1995 for impact on archaeological relics.

e) Consent under Clause 1 of schedule 2 of the *Road Management Act* 2004 allowing connection to a freeway.

f) Licence under section 67 of the *Water Act* 1989 required to construct, alter, operate or decommission works on a waterway, including works to deviate a waterway.

Note: ***As the Committee has recommended that Part B of the Project be set aside, a comment from the Secretary of Department of Environment and Primary Industries under section 66 of the Conservation, Forests, and Lands Act 1987 for works across and under the Moonee Ponds Creek is not required, unless Primary Recommendation 4 is not accepted.***

2. Adopt Planning Scheme Amendment GC2 as it relates to approval of Part A, subject to:

a) Adopting the revised Incorporated Document as shown in Appendix D.

b) Applying the Performance Requirements to the Project as shown in Appendix E.

c) Including the Performance Requirements as shown in Appendix E in the Incorporated Document '*East West Link Project Incorporated Document September 2013*'.

d) Applying the Urban Design Principles to the Project as shown in Appendix F.

e) Including the Urban Design Principles as shown in Appendix F in the Incorporated Document '*East West Link Project Incorporated Document September 2013*'.

f) Deleting the exhibited Design and Development Overlays until the final design is adopted.

3. Part A of the East West Link (Eastern Section) from the Eastern Freeway to CityLink, primarily in tunnel, be subject to the following changes:

a) Locating the eastern portal and ventilation stacks to the east of Hoddle Street and the Hurstbridge/South Morang Railway Line.

b) Deleting the proposed flyover as shown in the Reference Project.

c) Extending the bored tunnel construction at least as far east as Wellington Street.

d) Removing the proposed temporary sidetrack north of Alexandra Parade.

e) Deleting the connection between the Project and Elliott Avenue, due to its visual intrusion into this part of Royal Park and its impact on the landscape values of the Park, in favour of other means of achieving the proposed traffic movements.

f) Minimise the extent of cut and cover construction in Alexandra Parade and Royal Park.

g) Removing the southbound connections to and from CityLink/Tullamarine Freeway and Part B of the Project identified in the CIS map book as elevated structures over Ross Straw Field [“*Footscray Rd to EWL (Stage One)*” and *“EWL (Stage One) to Footscray Rd”*)].

h) Further investigating and resolving the location of the western portal and ventilation stacks in an area adjacent to Oak Street north of the Manningham Street intersection.

i) Implementing the Issue-Specific Recommendations 5 to 36.

4. Set aside Part B and the southbound connection of the Project, and do not issue the relevant Applicable Approvals, until the recently announced works on CityLink and the Tullamarine Freeway, and WestLink are clarified. The Committee recommends the review of a number of aspects of Part B be undertaken as part of a new or revised Comprehensive Impact Statement in conjunction with the planning process for WestLink (and other road improvements). If this recommendation is not supported, the Committee recommends that the alignment and proposed viaduct for Part B needs to be reviewed to consider placing it in-tunnel or aligning it on the east side of the existing CityLink.

Issue-Specific Recommendations

Traffic and Transport

5. Locate the portals and ventilation stacks east of the Hurstbridge/South Morang rail bridge, (whether or not the road design in the area east of the Reference Project's portals changes), with openings for ramps as required. Investigate the capacity to cover roads which are below natural ground level as far east as the relocated portals as a means of creating useable passive public open space and to improve north-south pedestrian and cycle links in this area.

6. **Prohibit road construction at grade beyond the northern road reservation boundary on Alexandra Parade between Smith Street and Gold Street, and delete that area from the Proposed Project Boundary. Sequence the construction process and the management of traffic on Alexandra Parade during construction so that all ground level activity occurs within the Alexandra Parade road reserve, thereby negating the need for the sidetrack and the proposed property acquisition for it.**

7. **Ensure the tunnel alignment does not require property acquisition to the north of the Alexandra Parade northern road reservation boundary.**

8. **Construct the connection serving the northbound Hoddle Street movement east onto the Eastern Freeway at a reduced level no higher than the existing pavement level of Hoddle Street. Design to ensure there are no above ground structures (apart from necessary overhead signs, lighting and sound barriers) at the Eastern Freeway/Hoddle Street interchange, and resolve the traffic movement served by the flyover in a less visually intrusive manner that requires no acquisition of residential property.**

9. **Reduce the carriageway cross section of Alexandra Parade and Princes Street to constrain traffic movement to improve north-south connections and increase 'green time' at signalised intersections for trams, vehicles, bicycles and pedestrians.**

10. **Revise the ramp connections between the western portal and CityLink North as shown on the Reference Project, and investigate alternative alignments further to the north-east.**

11. **Review the design of the Ormond Road exit ramp and consider the merits and functionality of the alternative proposed in the evidence of Mr O'Brien.**

12. **Identify areas for traffic monitoring in selected local streets in the Moreland, Moonee Valley, Yarra, Melbourne, Darebin, Banyule and Boroondara Council areas, now and at two year intervals during construction and up to two years after completion of the Project, and fund reasonable local area traffic management works that need to be implemented to reduce identified adverse traffic impacts attributable to the Project.**

<u>Land Use and Infrastructure</u>

13. **Facilitate a process that enables the opportunity for voluntary purchase agreements with property owners that have an interface with, or are impacted by the Project that are located outside the Proposed Project Boundary.**

14. **Negotiate and sign a memorandum of understanding as a condition of approval for sporting facility and relocation works (similar in style and scope to that entered into between the City of Melbourne and the LMA), between the LMA and the City of Moonee Valley, informed by the intervention and mitigation measures outlined in Document 515.**

<u>Visual Impacts, Urban Design and Landscape</u>

15. **Undertake and implement an urban design study for the Project corridor between Lygon Street and the portals east of the Hurstbridge/South Morang railway line, aimed at enhancing reduced through traffic volumes and providing improved**

amenity for abutting land uses, pedestrians and bicycle movements, and maximising open space and landscaping within these parameters.

16. **Assess and evaluate the final design for the Project against the Urban Design Charter for Victoria and the Urban Design Principles in Appendix F.**

17. **Appoint an independent design assessor or assessment Panel to ensure that all stages of design, documentation, tendering and construction incorporate the Urban Design Charter for Victoria and the Urban Design Principles.**

18. **Ensure that following the completion of the Project, there is no net loss of passive or active public open space.**

19. **Avoid any temporary or permanent construction related activity or laydown areas in the following parts of Royal Park:**
    a) **Australian Native Garden.**
    b) **Trin-Warren Tam-boore Wetlands and White's Skink habitat (north of a line that runs due east-west through the Ross Straw Field Sports Pavilion from the Upfield Railway Line to Oak Street).**
    c) **Remnant Grassy Woodland Ecological Vegetation Class.**

Noise and Vibration

20. **Regard the north south corridor at the western end of the Project as a single road transport corridor. Where increased total noise is attributed to the Project, the Concession Holder for the East West Link (Eastern Section) is responsible for meeting traffic noise criteria in the corridor.**

21. **Apply noise prediction, assessment, monitoring and management for the Project as shown in the revised Performance Requirements in Appendix E, including:**
    a) **A single day time traffic noise criterion.**
    b) **A night time traffic noise criterion.**
    c) **Open space criterion.**
    d) **Internal noise mitigation where necessary in accordance with the Australian standard.**

Air Emissions and Air Quality

22. **Undertake a detailed air modelling assessment to guide the final design of the tunnel, tunnel ventilation system and surface roads including elevated viaducts using $PM_{2.5}$ and PM_{10} as the key indicators for the assessment.**

23. **Manage the Project air emissions in accordance with the Performance Requirements in Appendix E, including:**
    a) **Make provision for retrofitting pollution control equipment in ventilation stacks for PM_{10} and $PM_{2.5}$.**
    b) **Fit air pollution control equipment into the tunnel ventilation systems if the modelling for the final design shows that the particulate levels are greater than 30% of the applicable air quality standards.**
    c) **Adopt the Carbon Monoxide objectives used for in-tunnel air quality for CityLink and EastLink.**
    d) **Include a mid-tunnel air intake structure in the final design of the tunnel.**

24. Consider design elements for the final design to minimise air pollution levels in sensitive areas to minimise the impact on public health.

25. Issue the Works Approval for the tunnel ventilation system conditional on:

- **a. Conducting further detailed air modelling assessment on the final design which includes moving the ventilation stacks east of Hoddle Street and the Hurstbridge/South Morang railway line and the ventilation stack west of Oak Street.**
- **b. Including a mid-tunnel air intake in the final design.**
- **c. Adopting the Carbon Monoxide in-tunnel air quality standards used in CityLink and EastLink for the Project.**
- **d. Making provision to retrofit pollution control equipment in the ventilation stacks for PM_{10} and $PM_{2.5}$.**
- **e. Requiring pollution control equipment if PM_{10} or $PM_{2.5}$ levels are greater than 30% of the applicable air quality standard.**
- **f. Undertaking an air monitoring program in Clifton Hill and in the vicinity of the ventilation stacks for a period of 12 months prior to the tunnel opening and 12 months post opening. Repeat the monitoring 5 years post opening of the tunnel.**

<u>Cultural Heritage</u>

26. Retain the cultural heritage of the Gold Street Precinct (HO321) and Clifton Hill Western Precinct (HO317) by avoiding property acquisition and demolition in these precincts. If this recommendation is not accepted, extend the Proposed Project Boundary to include all properties on the west side of Bendigo Street and the south side of Hotham Street east of Bendigo Street, and remove these properties from the Heritage Overlay.

27. Prohibit above ground structures (apart from necessary overhead signs, lighting and sound barriers) at the Eastern Freeway/Hoddle Street interchange to preserve the visual integrity of the Shot Tower.

28. Undertake further work to ensure that if there is to be any permanent intervention of East West Link in Royal Park that may impact the cultural heritage of the Park, a comprehensive study be carried out to identify the specific impacts and to determine appropriate ameliorative measures and that the design of the Project is modified to minimise such impacts.

<u>Surface and Groundwater</u>

29. Provide a copy of the final report of Dr Sandy Bennet, (prepared for the Assessment Committee and as attached in Appendix G), to the shortlisted tenderers for their consideration.

30. Issue consent under Section 67 of the *Water Act* 1989 for works on waterways in Merri Creek and Moonee Ponds Creek.

Native Vegetation and Biodiversity

31. Approve Planning Scheme Amendment GC2 to allow removal of native vegetation under sections 8, 29 and 35 of the *Planning and Environment Act* 1987, subject to the adoption of the recommendations of the Committee, including the Performance Requirements.

Solid Waste and Contamination

32. Undertake assessment and management of contaminated materials in accordance with the Performance Requirements in Appendix E, including:

- **a) Detailed site investigations prior to the excavation of any potentially contaminated soil.**
- **b) Environmental monitoring and community engagement plans.**
- **c) Managing air pollutants where these may be released in accordance with the requirements of the State Environment Protection Policy (Air Quality Management).**
- **d) Prohibition of the storage of contaminated spoil in sensitive locations.**

33. Store clean spoil at the Manningham Parklands/Ross Straw Field or the former Fitzroy Gasworks site, in accordance with the implementation of strict dust management practices, and not within 25 metres of the White's Skink habitat or Trin Warren Tam-boore wetlands.

34. Adopt Haulage Route 3 (as identified in the Transport Impact Assessment) for the transportation of construction material and solid waste to avoid sensitive uses, residential areas and minimise impacts on local communities.

Social and Business Impacts

35. Negotiate with Urban Camp to resolve a fair and satisfactory relocation and/or temporary closure strategy and associated compensation package.

Environmental Management Framework

36. Amend the Environmental Management Framework to include the following:

- **a) Establishment of a Community Liaison Committee with an Independent Chair.**
- **b) Provide a mechanism for public reporting of compliance against the Environmental Management Framework and Environmental Management Plans (this may be the Independent Auditors report which becomes available on the Linking Melbourne Authorities' website for instance).**
- **c) Provide a mechanism for complaints management that is transparent to the public and where follow up action is reported.**
- **d) Dust, noise, surface water, and groundwater management plans as well as further site-specific data to be collected on groundwater quality, levels and flow to better inform the risk assessment and development of mitigation measures as part of the Environmental Management Plans.**

Recommendations relating to Part B of the Project

If the Primary Recommendations of the Committee are not accepted and Part B is approved, the following additional recommendations apply:

37. Undertake a master planning process in consultation with the relevant stakeholders to identify appropriate locations proximate to residents of the Debney's Park Estate to relocate the following community facilities:

- **a) Flemington Community Centre.**
- **b) Debney's Park Playground.**
- **c) Flemington Community Garden.**

Implementation of the master plan and works should be at no cost to the community, stakeholders or to Moonee Valley City Council. Avoid where possible the location of playgrounds which young children frequent, or formal active recreation areas under elevated viaducts.

38. Negotiate a fair and comprehensive relocation and compensation package that reflects the need to relocate the Vision Australia dog breeding and training facility to an alternative fit for purpose site and facility, as well as funding to make good associated impacts on other related and nearby facilities.

39. Undertake a detailed air modelling assessment for Part B of the Project to guide the final design.

40. With regard to the West Melbourne Terminal Station site:

- **a) Provide confirmation to SP AusNet that the Project construction zone between the roadway and the West Melbourne Terminal Station site will remain in the ownership of SP AusNet and that the Linking Melbourne Authority will ensure access to allow a temporary transformer to be located on that land for the period of the West Melbourne Terminal Station upgrade works.**
- **b) Formalise the final Proposed Project Boundary (i.e. no encroachment in a westerly direction into the West Melbourne Terminal Station footprint) to enable the redesign of the West Melbourne Terminal Station redevelopment to continue as soon as possible.**
- **c) Secure additional land interests for SP AusNet with VicTrack to enable land for construction access and permanent use, as well as to agree new easement corridors for transmission lines entering the site. Such land must be fit for both construction and permanent use (including access and egress where applicable.**
- **d) Ensure the creation of easements on the acquired land to protect SP AusNet's assets and specifically to create new easements to provide for underground and overground corridors as relevant for electricity and gas supply.**
- **e) Identify and secure a new site for the relocation of the Fisherman's Bend Transmission Tower.**
- **f) Ensure that the design and construction of the Project minimises impacts on SP AusNet's assets and such assets are not adversely affected by dust, vibration, water or soil contaminants.**

g) Ensure the construction works avoid the existing gas and electricity assets, or relocate these assets without interruption to supply.

41. Remove the proposed access ramps to and from Arden Street.

42. Facilitate a process that enables the opportunity for voluntary purchase agreements with property owners that have an interface with, or are impacted by, the elevated road structures and viaducts in Parkville West, Flemington, Travancore, and Kensington outside of the Proposed Project Boundary.

43. Identify and implement, in consultation with the Flemington Neighbourhood Renewal Board and the Office of Housing, noise and air quality mitigation measures for the Flemington Housing Estate residents who face east onto the proposed Link.

Part A: Background

1 Introduction

1.1 The Assessment Committee

The Minister for Planning appointed an Assessment Committee (the Committee) on 21 October 2013 to undertake an independent review of the proposed East West Link (Eastern Section) Project (the Project). The Committee was appointed under the provisions of sections 35 and 235 of the *Major Transport Projects Facilitation Act* 2009 (MTPF Act) to assess the East West Link (EWL) Comprehensive Impact Statement (CIS) and to make recommendations to the Minister for Planning in accordance with section 73 of the MTPF Act. On the same date, the Minister for Planning signed Terms of Reference for the Committee (Appendix A) to provide the context for its assessment.

The proponent for the Project is the Linking Melbourne Authority (LMA).

The Committee comprises:

- Ms Kathryn Mitchell, Chair;
- Mr Nick Wimbush, Deputy Chair;
- Mr William O'Neil;
- Dr Lyn Denison;
- Mr Des Grogan; and
- Mr Jim Holdsworth.

Paragraph 8 of Part 2 of the Terms of Reference notes the Committee may seek written or verbal advice from experts or specialists. In this regard, the Committee retained the services of:

- Dr Sandy Bennet (tunnelling, geomechanics and hydrogeology);
- Mr Doug Munro (acoustics and vibration); and
- Ms Mandy Elliott (environmental management framework).

Paragraph 9 of Part 2 of the Terms of Reference note that the Committee may retain its own legal counsel and in this regard, the Committee retained the services of Mr Chris Wren SC.

The Committee was assisted by the office of Planning Panels Victoria and specifically:

- Ms Emma Moysey, Special Projects Manager;
- Ms Jessica Cutting, Senior Project Manager;
- Mr Harry Matheas, Assistant Director;
- Mr Adrian Williams, Business Manager; and
- Mr David Newton, Hearing Room Assistant.

Additionally, the office of Planning Panels Victoria through its whole administration team provided assistance to the Committee throughout the duration of the Project.

1.2 Terms of Reference and Role of the Committee

The MTPF Act Authorised Version No 020 (incorporating amendments as at 25 September 2013) is the guiding Act for this process.

The role of the Committee is set out in the MTPF Act and through its Terms of Reference. Subdivision 2 of Division 5 of Part 3 of the Act sets out the procedures for the establishment

of an Assessment Committee (s35), the opportunity to provide Terms of Reference and the publication of Terms of Reference (s36 and s37).

The Terms of Reference note that the Committee was appointed to assess the CIS for the Project and to make recommendations to the Minister for Planning whether or not to grant any applicable approval required for the Project to be developed, and if so recommend appropriate conditions for applicable approvals. In this case, the applicable approvals include:

- Works approval under s19B of the *Environment Protection Act* 1970 (the EP Act);
- Planning Scheme Amendment approval under s8, s29, and s35 of the *Planning and Environment Act* 1987 the (P&E Act);
- Permit under s74 of the *Heritage Act* 1995 to carry out works or activities in relation to a registered place or registered object;
- Consent under s129 of the *Heritage Act* 1995 for impact on archaeological relics;
- Consent under Clause 1 of schedule 2 of the *Road Management Act* 2004 allowing connection to a freeway;
- Licence under s67 of the *Water Act* 1989 required to construct, alter, operate or decommission works on a waterway, including works to deviate a waterway;
- Comments from the Secretary pursuant to s66 of the *Conservation, Forests and Lands Act* 1987 on plan of works across waterways.

Essentially, the role of the Committee is to assess the exhibited CIS, review the submissions made to it, conduct a public hearing and provide a written report to the Minister for Planning that sets out its finding and recommendations.

In conducting a public hearing, the Terms of Reference set out the Public Hearing Matters the Committee is to address as follows:

- *Whether the impacts of the project on the traffic performance of roads connecting to the project, and the surrounding road network, as well as on connectivity for public transport, cycling and pedestrians have been appropriately addressed.*
- *Whether the impacts of the project on land use and infrastructure in its immediate environs, including on housing, recreation and community infrastructure have been appropriately addressed.*
- *Whether the proposed Urban Design Framework in the CIS will appropriately manage visual impacts of the project on the surrounding area, including public open spaces.*
- *Whether the noise, vibration, air emission and light spill impacts of the project will be appropriately managed by proposed measures.*
- *Whether the impacts of the project on cultural heritage places have been appropriately addressed.*
- *Whether the impacts of the project on surface and groundwater waters have been appropriately addressed.*
- *Whether the impacts of the project on native vegetation and biodiversity have been appropriately addressed.*

- *Whether the risk from disturbance and disposal of solid wastes have been appropriately addressed.*
- *Whether the Environmental Management Framework in the CIS will provide an effective integrated approach to manage the environmental performance of the project.*

There was no specific public hearing matter that related to social impact or business impact matters (although these could be considered under impact on land use, including housing, recreation and community infrastructure), however the Committee heard extensive submissions and evidence about these issues, including from the LMA.

The functions of the Committee are prescribed by timeframes as set out in the Act. The public hearings were to take no longer than 30 business days, and the Committee's report must be submitted to the Minister for Planning within 30 business days of the last day of the hearing.

1.3 Approach to this Report

The Committee has approached its consideration of issues and the preparation of this report in the following way.

Part A provides the **Background**, which includes the introductory matters, a description of the Project, the relevant legislation and policy frameworks, the exhibition process, and the public hearing process.

Part B provides the **Assessment**, which takes each of the public hearing matters from the Terms of Reference, and then assesses these to determine whether they have been appropriately addressed. These matters include traffic and transport; land use and infrastructure; visual impacts and urban design; noise and vibration; air emissions and air quality; cultural heritage; surface and groundwater; native vegetation and biodiversity; solid waste and contamination; social and business impacts.

Part C deals with **Implementation**, with commentary on the Environmental Management Framework (the EMF), Performance Requirements, and the Planning Scheme Amendment GC2.

Part D provides the **Conclusions and Recommendations** of the Committee and includes its summary response to the Terms of Reference, and the Applicable Law Approvals.

The Committee references the evidence of various experts, the submissions made by advocates, and the presentations and submissions of community groups, businesses, sporting organisations and individuals. While some of these are specifically named, it is not possible to include or reference all as part of the Committee's assessment. This does not mean the submissions were not considered, rather the Committee has focused on the key issues, rather than who said what. Additionally, some submissions were made in confidence and these have been referenced by Submission number only, where applicable.

1.4 Matters not Considered in Detail

For various reasons, there are seven matters that the Committee has not considered in detail, these include:

- Cultural Heritage Management Plan;
- *Environment Protection and Biodiversity Conservation Act* 1999;
- Victoria Heritage Register;
- Business case for the Project;
- Melbourne Zoo;
- Public transport projects; and
- Further announcements post Hearing.

1.4.1 Cultural Heritage Management Plan

The Committee is not required to consider the *Aboriginal Heritage Act* 2006*,* as while a Cultural Heritage Management Plan (CHMP) is being prepared for the Project, it is separate to this process.

Post the Hearing, the Chair was provided with a copy of a letter from the Chief Executive Officer of the LMA to the Minister for Planning, that advised:

> ***EAST WEST LINK EASTERN SECTION***
>
> ***NOTIFICATION APPROVAL CULTURAL HERITAGE MANAGEMENT PLAN***
>
> ***(CHMP 12723)***
>
> *I wish to advise that in accordance with section 75(a) of the Major Transport Projects Facilitation Act 2009 that the Cultural Heritage Management Plan for the East West Link Eastern Section has been approved by the Registered Aboriginal Party, the Wurundjeri Tribe Land & Compensation Cultural Heritage Council and the Office of Aboriginal Affairs on the 15 April 2014.*

The Committee makes no further comment on this.

1.4.2 *Environment Protection and Biodiversity Conservation Act* 1999

The Committee does not need to consider Commonwealth approvals under the *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act), as the former Commonwealth Department of Sustainability, Environment, Water, Population and Communities determined on 24 April 2013 that the Project is not a controlled action requiring assessment and approval under the EPBC Act.

Some submissions suggested that there were errors in the referral. The Committee has addressed these briefly but considers if there are errors, then this is a matter for the Commonwealth to address.

1.4.3 Victorian Heritage Register

The Committee advised at the Preliminary Hearing that it was aware that Royal Park had been nominated for inclusion in the Victorian Heritage Register in late 2103. The Executive Director, Heritage Victoria assessed the nomination and made a recommendation that the Park be included in the Victorian Heritage Register. The recommendation was advertised

and the public were provided with 60 days to comment, which the Committee understood to be on or about 21 April 2014.

The recommendation of Royal Park for inclusion on the Victorian Heritage Register is a separate matter to these proceedings and it requires a separate process under the Heritage Act. The Committee advised parties that the nomination did not form part of the public hearings, nor could the Committee take submissions about it.

Since that time, the Committee is aware that some 153 submissions were received by Heritage Victoria about the nomination.

1.4.4 Business Case for the Project

One of the matters raised by numerous submitters related to the business case for the Project. The Committee was not provided with the business case, and in response to a question to the LMA about this at the hearing, Mr Morris for the LMA advised that he too had not been provided with the business case for the Project.

The Committee was provided with the Executive Summary of the Short Form Business Case (Document 148) that was prepared as information for Infrastructure Australia in June 2013. This document essentially sets out the high level background and drivers for the Project, as well as the high level perceived benefits. It shows a benefit cost ratio of 1.4 at a real discount rate of 7% (the rate used for other projects including the Regional Rail Link, the Melbourne Metropolitan rail project and the West Gate Bridge Strengthening). It notes that "*the core result shows a benefit cost ratio of 1.4 including wider economic benefits for a major project of this nature targeting economic growth*".

Mr Morris advised that in response to questions raised by the Committee and other submitters that it was important to have some idea of the costs associated with the Project. In this regard, he verbally provided 'ball park' ratios, which he thought might be useful. He expressed these as:

- One unit for one kilometre of 'normal' road;
- Three to five units for a kilometre of elevated or viaduct road;
- Three to five units for a kilometres of cut and cover; and
- Ten to fifteen units for a kilometre of tunnel.

Mr Morris advised that these comparisons depended upon a range of various and specific circumstances. For example, tunnelling costs are determined by geological and hydrogeological conditions, amongst others. In noting this, Mr Morris reiterated that the *Transport Integration Act* 2010 (TI Act) exhorts "*value for money*".

In his closing submissions (Document 525), Mr Morris expanded upon his reasoning and reiterated that the Committee need not concern itself with any business case for the Project. He said:

> *Whereas a cost-benefit analysis may legitimately form part of the former type of assessment, there is nothing in the Act or in any applicable law criteria that requires a "cost-benefit analysis" to be undertaken as part of the assessment of a declared project. Indeed, for reasons discussed further below, it is not a tool that is particularly well suited to the type of qualitative assessment that the Committee is required to undertake.*

Mr Morris further advised that "*even in the context of Government decision making, the suitability of using a cost-benefit analysis will depend upon the nature of the assessment being made, and the nature of the project and its impacts*".

The Committee has not been able to take this any further, nor comment on the adequacy of the benefit cost ratio put forward, as it was not provided with the business case for the Project nor any economic assessment related to this.

Consequently, the Committee is limited in its understanding of the localised and wider economic benefits of the Project. It is for these reasons, that the following assessment and the findings and recommendations of the Committee are not based on economic imperatives.

1.4.5 Melbourne Zoo

A number of submissions expressed concern about the impact of the Project on the Melbourne Zoo, which is located in Royal Park. Ms Stock in particular was passionate about what she saw as major detrimental impacts on the Zoo. Other submitters expressed similar views. The Committee did not receive a submission from the Zoo or DEPI, or any evidence about any impact of the Project on the animals. Other than commenting on potential vibration and noise effects on the Zoo, the Committee is not able to take this issue any further. It is noted that the Performance Requirements for the Project provide for ongoing consultation with the Zoo (and other stakeholders) and include actions and responsibilities aimed at minimising impacts as well as impact mitigation as necessary.

1.4.6 Public Transport Projects

Numerous submissions commented that the Project should not be contemplated or built due to the need to build infrastructure such as the Doncaster heavy or light rail connection, Metropolitan Rail and the like. It is not the role of the Committee to consider these projects, it does not discuss the range of potential projects, it is outside of its Terms of Reference and it makes no findings or recommendations on these.

1.4.7 Further Announcements post Hearing

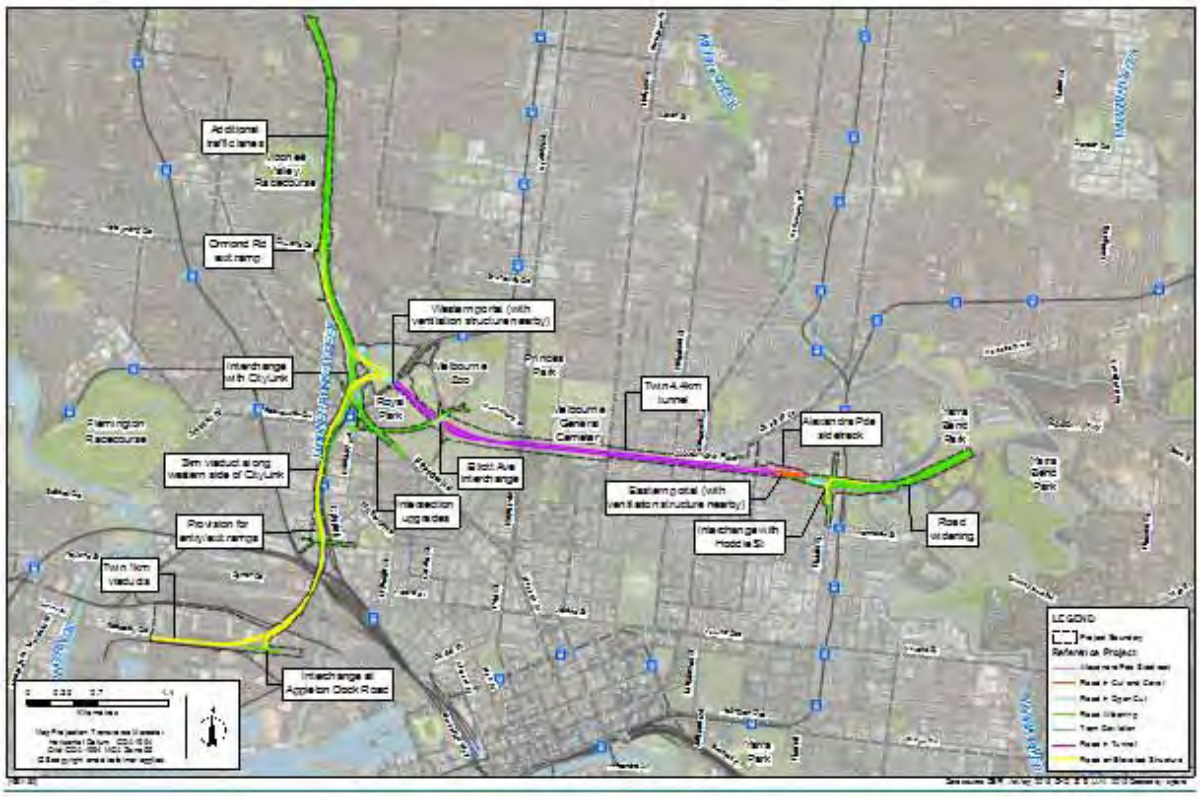
There have been a number of significant announcements made by Government since the Hearing concluded that have a direct impact on the Project, especially in relation to Part B and the capacity to achieve a southerly connection to CityLink within Part A. Most of these are as a result of both State and Federal Budget commitments, as well as ongoing commitments by the State Government for road improvements. These include:

- A commitment to widen CityLink and the Tullamarine Freeway, which as the Committee understands, was briefly referred to as 'Project Zebra' during the course of the Hearings.
- A commitment to build Stage Two of the East West Link that is from the Western Ring Road to the Port of Melbourne. This project is known as WestLink.

2 The Project

The Project is comprised of two main parts, referred to in the CIS as Parts A and B, "*with Part A able to be built independently of Part B"*. To illustrate how the Project may be developed, it is supported by a Reference Project. Parts A and B and the main elements of the Project associated with each, are illustrated in Figure 1 and described further.

Figure 1: East West Link Eastern Section Reference Project – Main Components



Source: CIS Summary Report

2.1.1 Part A – Linking the Eastern Freeway to CityLink

This section is proposed to extend from the western end of the Eastern Freeway in Clifton Hill to join with CityLink in Parkville. The main elements of the Project include:

- Twin tunnels approximately 4.4 kilometres in length between the Eastern Freeway and CityLink;
- An interchange at Elliott Avenue, with easterly oriented ramps allowing access to/from Elliott Avenue;
- Additional traffic lanes along the Eastern Freeway between Hoddle Street and Yarra Bend Road;
- A reconfigured interchange at Hoddle Street to the Eastern Freeway;
- A freeway to freeway interchange with elevated structures connecting the tunnel portals in Manningham Parklands to CityLink in both northerly and southerly directions;
- Additional traffic lanes on the Tullamarine Freeway section of CityLink; and

- An off ramp to Ormond Road and associated upgrades to the intersection of Flemington Road and Elliott Avenue.

2.1.2 Part B – Linking CityLink to the Port

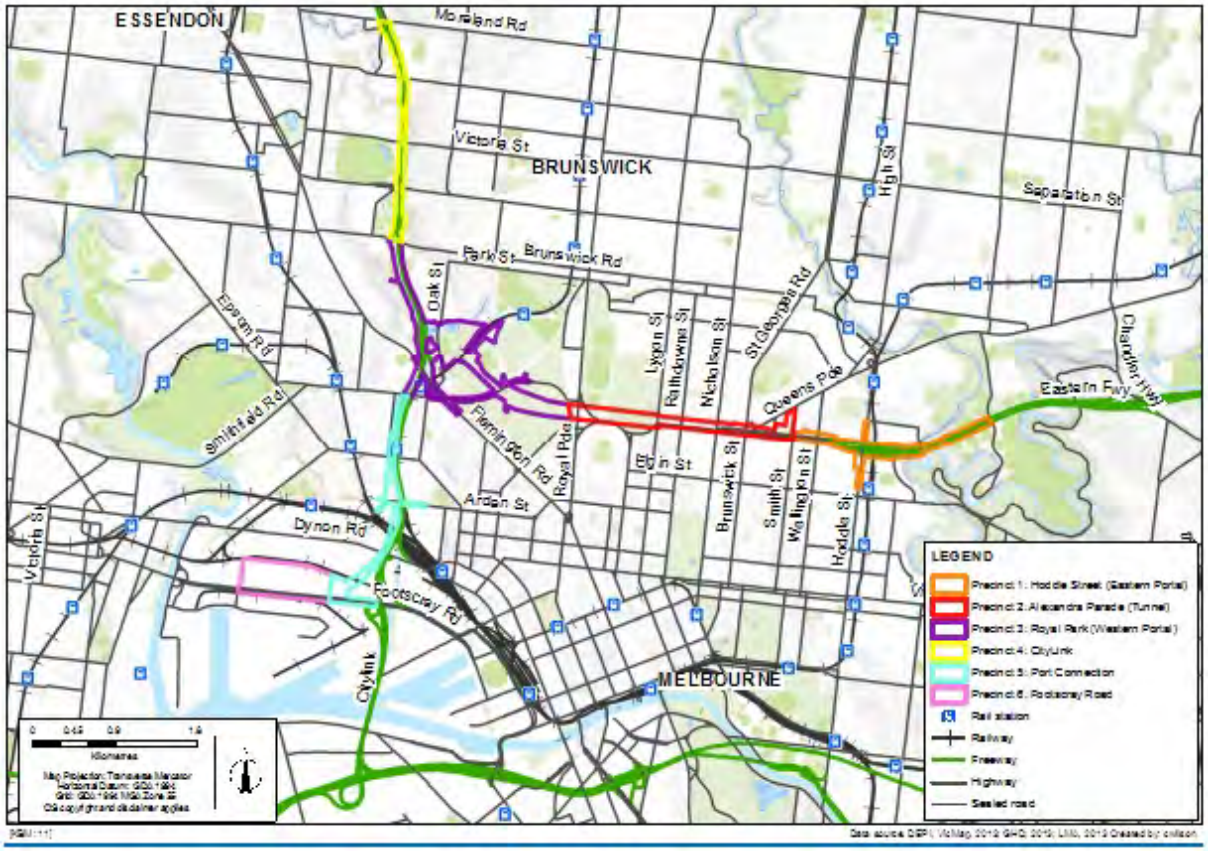
This section is proposed to extend southbound from Part A to the Port precinct. The main elements of Part B include:

- A three kilometre viaduct parallel to CityLink (located on the western side) from Mount Alexander Road to Footscray Road;
- A viaduct generally along the Footscray Road alignment; and
- An interchange at Appleton Dock and Footscray Road and provision for entry/exit ramps at Arden Street from the viaduct.

2.2 Project Area Precincts

Parts A and B were divided into six precincts. Part A includes Precincts 1 to 4, whilst Part B includes Precincts 5 and 6. The location of each Precinct is depicted in Figure 4.1 of the CIS and is shown as Figure 2.

Figure 2: Project Boundary and Precincts 1 to 6

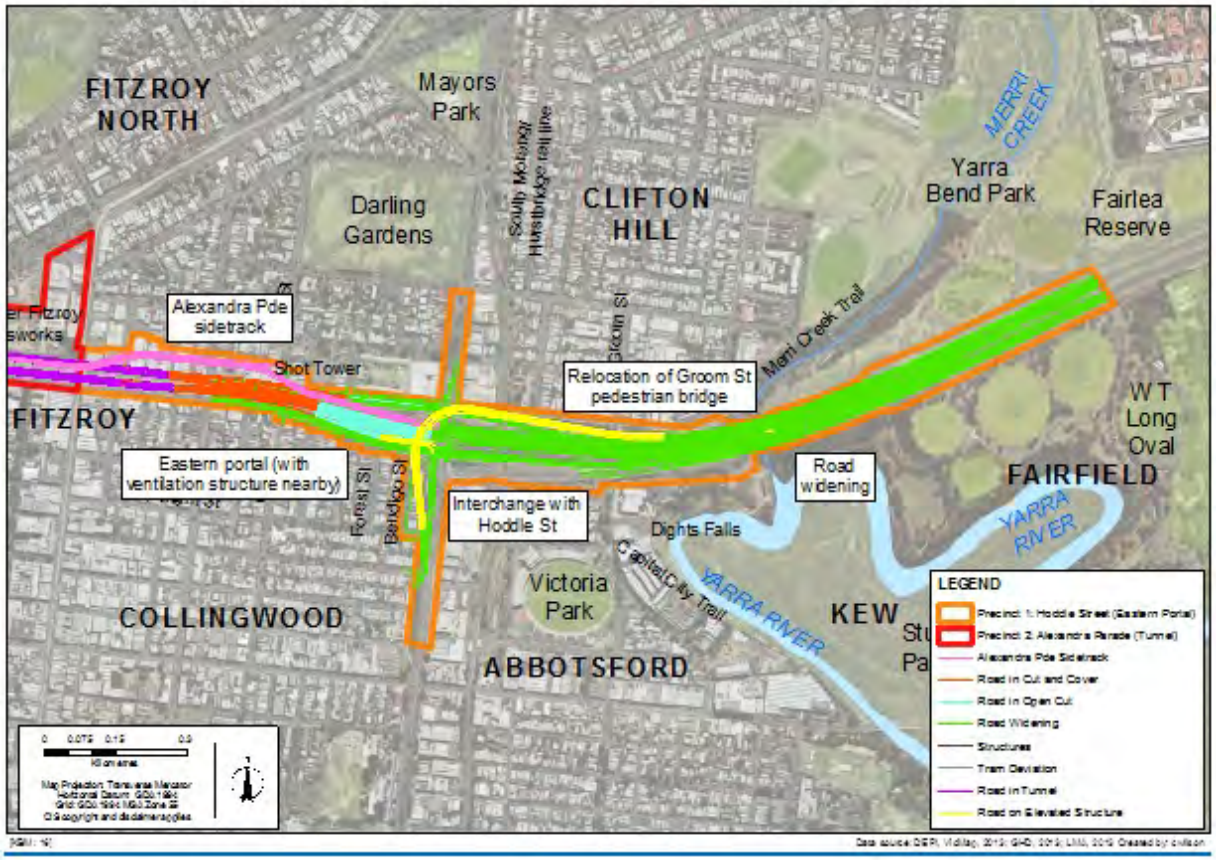


Source: CIS Summary Report

2.2.1 Precinct 1: Hoddle Street (Eastern Portal)

The eastern end of the Project is contained in Precinct 1. The Precinct commences on the Eastern Freeway at Yarra Bend Road (approximate chainage 2760) which is identified as the "*limit of works"* and proceed west to Smith Street (approximate chainage 5000). In addition to the alignment of the Project Part A works, the Precinct includes approximately 550 metres of Alexandra Parade which will remain as a surface road between the eastern tunnel portal and Smith Street. Precinct 1 is shown as Figure 3.

Figure 3: Precinct 1



Source: CIS Summary Report

The following infrastructure elements are depicted in the Reference Design:

- Additional traffic lanes along the Eastern Freeway Reservation from Hoddle Street to Yarra Bend Road including a new bridge span over the Merri Creek;
- Relocation of the existing Groom Street/Trenerry Crescent pedestrian bridge;
- Reconfiguration of the Hoddle Street and Alexandra Parade interchange incorporating a new north to east connection from Hoddle Street to the Eastern Freeway shown as an elevated flyover. The structure passes over Alexandra Parade, Hoddle Street and the South Morang/Hurstbridge railway line. At this point it is six metres above the railway line. It then connects with the eastbound lane of the Eastern Freeway prior to Merri Creek;
- Provision of the eastern tunnel portal (at approximate chainage 4480);

- Connection of the Eastern Freeway with the Project tunnels via an open cut trench from Hoddle Street to the eastern portal, then via cut-and-cover construction to approximate chainage 4800, 100 metres west of Wellington Street; and
- Bored tunnel construction from chainage 4800 to Smith Street.

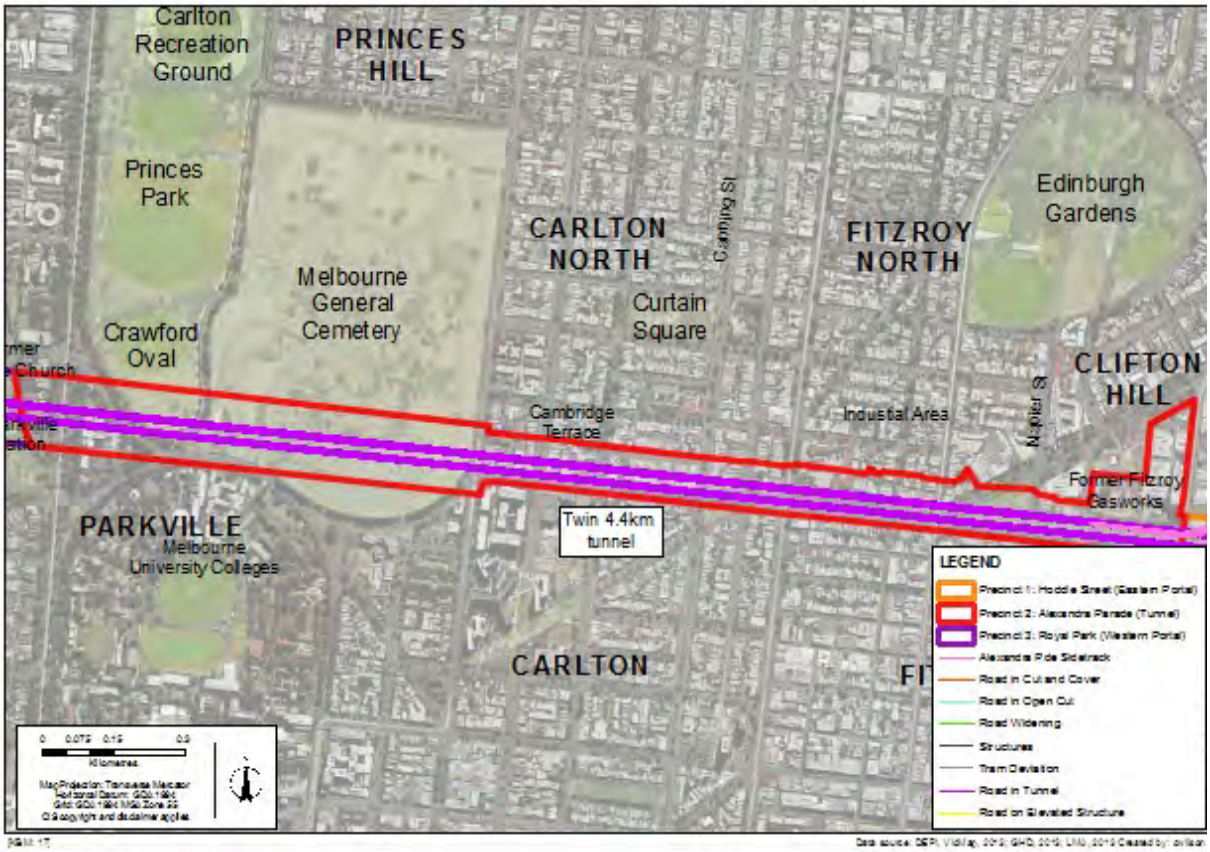
A tunnel ventilation structure near the eastern portal will need to be provided.

The most significant issues associated with this Precinct include the design, scale and siting of the interchange at Hoddle Street and Alexandra Parade, the location of the eastern portal proximate to sensitive uses, and the scale of impact associated with the proposed demolition of houses and businesses to enable the construction of a temporary sidetrack. Based on the Reference Project, there are 35 residential and 18 commercial properties proposed to be acquired in Precinct 1 to accommodate these elements. On completion of the works, the properties required for the sidetrack are identified as an urban renewal opportunity.

2.2.2 Precinct 2: Alexandra Parade (Tunnel)

Precinct 2 includes the majority of the tunnelled section of the Project. It excludes the eastern and western tunnel portals. Precinct 2 is shown on Figure 4.

Figure 4: Precinct 2



Source: CIS Summary Report

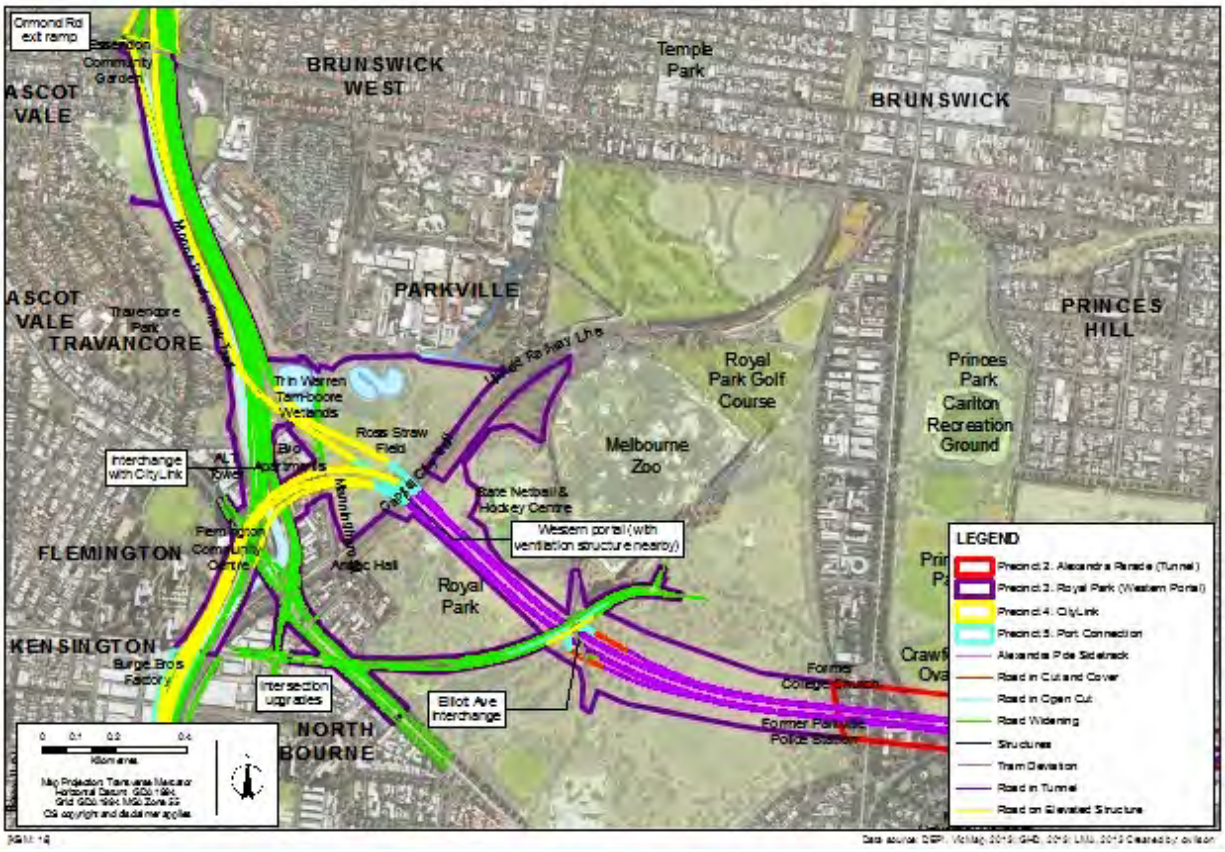
The tunnels are proposed to be twin tunnels bored approximately 20 to 30 metres underground. The Precinct commences at Smith Street (approximate chainage 5000). The

plans indicate that the westbound bored tunnel is located north of the westbound carriageway of Alexandra Parade. The eastbound tunnel is located partially under and north of the eastbound carriageway of Alexandra Parade. They continue under private properties on the northern side of Princes Street, the Melbourne General Cemetery, Princes Park and Royal Parade. The Precinct ends at approximate Chainage 7400. The CIS indicated that if a mid-tunnel air intake structure is required, it is likely to be located within this Precinct. Its location will be subject to detailed design.

2.2.3 Precinct 3: Royal Park (Western Portal)

Precinct 3 commences at The Avenue in Parkville (approximate chainage 7400) and continues in tunnel under Royal Park to chainage 8800, the western portal. Beyond the portal the ramp connections are shown as open cut and cover elevated structures. The Reference Project depicts an interchange at Elliott Avenue with the ramps to be constructed by mix of both cut-and-cover and open cut trenching. In this location a realignment of the Tram Route 55 is proposed. Precinct 3 is shown on Figure 5.

Figure 5: Precinct 3



Source: CIS Summary Report

The Reference Project entertains adoption of cut and cover construction from 200 metres east of Elliott Avenue (approximate chainage 8000) through to the western tunnel portal located immediately to the west of the Upfield railway line (approximate chainage 28800). The road alignment then proceeds via elevated ramps over Manningham Parklands/Ross

Straw Field both to the north and south in order to provide links to CityLink and a future connection with Part B of the Project through to the Port of Melbourne.

The northbound connection from the western portal is shown to run parallel to CityLink along Moonee Ponds Creek. An off ramp is proposed at Ormond Road which is the northern extent of Precinct 3.

By way of summary, the main proposed infrastructure elements within this Precinct include:

- Elliott Avenue interchange;
- Construction under the Upfield Railway line;
- New bridges to separate Upfield Railway Line from the tunnel construction;
- Western Tunnel portal and associated ventilation structure;
- Realignment of Tram Route 55 through Royal Park;
- Five elevated ramps across Manningham Parklands/Ross Straw Field connecting to CityLink north, City Link south, and the future Part B viaducts;
- An off ramp to Ormond Road; and
- Upgrades to the intersection of Flemington Road and Elliott Avenue.

Fifty five residential properties located within the Proposed Project Boundary of Precinct 3 are proposed to be acquired. The Government has purchased the Evo Apartment complex which abuts the Proposed Project Boundary. This complex comprises six stories with 175 apartments.

2.2.4 Precinct 4: CityLink

Precinct 4 extends to the north along the CityLink alignment from Ormond Road at chainage 10300 to the Moreland Road entry and exit ramps at approximately chainage 12400. South of Dean Street the proposed alignment extends outside the CityLink reserve and requires acquisition of three residential properties. The alignment also affects Ormond Park, Holbrook Reserve, and Moonee Valley Racecourse. Precinct 4 is shown on Figure 6.

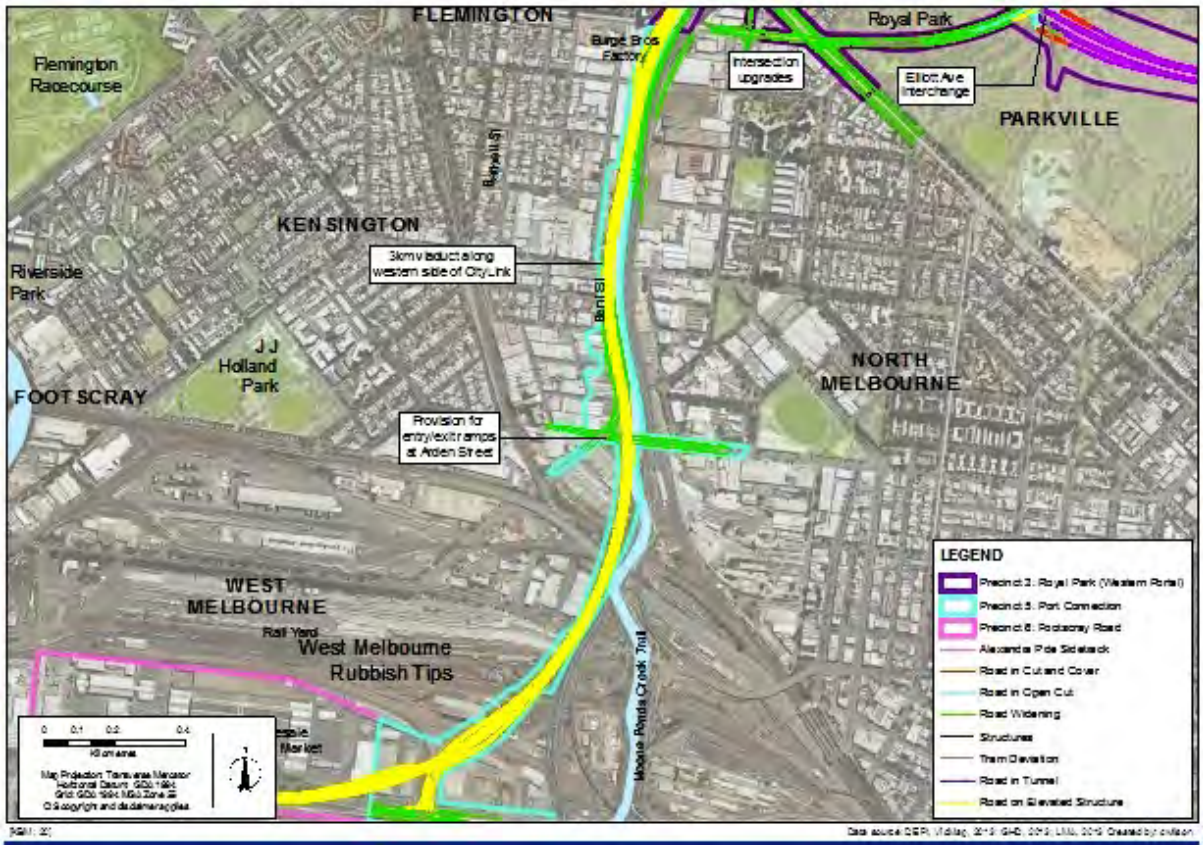
Figure 6: Precinct 4

Source: CIS Summary Report

2.2.5 Precinct 5: Port Connection

Precinct 5 extends from the twin parallel elevated viaducts over Racecourse Road at approximately chainage 29640, to Footscray Road at chainage 32200. This route generally follows the alignment of CityLink on its western side. Provision for future on and off ramps to Arden Street is identified. The alignment crosses the eastern boundary of the recently upgraded Vision Australia Guide Dog facility, the West Melbourne Terminal Station, the major railway corridor leading to the north and west of the city and Dynon Road. Precinct 5 is shown on Figure 7.

Figure 7: Precinct 5



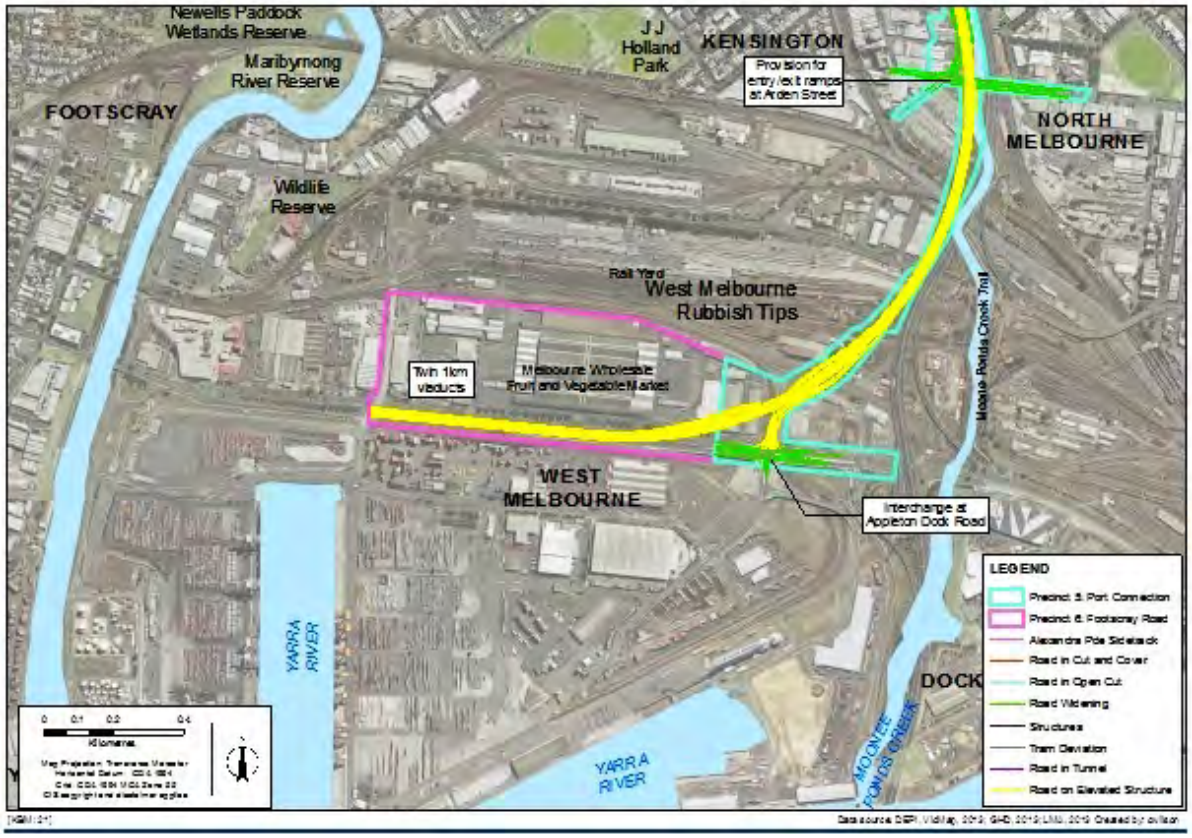
Source: CIS Summary Report

Thirteen residential properties on Bent Street and 12 commercial properties on Stubbs and Barrett Streets are stated as requiring acquisition within Precinct 5. In addition, the proposed alignment impact upon numerous apartments and houses adjacent to the proposed viaducts, beyond the Proposed Project Boundary. As such, these properties are not eligible for acquisition.

2.2.6 Precinct 6: Footscray Road

The CIS notes that permanent acquisition would not be required in Precinct 6. Precinct 6 is shown on Figure 8. Precinct 6 includes Footscray Road between Docklands Road and Appleton Dock Road and the former Wholesale Fruit and Vegetable Market.

Figure 8: Precinct 6



Source: CIS Summary Report

2.3 The Reference Project and Proposed Project Boundary

For the purposes of assessing impacts within the CIS, a Reference Project was defined. It included the proposed infrastructure alignment within a Proposed Project Boundary, identified key elements of the design and described the likely construction method, included a set of road design principles, an Urban Design Framework, noise minimisation and other standards, appropriate construction methods, and provided a framework for environmental risk and impact assessments.

The CIS stated that the Reference Project was developed by a "*consortium of contractors and consultants including those with specialist tunnelling expertise"*, and was then independently reviewed by experts in major infrastructure projects. It noted that the consortium considered the concepts presented in the Eddington Report (2008) (i.e. three broad corridors referred to as the northern, southern and central corridors respectively). The preferred final scheme selected was the central corridor, and was thereafter referred to as the Reference Project.

It was stated in the CIS that the Reference Project was subject to change, and the Project could be configured differently, particularly by firms tendering to construct and/or operate the Project.

Specific areas/approaches whereby variations to the Reference Project are possible include:

- Alternative locations/design for project structures;
- Change to the road alignment within the Proposed Project Boundary; and

- Alternative tunnelling construction techniques within Royal Park.

In the CIS, 'Proposed Project Boundary' is defined as that "*area proposed to be gazetted as the 'project area' under the MTPF Act following consideration of the CIS*. *The Proposed Project Boundary would thus define the area in which the project components are proposed to be contained, and include areas that would be used for permanent structures and temporary construction areas".* The Proposed Project Boundary and the six precincts are shown in Figure 4.1 of the CIS.

However, within the Mapbook, an area said to be a Proposed Project Boundary is depicted by a blue dotted line within which the Reference Project is contained and constrained (see discussion at Chapter 5.5.1(ii)).

Within the Proposed Project Boundary, there are areas proposed for both permanent and temporary occupation. Temporary occupation of parts of Royal Park is proposed to construct the western portal, CityLink and Elliott Avenue interchanges and to accommodate construction site activities. The Proposed Project Boundary extends to the north of the Trin Warren Tam-boore Wetlands, reflecting the area that could be required potentially for construction activities. As defined, these lay down and construction zones within Royal Park could total 23.27ha, and will not be accessible to the public during the Project's construction phase.

2.4 Delivery Model

The CIS stated that the Project would be delivered in accordance with Performance Requirements developed through the assessment process, and that these Performance Requirements would set the standards that the Project should achieve in relation to the design, construction and operation phases. The stated aim of using such a delivery model was to enable sufficient flexibility to encourage innovation within the private sector.

In order to deliver the Project, "*a contractor would be appointed under the Public Private Partnership availability model to finance, design, construct and operate the project. Linking Melbourne Authority would manage the contractor on behalf of the Victorian Government. The contractor would be required to comply with the performance requirements and Environmental Management Framework and any other approval conditions issued by the Minister for Planning".*

It is understood that three consortia have been short-listed for the Project, with bids due (and as the Committee understands, since received) on 28 April 2014, and that the preferred tenderer is likely to be announced in September 2014.

The construction period for the Project has been identified as five years for Part A, and three years for Part B, with construction proposed to commence in the latter half of 2014. The first year of either construction program would involve property acquisition, service relocation, and other pre-construction activities.

Although the CIS assessed the extent of cut and cover construction technique through Royal Park as a potential variation, it is mandated that "*a conforming bid will include a full tunnel construction with no ground disturbance between Smith Street and approximately 200 metres east of Elliott Avenue".*

3 Legislative and Policy Context

3.1 Legislation and Applicable Law Approvals

The policy principles and objectives that underpin the development of the Victorian transport system are found within the *Transport Integration Act* 2010 (the TI Act). The legislation directing the framework for the assessment and approval of the Project is the MTPF Act.

The applicable approvals sought are:

- Works approval under s19B of the *Environment Protection Act* 1970 (the EP Act);
- Planning Scheme Amendment approval under s8, s29, and s35 of the *Planning and Environment Act* 1987 the (P&E Act);
- Permit under s74 of the *Heritage Act* 1995 to carry out works or activities in relation to a registered place or registered object;
- Consent under s129 of the *Heritage Act* 1995 for impact on archaeological relics;
- Consent under Clause 1 of schedule 2 of the *Road Management Act* 2004 allowing connection to a freeway;
- Licence under s67 of the *Water Act* 1989 required to construct, alter, operate or decommission works on a waterway, including works to deviate a waterway; and
- Comments from the Secretary pursuant to s66 of the *Conservation, Forests and Lands Act* 1987 on plan of works across waterways.

3.1.1 *Transport Integration Act* 2010

The TI Act provides the framework to ensure that all components of the transport system are considered together and that transport and land use planning are fully integrated (ss11, 12, 15 TI Act).

The TI Act provides that:

- All decisions should be based on a triple bottom line (social, economic and environmental) assessment, taking account of externalities and value for money, with a long-term outlook on the wider transport and land use system (s16 and s17);
- The transport system should provide for the effective integration of transport and land use and facilitate access to social and economic opportunities (s11);
- The principle of transparency means members of the public should have access to reliable information to foster a good understanding of transport issues and the process by which decisions about the transport system are made (s21); and
- A transport body (as described in s27A(1)) must develop a strategy and implementation plan (s27A(2)), and the strategy and implementation plan must specify the processes and procedures that the transport body will put in place to enable it to have regard to the transport system objectives (Division 2 s7-13) and decision making principles (Division 3 s15-21). The decision making principles include integrated decision making, equity, the perspective of the transport user, and the precautionary principle.

With regard to the principle of triple bottom line, the Committee is not in a position to undertake an economic assessment of the Project, and could not inform itself through a

triple bottom line assessment. Further discussion of the relationship between the MTPF Act and the TI Act is found in Chapter 5.5.3 of this report.

3.1.2 *Major Transport Projects Facilitation Act* 2009

The Premier of Victoria declared the "*proposed freeway-standard link between the Eastern Freeway and the Tullamarine Freeway generally along the Alexandra Parade corridor, with a further southerly connection to the Port of Melbourne area*" as a declared Project under s10 of the MTPF Act in December 2012.

The Project has been declared to be a road transport-related project for the purposes of the TI Act and a designated road project for the purposes of the *Road Management Act* 2004.

The MTPF Act enables a 'declared project' to be assessed and approved under one of two processes:

- Impact Management Plan (IMP) process, which according to DTPLI, applies to transport projects where the land is wholly owned by a public authority or reserved for a public purpose and certain approvals are either not required or have been granted; or
- A Comprehensive Impact Statement (CIS) process.

Because the East West Link requires approval under a number of Acts within Schedule 1 of the MTPF Act (referred to as the 'applicable laws'), a CIS process is required as opposed to a more streamlined IMP process. An approval decision is made by the Minister for Planning under the MTPF Act and is the approval decision for the applicable laws.

3.1.3 *Planning and Environment Act* 1987

The *Planning and Environment Act* 1987 (P&E Act) establishes the objectives for planning in Victoria and provides for the Victorian Planning Provisions (VPP) which set the policy framework.

The Project requires a Planning Scheme Amendment under the P&E Act. The LMA exhibited Amendment GC2 to the Melbourne, Moonee Valley, Moreland and Yarra Planning Schemes with the CIS. Amendment GC2 is one of the more substantial applicable approvals that is required for the Project. Preparation, approval and adoption of a planning scheme amendment is required under s8, s29 and s35 of the P&E Act.

(i) The Applicable Approval

Amendment GC2 seeks to introduce, amongst other things, an Incorporated Document into the Melbourne, Moonee Valley, Moreland and Yarra City Council Planning Schemes that will allow the use and development of the land for the purposes of the Project (as defined by the Premier as the 'declared project') without the need to obtain planning permission and without the need to otherwise comply with the provisions of the relevant planning schemes.

Whereas the other applicable approvals relate to discrete components of the Project, Amendment GC2 relates to the Project in its entirety. Amendment GC2 relates Part A and Part B of the Project.

Amendment GC2 introduces a site specific planning control contained in an Incorporated Document that would apply to land in the Proposed Project Boundary as finalised through

the CIS process (and incorporating any changes to the Proposed Project Boundary that may be required by the Minister for Planning's decision on whether to grant some or all of the applicable approvals).

The Incorporated Document would authorise use and development of the land within the finalised boundary for the purposes of the Project and its associated activities.

To ensure that the development of land above the tunnel is not adversely affected by the tunnel's construction or operation, and that such development does not adversely affect construction or operation of the tunnel, the planning scheme amendment (as exhibited) introduces new schedules to the Design and Development Overlay to land above the tunnel in the municipalities of Melbourne and Yarra. This would require a planning permit to be obtained for buildings and works that are 15 metres or more below ground level, and notice of the application to be given to the Roads Corporation as a referral authority. It is noted that the LMA's final submission advocates for the removal of the Design and Development Overlay provisions from the Amendment material. This matter is discussed in Chapter 18.3.

Under the MTPF Act, it is the Minister for Planning who will determine whether to adopt or abandon the Amendment. The Minister for Planning would be the Responsible Authority for administering and enforcing the planning scheme provisions applicable to the use and development of land for the Project.

3.1.4 *Heritage Act* 1995

The *Heritage Act* 1995 regulates the protection and conservation of places and objects of cultural heritage significance listed on the Heritage Register maintained under the Act and archaeological sites and relics, including those listed on the Heritage Inventory.

(i) The Applicable Approvals

The CIS lists registered heritage places situated within Precinct 2 of the alignment in Table 3-3 of the CIS that will require a permit for 'works and activities' under s74 of the *Heritage Act* 1995. No other precincts within the alignment contain heritage places or objects that are included in the Heritage Register and accordingly no further permission is required, or can be granted, under the relevant provisions of the Heritage Act.

These registered heritage places are H1788, H1606, H2198, H1545 and HO394, all located within Precinct 2 - Alexandra Parade Precinct (Tunnel).

Pursuant to s73(1) of the *Heritage Ac*t, the Committee must consider the manner in which the application relates to the statutory duties of public authorities (of which the LMA is an example).

Consent under s129 is required for Heritage Inventory Places H7922-0142, H7822-0209, H7822-2311 for Part A of the Project, and required for Heritage Inventory Place H7822-0312 located within Part B of the Project.

3.1.5 *Environment Protection Act* 1970

The *Environment Protection Act* 1970 (EP Act) regulates certain activities that have the potential to impact on the environment. The main areas with regard to protecting the

environment and human health under the EP Act are air quality, noise, energy and greenhouse gas emissions, surface waters, groundwater, contaminated soils and waste.

There are a number of State Environment Protection Policies (SEPPs) that are relevant to the assessment of the Project. SEPPs are subordinate legislation made under the provisions of the EP Act to provide more detailed requirements and guidance for the application of the EP Act to Victoria.

SEPPs of relevance to the Project are:

- SEPP (Ambient Air Quality) 1999 (as amended in 2001) sets air quality objectives and goals for the whole of Victoria. The SEPP adopts the requirements of the National Environment Protection (Ambient Air Quality) Measure (AAQ NEPM). This NEPM sets standards, goals, monitoring and reporting protocols for six common pollutants: carbon monoxide (CO); nitrogen dioxide (NO2); photochemical oxidants (as ozone); sulfur dioxide (SO2); lead; and particles as PM_{10}. The NEPM was varied in 2003 to include advisory reporting standards for $PM_{2.5.}$ The SEPP includes a separate objective for visibility reducing particles, which is not included in the NEPM. SEPP (Air Quality Management) 2001 requires generators of greenhouse gas emissions to manage the emissions in the same way that other emissions are managed, in particular requiring best practice to be applied. The policy refers to the development of protocols for environmental management relating to greenhouse gas emissions, which are to be applied in Works Approvals, licensing and other development approvals.
- Protocol for Environmental Management – Greenhouse Gas Emissions and Energy Efficiency in Industry (the 'Greenhouse PEM') requires that, where operation of the proposed works will exceed defined thresholds, the proponent must identify and install best practice energy efficient plant and equipment.
- SEPP (Waters of Victoria) (SEPP (WoV)) 2004 is the overarching policy which deals with the standards required to protect beneficial uses. The schedule within it specifically dealing with the Yarra catchment (Schedule F7) is the one that needs to be adhered to. Clause 57 within the SEPP (WoV) requires road managers to manage stormwater runoff. The focus of the surface water assessment has been on the two ends of the tunnel – Merri Creek/Yarra River at the eastern end, and Moonee Ponds Creek at the western end.
- SEPP (Prevention and Management of Contamination of Land) 2013 has been developed based on the National Environment Protection (Assessment of Site Contamination) Measure. It is applicable to the onsite management of contaminated land and soils.
- The Environment Protection (Industrial Waste Resource) Regulations 2009 provide the requirement for the off-site management of wastes, including soils. These regulations are specific to wastes and soils that have high contaminant concentrations, which are referred to as Prescribed Industrial Waste (PIW).
- The Environment Protection (Scheduled Premises and Exemptions) Regulations 2007 provide the requirements for when a Works Approval and licence is required. These may apply if on-site treatment or if a facility for the on-site retention of contaminated soil is required.

- The Industrial Waste Management Policy (Waste Acid Sulfate Soils) 1999 is specific for the management of soil, sediment or disturbed rock containing metal sulphides.
- The SEPP N-1 policy applies to the noise generated by the plant and equipment under the control of the project operator, which effectively comprises the tunnel ventilation system.
- Environment Protection (Vehicle Emissions) Regulations 2003 applies to operational aspects of the Project.

(i) The Applicable Approval

A Works Approval under s19B of the EP Act is required for a road tunnel ventilation system as specified in the *Environment Protection (Scheduled Premises and Exemptions) Regulations* 2007.

The Works Approval is only applicable to Part A of the Project. This is because the road tunnel ventilation system is the only component of the Project that constitutes a 'scheduled premises' for the purposes of the EP Act and the *Environment Protection (Scheduled Premises and Exemptions) Regulations* 2007.

Under s20 the EP Act, an environmental discharge licence is required prior to operation of the approved road tunnel ventilation systems to permit emissions to air. The licence would contain relevant conditions based on the Project's environmental risk, including discharge limits. Licensing usually follows the completion of works that have been subject to a Works Approval. Licensing of the tunnel ventilation system is not part of this MTPF Act process and not a matter for the Committee to consider; the licence will need to be obtained by the successful contractor prior to the commencement of the operation of the tunnel.

Wastewater discharges to surface waters may require a Works Approval and Licence depending on the volume and duration of any discharge. Such discharges are not included in the CIS or the Applicable Approvals sought. If they become necessary in detailed project design a separate Works Approval and Licence will need to be applied for as necessary.

Under the MTPF Act, it is the Minister for Planning who may issue a Works Approval. Under the CIS process, the EPA will provide its advice to the Minister for Planning on whether a Works Approval should be issued for the tunnel ventilation system and, if so, whether it should be subject to conditions. The EPA advice must be provided within 30 business days of the Public Hearing, concurrent with the timing of the Committee's report.

3.1.6 *Road Management Act* 2004

The *Road Management Act* 2004 establishes a framework for the management of the road network in Victoria that facilitates the coordination of the various uses of road reserves for roads, infrastructure and similar purposes. The Act provides for the role, functions and powers of road authorities, depending on the type of road concerned.

(i) The Applicable Approval

Consent by the Minister for Roads under Clause 1 of Schedule 2 of the *Road Management Act* 2004 is required and this applicable approval relates only to the point at which Part A of the Project will connect to the Eastern Freeway and the points at which Parts A and B of the

Project will connect to CityLink. A key consideration in determining whether consent should be granted is the "*principal object of road management"* which is *"to ensure that a network of roads is provided primarily for the movement of persons and goods as part of an integrated transport system and that road reserves are available for other appropriate uses".*

3.1.7 *Conservation, Forests and Lands Act* 1987

The *Conservation, Forests and Lands Act* 1987 has a primary purpose to provide a framework for public land management, including measures to be taken for the protection of land, waters and wildlife.

(i) The Applicable Approval

A comment is to be provided from the Secretary of DEPI on the plan of works across a waterway under s66 of the *Conservation, Forests, and Lands Act* 1987. This is required for works across and under the Moonee Ponds Creek for Part B of the Project.

3.1.8 *Water Act* 1989

The *Water Act* 1989 governs water entitlements and establishes the mechanisms for managing Victoria's water resources, including works within waterways.

(i) The Applicable Approval

The Licenses to construct, alter, operate or decommission works on a waterway under the *Water Act* 1989 (Vic) will be required for the project.

The works proposed are in respect of the Merri Creek and the Moonee Ponds Creek, and will require approval pursuant to Part 5 of the *Water Act* 1989. Licences are required for Part A and Part B of the Project.

3.1.9 Other Relevant Legislation

The LMA advised that all other statutory approvals required for the Project would be obtained by the contractor under the relevant applicable legislation. These approvals would include an environmental discharge license under the EP Act associated with the operation of the tunnel ventilation system, consent to carry out certain works on a road under the *Road Management Act* 2004 and potentially permits and consents under the *Flora and Fauna Guarantee Act* 1988 and *Wildlife Act* 1975 for the removal of native flora and fauna, particularly for removal of flora or fauna on Crown land.

3.2 Policy

3.2.1 State Policy

(i) State Planning Policy Framework

The State Planning Policy Framework (SPPF) is contained in Clauses 10 to 19 of the Victoria Planning Provisions (VPP). The SPPF, which is a broad expression of government planning polices, currently makes no reference to the East West Link project.

The Committee is aware that the SPPF is being reviewed by an Advisory Committee. Among that Advisory Committee's published Terms of Reference is a requirement to provide written

advice to the Minister for Planning on the role, structure and format of a revised SPPF that integrates and aligns State planning policy with recently announced or approved policy, including key strategic directions of *Plan Melbourne*.

In March 2014, the Advisory Committee released a draft document titled *Integration version* of the Planning Policy Framework for review and for public comment, closing on the 23 May 2014. That version of the revised SPPF was based on the draft of *Plan Melbourne* as released in October 2013. It is understood that consistent with the approach to not list projects, the *Integration version* made passing references to the East West Link.

Clause 3 of the *Integration version* provides The Planning Vision and under Planning for Cities - City structure and productivity, Strategy 1.3 says:

> *Facilitate the growth and development of Melbourne as identified in the Metropolitan Melbourne Framework.*

Map 8 refers to the Melbourne Metropolitan Framework and it references 'Potential Road' in the general vicinity of the proposed route, but does not specify it as East West Link.

Cause 12 of the *Integration version* relates to Economic Development, and location of employment, it is noted that:

> *An integrated economic triangle will connect the Hastings-Dandenong corridor with the Hume corridor to the north and the Wyndham-Geelong corridor to the south-west. This Integrated Economic Triangle will encompass the following elements:*
>
> - *…*
> - *the East West Link and the North East Link*

Clause 12 relates to transport. Although the East West Link project is not referenced under the Transport System at Clause 12.01 or under the road network at Clause 12.06, it is referred to at Clause 12.07 Freight and Logistics where the long-term freight network vision plan names a new road link as East West Link.

(ii) Plan Melbourne

Plan Melbourne provides the key policy expression for the Project. It was launched by the Premier and the Minister for Planning as adopted Government policy on 19 May 2014.

A *More Connected Melbourne* highlights the need to provide an integrated transport system connecting people to jobs and services, and goods to market. In discussing city shaping transport projects, *Plan Melbourne* says:

> *The most significant road project is the East West Link, which will fix a major gap in our freeway network and provide significant improvements in cross-city traffic movements and freight flows.*

Direction 3.1 is to transform the transport system to support a more-productive Central City, and Initiative 3.1.1 is to build the East West Link as an integrated transport and land use project. In this regard, *Plan Melbourne* notes:

> *Demands for road travel from east to west across our metropolis is expected to grow by 38 per cent between now and 2031, to 440,000 trips per day. The freight*

> *task in Melbourne is also growing quickly … we currently have no alternative to the M1 for direct cross-city road connections, with particular implications for freight vehicles due to their heavy reliance on the freeway network.*
>
> *The East West Link will be an 18-kilometre freeway connecting the Eastern Freeway to the M80 Ring Road to the west of the Maribyrnong River … the East West Link will provide a number of major benefits to our city. By providing a cross-city route, this link will reduce the number of vehicles on central arterial roads and local streets.*
>
> *The East West Link – Eastern Section will link the Eastern Freeway at Hoddle Street via a tunnel to CityLink at Parkville. This part of the project will reduce the daily queues where the Eastern Freeway abruptly ends at Hoddle Street. Recent studies have shown that most of this traffic is trying to get across town, not into the CBD. It will also improve access via CityLink to the M1, the Port of Melbourne, Melbourne Airport and the Western Ring Road/Hume Freeway.*

In providing the implementation and timing for the Project, *Plan Melbourne* notes that commencement of the construction for East West Link Stage 1 will occur in the short term. It further notes that the completion of the full East West Link freeway project connecting the Eastern Freeway to the M80 Ring Road will occur in the medium term.

Initiative 3.1.2 notes the move towards a Metro-style system, starting with *Melbourne Rail Link*, and says:

> *The Melbourne Rail Link will be the centrepiece of a metro-style system that will significantly expand the metropolitan passenger rail network and increase services to Melbourne's growth area in the north, west and south-east …*
>
> *The Melbourne Rail Link includes the Airport Rail Link, a frequent and reliable rail service running between Melbourne Airport, the CBD and Melbourne's south-east, and providing the benefit of directly linking Melbourne Airport to Sunshine and Southern Cross station ...*
>
> *By increasing capacity, the Melbourne Rail Link will allow for a future rail extension to Rowville and the addition of the South East Rail Link, which will provide the additional rail freight capacity to service a future Port of Hastings and unlock capacity* for enhanced regional passenger services *for Gippsland.*

Planning for the Melbourne Rail Link is to commence in the short term, with construction to occur in the medium term.

Map 20 of *Plan Melbourne* shows the alignments for the East West Link and the Melbourne Rail Link.

3.2.2 Local Policy

Relevant local policies include:

City of Melbourne

- Parks Policy 1997
- Royal Park Master Plan 1998

- Cities of Melbourne, Port Phillip, Stonnington and Yarra: Inner Melbourne Action Plan 2005
- Towards a Better 'Public Melbourne' Draft Urban Design Strategy 2006
- Royal Park Stormwater Wetland and Reuse Scheme 2009
- Open Space Strategy 2012
- Urban Forest Strategy 2012
- Arden-Macaulay Structure Plan 2012

City of Yarra

- Yarra River Policies and Planning 2004
- Yarra Industrial and Business Land Strategy Review 2004
- Cities of Melbourne, Port Phillip, Stonnington and Yarra: Inner Melbourne Action Plan 2005
- Smith Street Structure Plan 2008
- Smith Street Activity Centre Structure Plan – Transport and Parking Framework 2008
- North Fitzroy Gasworks Precinct Urban Design Framework 2008
- Yarra Urban Design Strategy 2011, North Fitzroy Gasworks Precinct Urban Design Framework 2008
- Johnston Street Local Area Plan – Draft 2011
- Yarra Urban Design Strategy 2011
- Yarra Business and Industrial Land Strategy 2012
- Housing Strategy 2010–2013

Moonee Valley City Council

- Debney's Park Master Plan 2009
- Open Space Strategy 2009
- Travancore Park Feasibility and Options Study 2012

Policies such as the Royal Park Master Plan 1998 and the Arden-Macaulay Structure Plan 2012 were the subject of much discussion at the Hearing, and are discussed in further detail in Part B of this Report – Assessment.

3.3 The Eddington Report

3.3.1 Background

In 2006 the Victorian Government retained Sir Rod Eddington to "*conduct an investigation into the best transport solutions for connecting Melbourne's eastern and western suburbs*". This request culminated in a report dated March 2008 entitled *Investing in transport – East West Link Needs Assessment*, generally known as the Eddington report.

The Eddington report noted that there is clear evidence that Melbourne needed a better east-west connection to address core congestion within the transport network, meet rapidly increasing travel demand, support a growing population (noting the growth predicted in the west) and "*to keep pace with the changes taking place in the city's economic and urban structure*".

The report included 20 recommendations, the fourth of which stated; *"planning work should commence on the staged construction of a new 18km cross city road connection extending*

from the western suburbs to the Eastern Freeway". This route was divided into two major sections, being the inner west to the Port (now commonly referred to as the Western section) and west Melbourne to the Eastern Freeway (that which is the subject of this hearing - Parts A and B), with alternatives or sub-sections within each component.

The Eddington report concluded "*the most urgent need is an alternative to the West Gate Bridge – a tunnel under or a bridge over the Maribyrnong River, connecting to a northern bypass of the city*" (the 'western section').

The State Government has determined that the cross-city road connection as defined in the CIS is the priority rather than the second crossing of the Maribyrnong River.

On page 204 of the Eddington report, it defined the cross city road tunnel:

> *This would pass under Royal Park, providing an east-west link from the Western suburbs, the Port of Melbourne and the Tullamarine Freeway to the Eastern Freeway. The tunnel has the potential to remove a significant amount of surface traffic from crossing Royal Park, consistent with the park's master plan.*

However, the closure of Elliott Avenue was not considered by the Eddington Report. Further on page 218:

> *West Melbourne to Flemington/Parkville - This section would require a mix of cut-and-cover and bored tunnel construction in order to traverse the fully developed inner city areas of Kensington and North Melbourne. From the port interchange, the route follows a north-east alignment adjacent to Kensington Rd, with J.J. Holland Park required as a staging point for deep tunneling (to be fully restored at the end of construction).*
>
> *Tunnels in this section would be two or three lanes in each direction.*
>
> *Flemington/Parkville to Eastern Freeway - The alignment for this connection would follow a route under Royal Park, Cemetery Road, Princes Street and Alexandra Parade. At the western end, the tunnels would diverge to provide long, two-lane connections to CityLink for north-bound traffic.*

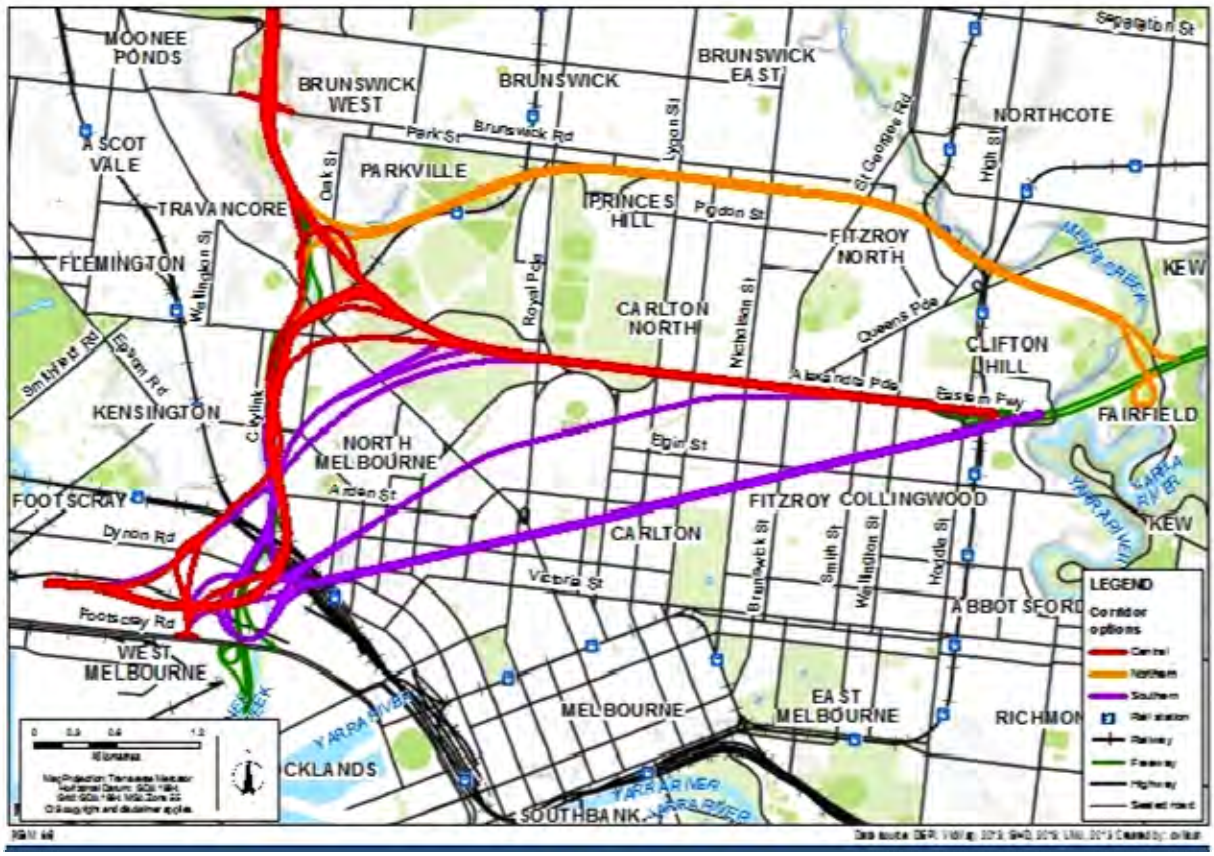
And with regard to access to the City:

> *The Study Team notes that while there is clearly a desire for city access by traffic leaving the Eastern Freeway, there are sound operational, functional and strategic reasons for this section to act as a northern city bypass, and city access ramps have not been included. The Team did not identify any significant demand for a southerly connection to CityLink.*
>
> *……..*
>
> *… the Study Team has not provided city access ramps on the Eastern Freeway to CityLink section. Given existing congestion on north-south roads such as Nicholson Street and Smith Street, it would be difficult to provide city access without adding to current congestion problems and possibly causing queuing in the tunnels.*

The western section of the route was termed 'WestLink' and in October 2010, the LMA released a Community Update, indicating the *"longer tunnel gets the green light*", describing the preferred route for the WestLink project. Stage 1 of the Project commenced at Paramount Street, north of Somerville Road and terminated at Dock Link Road.

In 2012 the State Government announced that it would proceed with the Eastern Section of the Project, comprising two parts. Three broad corridors were identified and assessed: a northern, central and southern. This is shown in Figure 9.

Figure 9: Potential Location of Corridors



Source: CIS Summary Report

The CIS noted (Chapter 4, p4) that these options were further refined as part of the development of the business case for the Project. The central corridor was recommended for further investigation and formed the basis of the Reference Project.

Options were considered for Part B and it was concluded that a viaduct on the west side of CityLink was the "*best performing option*".

3.3.2 Submissions

The LMA maintained throughout the course of the Hearings that the Project is consistent with the recommendations of the Eddington report. It further submitted that although the Eddington report suggested there be no city access ramps, the Elliott Avenue interchange cannot be fairly regarded as a 'city access ramp'. Rather, the LMA said the Elliott Avenue interchange provides a surface connection to traffic headed to destinations to the inner

west, and the interchange "*facilitates access to the Parkville precinct, something that is wholly consistent with the findings of the Eddington Report"*. With regard to the access ramps off Hoddle Street, the LMA pointed to the section of the Eddington report that stated *"… there would probably be a need to be widening of the Eastern Freeway to allow the lane configuration necessary for traffic to enter the tunnel or exit to Hoddle Street and Alexandra Parade would be a necessary element of the work*" and "*westerly ramps would be included near Hoddle Street and Queens Parade to facilitate local access".*

The City of Yarra disagreed with the LMA's analysis of the Eddington report and it suggested that "*the Project as presently designed is actually at odds with its [Eddington's] recommendations*". One of the inconsistencies raised by Yarra is that the Project includes inner city access between Hoddle Street and CityLink, which the LMA say is vital and which Yarra say is against the recommendations of the Eddington report.

Further, Yarra argued that the Eddington report stated that the most urgent transport need was for an additional alternative river crossing to take pressure off the West Gate Bridge. Other submitters noted this key Eddington report recommendation, with particular points raised including:

- Eddington supported a wide range of interventions aimed at improving east-west travel in Melbourne, of which East-West Link was one;
- Eddington rejected a tunnel along the lines proposed by the LMA, in the sense that it did not support a tunnel using the northern alignment under Royal Park, nor the inclusion of exit and entry points between Clifton Hill and City Link, whereas the LMA is proposing entry and exit portals at Elliott Avenue, Parkville.
- Eddington's own supporting documents cast doubt on whether the benefits of East West Link would outweigh the prohibitive costs.

Other submitters questioned the traffic modelling contained within the CIS and pointed to the traffic modelling undertaken for the Eddington report that suggested only 12 per cent of Eastern Freeway traffic was destined for CityLink and the northwest, with the remainder destined for the CBD or the Hoddle Street/Punt Road corridor to the south-east.

The Planning Institute of Australia (PIA) (Submission 702) submitted that its qualified support for the 2008 Eddington recommendations do not extend to this current Project proposal because "*PIA does not believe that the current proposal addresses either the context or the detail of the Eddington recommendations"*.

3.3.3 Discussion

The Committee notes that the Eddington report emphasised the need for a better east-west road connection across Melbourne for the reasons outlined above. The CIS provides a number of reasons why the Government is proceeding with the Eastern section of the Project first, rather than the Western (or second Maribyrnong River crossing). These reasons include connecting Melbourne's freeway network and 'gateways', providing a completely new cross-city link, and alleviating congestion at the end of the Eastern Freeway. The CIS suggested that if the Western section were to be built first, it would become another freeway standard road that comes to an end in the inner city, potentially generating further congestion.

The Eddington report indicative study area includes the area of the options assessed as part of the CIS. The Eddington study area was quite broad and extended from the Western Ring Road at Deer Park Bypass to east of Hoddle Street at the Eastern Freeway. The description provided by the Eddington report of the cross city road connection as part of the study area options generally accords with the Reference Project, except that no city access ramps were provided for in the Eddington options. Designs such as flyovers and viaducts were not detailed in the Eddington report.

The Committee notes that the LMA put forward that the Elliott Avenue and Hoddle Street interchanges are not strictly city access ramps.

For Part B of the Project, the LMA recognised in its submission that it does not follow the precise, preliminary alignment suggested in the Eddington report. The LMA provided the following reasons for this:

a. *First, there are significant geo-technical issues associated with constructing a tunnel in the broad area identified in the Eddington Report;*

b. *Second, even if a tunnel were possible, it would be likely to be prohibitively expensive; and*

c. *Third, there have been significant changes in the strategic context of Melbourne that have emerged in the 6 years since the Eddington Report, changes that include:*

    i. *The proposed redevelopment of Fisherman's Bend;*

    ii. *The proposed redevelopment of the Arden-Macaulay precinct;*

    iii. *The increasing population and job growth in the Melbourne CBD, Docklands and Southbank; and*

    iv. *The increased freight activity at the Port of Melbourne, (p37-38 Main Submission).*

3.3.4 Conclusion

The Committee accepts that the Eddington Report provides a sound basis for the need for an east-west cross city road. However the Committee considers the CIS overstates the level of support in the Eddington report for the construction of the east-west city crossing (from CityLink to the Eastern Freeway) as the priority project. The Committee notes that the preferred designs (e.g. interchanges and other components of the Reference Project) proposed by the LMA in the CIS for both Part A and Part B of the Project are not necessarily consistent with the recommendations for a 'city bypass'.

The Committee further notes that many of the recommendations of the Eddington report were related to increasing the efficiency of public transport and the use of public transport as an alternative mode of travel, in particular to the CBD.

Notwithstanding, the Committee accepts that the Eddington Report provides the catalyst for this Project.

3.4 Planning for Major Roads

Until the mid 1970s, VicRoads (and its predecessor the Country Roads Board) placed 'notice of fixed alignments' on potential road alignments. A review of such 'fixed alignments' in the 1990s was undertaken in which many were changed to road reserves with the application of a Public Acquisition Overlay (PAO).

Road and freeway planning requires road reservations to be put in place, mostly by placing a PAO over the land proposed for the road or freeway. Some of the road reserves or PAO's previously identified in the 1970s were for roads that may never eventuate.

One of the key early road planning studies undertaken was the 1969 Melbourne Transportation Plan, which was a road and rail transport plan for Melbourne that recommended 510 kilometres of freeway for metropolitan Melbourne, as well as extensive railways including the underground city loop (opened gradually between 1981 and 1985) and the Doncaster rail line (yet to be constructed).

In inner Melbourne, opportunities were limited to implement the plans of the 1969 study due to areas already being developed. However, in greenfield areas the plan was able to identify optimum routes and reserve the land well in advance of development. Though the proposed network was refined in 1973 by removing some of the more controversial inner city alignments, it set the basis for the current freeway network (for example, CityLink with its construction completed in 1999 and then since upgraded, EastLink where construction was completed in 2008 and the Peninsula Link where construction was completed in 2013).

Other examples of major roads where there has been a long planning time frame include:

- Western Ring Road - The Western Ring Road project was proposed as part of the 1969 Melbourne Transportation Plan and has been documented in almost every edition of the Melway Street Directory since that time. Construction of the Western Ring Road began in 1989 with work on the Broadmeadows section. It was completed with the final link between the Calder and Tullamarine Freeways in the mid 1990s, and has now since been widened.
- Geelong Bypass – One of the first plans for a ring road of Geelong dates back to 1969, when a report was released by the Geelong Regional Commission. The alignment was first finalised in 1979 and appeared as a proposed freeway in the Melway Street Directory for a number of years. The project was subject to a planning and Environment Effect Statement process, and construction was completed for the first stage in 2009. It has been extended in stages and now has a link to Torquay.
- Shepparton Bypass - The planning study to determine the alignment for the future Goulburn Valley Highway bypass of Shepparton commenced in 1995. The study involved the development of options for the construction of a dual carriageway of approximately 36km in length. The alignment was adopted in December 2001. The boundaries for the bypass have now been finalised and were incorporated into the local Planning Scheme in late 2006. Construction has not yet commenced.

In more recent years, the approach to reserving land for a road project generally commences when either:

- A Precinct Structure Plan or land use planning exercise is put forward by a Council which involves new or duplicated arterial roads, VicRoads will assist the planning authority; or
- Funding has been allocated to a project.

While it is clear that the Eddington Report provides the most recent basis for the East West Link, the detailed planning for the Eastern Section has been much more recent. Mr Wren tabled extracts from recent Melways (Document 105) that has the alignment for the WestLink section included. The alignment extends from the Western Ring Road at Sunshine West to West Footscray where it appears to then be in tunnel, and emerges near Dynon Road adjacent to the Melbourne Fruit and Vegetable Market. There is no similar notation for this Project.

The Committee acknowledges that the LMA has a sound track record in managing complex road projects on behalf of the Government and the wider community. It was responsible for delivering the $2.5 billion EastLink project, which the Committee notes was opened five months early. The Authority delivered the $759 million Peninsula Link project, which opened in early 2013. Both these projects have been acclaimed for their high quality functional and design elements.

A key challenge and difference with this current Project is that it proposes a new road that passes through (and under) an established and densely populated inner city area, and through parks adjacent to these areas. The detailed planning for such a road must therefore be undertaken with sensitivity, care and with a high level of community engagement.

Document 106 tabled by Mr Morris is the October 2010 copy of 'WestLink News', and while the Committee recognises there were community updates for this East West Link Project, the time frame for these was significantly truncated.

Mr Keys for the City of Melbourne was the only witness who provided a strategic overview of road planning in Melbourne. His evidence was useful as it put the evolution of the Project in a context that showed that planning for an east-west link across the northern suburbs of Melbourne has been mooted in one form or another since 1954. He advised that the 1954 Metropolitan Planning Scheme discussed improved east west connections and the 1969 Transport Plan further refined a possible connection. The 2003 Northern Central Corridor Study found a link could not be justified, but the Eddington Report in 2008 found there was a case for a connection.

4 Exhibition of CIS and Submissions

4.1 Exhibition

The CIS was exhibited for a period of 30 business days from 31 October to 12 December 2013, during which submissions could be received. In accordance with s54(2) of the MTPF Act, an Assessment Committee may receive and review a submission that is made after the end of the public exhibition period, and some submissions were received several weeks after the closing date.

There were 1477 'properly made' submissions provided to the Committee. A breakdown of the submissions received is given below:

- Nine were received from Local Councils;
- Nine were received from Government departments/agencies/operators;
- Six were received from Members of Parliament;
- 90 were received from community, sporting and business groups;
- 1363 were received from individuals.

A total of 69 submitters requested that their submission be considered as confidential, of which 30 such requests were granted. Of these submissions, 22 were published in a redacted form (s53(2) of the MTPF Act), six were withheld from publication, and two were published in an edited form. A full copy of all such submissions was provided to the LMA (s55 of the MTPF Act).

Another 262 submissions deemed 'not properly made' were also received (Note – these submissions were in the form of an identical proforma submission). These submissions were reviewed by the Committee, (s54(2) of the MTPF Act), as it is at the discretion of the Committee whether submissions that are 'not properly made' are considered. These submissions were however not placed on the web page but were provided to the LMA.

The submissions were received from across Victoria, including Yarrawonga, Mallacoota, Inverloch, and Hamilton (Document 15: Sheet 1, Figure 1). However the majority of submissions were received from metropolitan Melbourne, with the largest clusters located at the:

- Eastern end of the project in the City of Yarra, in suburbs including Abbotsford, Victoria Park, Clifton Hill, and Collingwood (Figure 3, Sheet 16, Document 15). This area was defined in the Project description as Precinct 1; and
- Western end of the project in the Melbourne and Moonee Valley Council areas, in suburbs including Moonee Ponds, Travancore, Parkville, Flemington, and Kensington (Document 15: Figure 3, Sheets 5, 9 and 13). This area was defined in the Project description as Precincts 3, 4 and 5.

4.2 Summary of Issues Raised

There were 18 broad 'issue' categories identified in the submissions received by the Committee, these included traffic, visual/urban design, planning, the LMA, biodiversity, social, air quality, European cultural heritage, noise, Greenhouse gas emissions, business,

vibration, the overall environmental management framework, legal matters, surface water, contamination, groundwater, and Aboriginal cultural heritage.

Around one fifth of submissions made comments related to traffic and transport issues, whilst around 15% of submissions included comments regarding visual and urban design, the LMA, and planning. Around one in ten submissions made comments related to biodiversity matters, whilst social, air quality, European cultural heritage, and noise were mentioned in around one in twenty submissions.

In relation to traffic and transport issues, many submitters made comments regarding the veracity and reliability of the modelling and traffic volume data, the potential impacts of the Project on traffic congestion and vehicular flow, as well as local connectivity for bicycles and pedestrians.

Regarding visual and urban design issues, many submitters were concerned about amenity impacts of the Project on residential areas, and public open space, including parklands, and pedestrian walkways and connectivity. Likely overshadowing, noise and amenity impacts from the interchanges and elevated roadways/viaducts associated with the Project was of significant concern.

In relation to planning issues, submitters were concerned about the potential dislocation of community facilities and users of public open space/sporting facilities, and the Project's potential impact on strategic planning and city-shaping in the City of Melbourne.

Submitters wrote about the removal of native vegetation, particularly in Royal Park, as well as the impacts on flora and fauna in the Moonee Ponds and Merri Creeks. In relation to the environmental management of the Project, submitters expressed concern regarding the procedures for reporting, auditing and registering of complaints, as well as the adequacy and enforceability of the Performance Requirements. The most significant issue raised in relation to greenhouse issues was the potential increase in emissions.

Concerns raised in relation to air quality issues related to human health, particularly the potential increase in emissions from vehicles, and from the ventilation structures. A number of submissions raised concerns regarding contamination, included the transport and disposal of contaminated soil, management of stockpiles during construction, and the potential of contaminated materials from the Fitzroy Gasworks site.

The majority of concerns about European Cultural Heritage were related to the heritage values associated with Royal Park, the Shot Tower in Collingwood, the Urban Camp in Parkville, and the potential impact to Heritage listed properties.

Many submitters were concerned about the potential for increased noise levels caused by changed traffic conditions, particularly around the new interchanges and elevated roadways/viaducts. Noise levels during the construction period, as well as the visual and amenity impact from the noise barriers were raised.

Potential impacts to businesses were raised in submissions, and these related to both positive and negative regional economic impacts, as well as dislocation of occupants of existing commercial and industrial properties, and the potential impacts on employment.

Concerns were raised about potential water quality, drainage and flooding issues, particularly associated with the Trin Warren Tam-boore Wetlands and the Merri and Moonee Ponds Creeks. In relation to groundwater, there were submissions about the maintenance of groundwater levels and quality, the potential for contamination, and tunnel inflow management.

Some submissions expressed concern about legal issues, particularly in relation to the Assessment Committee process, and the potential for bias and impropriety, as well as the applicability of the Applicable Law criteria.

Although not part of the Terms of Reference for the Committee, many submitters asked questions about the management of Aboriginal cultural heritage issues, including areas of high sensitivity including waterways and Royal Park, as well as the adequacy of the Cultural Heritage Management Plan to protect such values.

More detail is provided on the content and nature of submissions within each of the Assessment Chapters of this Report (Refer Part B).

5 Public Hearing Process

The public hearing process conducted by the Committee was guided by the provisions of the MTPF Act and the Committee's Terms of Reference.

5.1 Information Briefing

Once appointed, and in accordance with Part 2(1) of its Terms of Reference, the Committee held an information briefing on Wednesday 27 November 2013 with invited representatives of the LMA, Melbourne, Yarra, Moonee Valley and Moreland City Councils; and the Department of Environment and Primary Industries (DEPI); Department of Transport, Planning and Local Infrastructure (DTPLI); Department of Health; Environment Protection Authority (EPA); Heritage Victoria; Melbourne Water; and VicRoads). The purpose of the briefing was for the Committee to be provided with an overview of the Project and the environmental approvals framework.

5.2 Site Inspections

The Committee undertook a detailed inspection of the Project Area on Wednesday 18 December 2013. This was requested by the Committee, and it was coordinated by the LMA. Representatives of the Melbourne, Yarra, Moonee Valley and Moreland Councils, and various Government departments and agencies were in attendance. Sites and areas inspected included (but were not limited to):

- Alexandra Parade East;
- Trenerry Crescent – Merri/Yarra River interface;
- Pedestrian ramp, Maugie Street;
- Clifton Hill Primary School (external area);
- Potentially directly impacted local streets in Collingwood and Clifton Hill (eg Bendigo Street);
- Elliott Avenue;
- Manningham Parklands/Ross Straw Field;
- Manningham Street;
- Fenton Crescent/Hockey Lane;
- Holbrook Reserve/Moonee Ponds Creek;
- Brisbane Reserve/Ormond Park/Debney's Park Estate;
- Arden Street; and
- Melbourne Markets/freight terminal.

At the Preliminary and Public Hearings, the Committee sought suggestions from submitters of other areas and sites to inspect.

The Committee undertook further inspections on Thursday 8 May 2014 of the following places and areas; and met with representatives of submitters where access was required:

- Vision Australia, Barrett Street North Melbourne;
- SP AusNet site in West Melbourne; and
- Apartment at 120 Racecourse Road, Flemington.

Further, the Committee reviewed other sites and areas, including:

- Extensive areas of Royal Park and surrounds;
- Trin Warren Tam-boore wetlands;
- Manningham Street and Oak Streets and surrounds;
- Parkville West;
- Moonee Ponds Creek area in North Melbourne;
- Bent Street apartments;
- Debney's Park Estate and community gardens; and
- Various streets in Collingwood, including Bendigo, Forest, Wellington, Gold, and Noone Streets.

The Committee inspected various other places and sites before, during and after the Hearing as necessary.

5.3 Preliminary Hearing

The Committee held a Preliminary Hearing in relation to the Project on Tuesday 14 January 2014. The Preliminary Hearing enabled the Committee to:

- Explain its roles and responsibilities;
- Explain the public Hearing protocols;
- Discuss the exhibition and submission process;
- Discuss the information briefing and site inspections;
- Provide information on the hearing dates, times and venue;
- Discuss how it would deal with evidence and cross examination;
- Explain the difference between advocates, experts and submitters;
- Respond to procedural inquiries; and
- Answer general questions from the floor about the process.

The Committee made a number of directions about the requirement for further information from the LMA, the tabling of evidence and the production of conclave reports. These are briefly discussed below.

5.3.1 Section 57(4) Report

At the Preliminary Hearing, the Committee made a Direction that the LMA respond to a number of points of clarification and requests for information under s57(4) of the MTPF Act and Clause 2(4) of the Project Terms of Reference. While the Committee tabled this report at the Preliminary Hearing, it had provided the report to the LMA on 13 January 2014 so that it had the opportunity to review the request and to respond to it at the Preliminary Hearing.

Those Directions contained requests for clarification and further information. The information sought was generally divided into:

- Copies of material to be provided (for example reports and plans); and
- Matters where clarification was sought.

The Committee directed that under Clause 2(4) of the Terms of Reference, the LMA was to provide this information within 20 business days of the request; that being by Tuesday 11 February 2014. This Direction was adhered to. The Committee made it clear in its request that:

This information is sought for clarification and without prejudice to the Assessment Committee's final recommendations. Readers should not assume that the issues in this request for information are the only issues of interest to the Assessment Committee or that the Assessment Committee has particular concerns about these issues. The Committee reserves the right to seek further information as necessary throughout the Public Hearing process.

The specific matters in which the Committee sought further information on related to:

- The Committee's Terms of Reference and assessment of scope;
- The Reference Project:
  - Consideration of alternatives
  - Impact on transport projects and policy
  - Project definition
- Traffic and transport:
  - Background reports
  - Traffic predictions (project, eastern and western ends)
- Planning and design:
  - Design opportunities
  - Tunnel protection
- Landscape and visual:
  - Urban design
  - Project conceptualisation
  - Overshadowing
  - Light spill
- Air quality:
  - Tunnel ventilation
  - Clifton Hill Primary School and Alexandra Parade
  - Ormond Road exit
  - Elevated receptors
  - Road gradient effects
  - Emission factors
  - In-tunnel and background air quality
- Noise and vibration:
  - Vibration and regenerated noise
  - Other project experience
  - Noise modelling
  - Construction noise
  - Operational noise
- Groundwater and contamination:
  - Groundwater and contamination reports
  - Groundwater characterisation
  - Risk issues
  - Soil contaminants
  - Performance requirements
- Social and business:
  - Actions to minimise social impacts

  - Acquisition and property condition assessment
  - Traffic and social impacts
- Environmental Management Framework:
  - Risk assessment process
  - Performance requirements and suggested conditions
  - Outline Environment Management Plans
  - Emergency management

Whilst the s57(4) response was of assistance to the Committee, the Committee needed to request further information during the course of the Hearings. The Committee discusses this further as part of Part B: Assessment, in Chapters 6 to 15. A total of 529 Documents were handed up during the course of the Hearings, and the complete Hearing Document List is provided in Appendix C.

Given that submissions were being processed several weeks after the closing date, and the very short time frame between the close of submissions and the Preliminary Hearing, the Committee was required to act promptly on the opportunity to review and request further information. The timeframes were further compromised by the Christmas and New Year period. This made the provision, receipt and understanding of information a difficult task for all parties, not only the Committee.

5.3.2 Evidence Reports

The Committee made directions about the tabling of expert evidence reports, and these were generally complied with.

After the Preliminary Hearing and from its further review of the CIS, the Committee directed that the LMA provide evidence on road design matters as it had not included that area of expertise in its list of witnesses.

The Committee notes that the majority of the LMA's expert witnesses were actively engaged in the development of the CIS, and accordingly their witness statements could not be considered as offering an unencumbered, independent review of the Project and its key elements. For a complex Project such as this, the process would have been enhanced by having critical evidence that was peer reviewed.

5.3.3 Conclave Reports

The Committee directed that following the submission of expert evidence, if there was more than one expert report in the relevant areas of expertise, those experts must meet to prepare statements of agreed facts and issues that remain in dispute. The statement must be signed by all participants, and the meetings should be held in the week of 24 February 2014. These meetings were coordinated and led by the LMA (or in some cases GHD), and there was no client or legal representation present. The Committee directed that the conclave meeting and subsequent reports should canvass the following issues:

- Understanding of methodology and assumptions in the assessments undertaken to date;
- Appropriateness of methodology for the task;
- The results obtained; and
- Interpretation of results.

The LMA coordinated the reports of such meetings, and most reports were tabled on Day 1 of the Hearing. Conclave reports were provided in the following areas of expertise:

- Traffic/transport/road design;
- Acoustics;
- Vibration;
- Groundwater;
- Land contamination;
- Air quality;
- Heritage;
- Flora and fauna; and
- Social impacts.

The Committee appreciates the manner in which this work was undertaken and it commends this process for future matters.

The Committee made a similar direction about the Performance Requirements, whereby it directed that parties who made submissions about these meet before the Hearing to provide a consolidated list of agreed requirements.

5.4 Assessment Committee Public Hearings

The Committee held a public Hearing for 30 business days from Monday 3 March to Tuesday 15 April 2014 at the Mercure Melbourne Treasury Gardens Hotel on Spring Street (noting the Committee did not sit on Friday 4 April). Apart from one 'in camera' session for an individual submitter on Day 25, all hearing sessions were open to the public at all times.

In summary, the Committee heard from the LMA (15 witnesses), five Councils (22 witnesses and/or evidence statements), the EPA, six Members of the Victorian Parliament, one Member of Federal Parliament, 70 community, business or sporting organisations, and 170 individuals.

Those who appeared before the Committee are shown in Table 1.

Table 1: Parties to the Assessment Committee Hearing

Submitter	Represented by
Linking Melbourne Authority	Stuart Morris QC, with Nick Tweedie SC and Barnaby Chessell of Counsel, instructed by Sallyanne Everett and Sophie Marjanac of Clayton Utz, who called the following expert witnesses: - Michael Veitch of Veitch Lister, (Traffic Modelling); - Stephen Pelosi of Movendo, (Traffic) - Tom Brock of GHD (Road Design) - Allan Wyatt of ERM (Visual Impacts/Urban Design) - Heather Nesbitt of GHD (Social Planning) - Marianne Stoettrup of Matters More Consulting (Business Impacts) - Gavin Hay of GHD (Surface Water) - Peter Lovell of Lovell Chen (Heritage) - John Patrick of John Patrick Pty Ltd (Cultural Landscape) - Brett Lane of Brett Lane and Associates Pty Ltd (Flora, Fauna, Aquatic Ecology)

Submitter	Represented by
	- John Heilig of Heilig and Partners Pty Ltd (Vibration) - Peter Fearnside of Marshall Day (Acoustics) - Dr Peter Nadebaum of GHD (Contamination) - Tim Anderson of GHD (Groundwater) - Barry Cook of GHD (Air Quality)
Minister for Planning and Department of Transport, Planning and Local Infrastructure	Chris Townshend SC and Marita Foley, instructed by David Honey, General Counsel
Melbourne City Council	Ian Pitt SC of Best Hooper, direct brief, who called the following expert witnesses: - Eric Keys of Eric Keys and Associates Pty Ltd (Strategic Traffic Modelling) - Jim Higgs of TTM Consulting Vic Pty Ltd (Road Design) - Tim Beresford of Norman Disney and Young (Acoustics) - Catherin Bull of University of Melbourne (Open Space) - Mardie Townsend of Deakin University (Open Space) - Graham Porteous of Council (Recreation) - Rob McGauran of McGauran Giannini Soon Pty Ltd (Urban Design) - Rob Moore of Council (Urban Design) - Ian Shears of Council (Water, Vegetation and Biodiversity) - Christina Dyson of Council (Cultural Heritage) - John Henshall of Essential Economics Pty Ltd (Economics and Urban Development)
Moonee Valley City Council	Louise Hicks of Counsel, direct brief, who called the following expert witnesses: - Andrew O'Brien of O'Brien Traffic (Traffic) - Robin Brown of Renzo Tonin and Associates (Acoustics) - Bonnie Rosen of Symplan (Social Impacts) - John Henshall of Essential Economics Pty Ltd (Economics)
Yarra City Council	Adrian Finanzio SC and Rupert Watters of Counsel, instructed by Greg Tobin of Harwood Andrews, who called the following expert witnesses: - Peter Thompson of Pitt and Sherry (Traffic) - Michelle Zeibots of the Institute for Sustainable Futures (Induced Traffic) - Rob McGauran of McGauran Giannini Soon Pty Ltd (Urban Design) - Bryce Raworth of Bryce Raworth Pty Ltd (Heritage) - Neville Goddard of Watson Moss Growcott Acoustics (Acoustics) - Evidence tabled but not called: - Beverley Kliger of Beverley Kliger and Associates (Social Planning) - John Webb of LaTrobe University (Groundwater)
Darebin City Council	Nathan Moresi, Coordinator Transport Management Steve Hamilton, Director Assets and Business Services
Moreland City Council	Craig Griffiths, Senior Transport Planner Olivia Wright, Manager Strategic Transport Projects Leigh Dowler, Transport Coordinator
SP AusNet	Michelle Quigley SC, instructed by Alexandra Smith, Corporate Counsel SP AusNet, and Emily Sykes, Herbert Smith Freehills
Environment Protection Authority	Joanne Lardner of Counsel, with Katy McGuiness (Project Manager,

Submitter	Represented by
	Major Projects Unit) and Tony Robinson, who called the following expert witness: - Paul Torre of EPA (Air Quality) - Submissions were made from the following EPA staff: - John Marsiglio, Lead Assessor Industry (Works Approval, Noise, and Energy and Greenhouse Gas) - Leon Metzeling (Surface Water) - Julia Caluzzi (Groundwater) - Laura-lee Innes (Contaminated Land and Waste)
Members of Parliament	Richard Wynne MP, Member for Richmond Brian Tee, MLC, Member for Eastern Metropolitan Region Justin Madden, MP, Member for Essendon Jennifer Kanis, MP, Member for Melbourne Jane Garrett MP, Member for Brunswick Colleen Hartland, MLC, Member for Western Metropolitan Region
Combined Community Groups	Tom Pikusa of Counsel
Collective for Child Health	Greta Gillies
Australian Institute of Landscape Architects	Ronald Jones Bruce Echberg
Residents about Integrated Development @ 3051	Peter Hogg, Chair
Owners Corporation, Lennon Street, Parkville	Robert George
Inner Melbourne Planning Alliance	Darragh O'Brien, President
Various parties	Ben Hardwick of Slater and Gordon
Planning Institute of Australia (Victoria)	Liz Johnstone, Executive Officer William Chandler, Planning Consultant
Schotts Home Emporium	Jason Sumner of Apex Town Planning
Provans Timber and Hardware	Tim Radisich of Associated Town Planning Consultants Greg Heverin, General Manager
Mercantile Cricket Association	Alec Kahn, Match Secretary
Parkville Gardens Residents Association	Tony Rogers, Secretary
National Trust of Victoria	Paul Roser, Senior Manager, Advocacy and Conservation
Fitzroy Residents Association	Thomas Keel, President
Yarra Campaign for Action on Transport	Andrew Herington
The 3068 Neighbourhood Group	Chris Goodman, President
Yarra Climate Action Now	Kerry Echberg, Convenor
Cardijan Community Australia	David Moloney, Secretary

Submitter	Represented by
RACV	Brian Negus, General Manager, Public Policy
ALG, AiG, IPA, MBAV, PCA, RACV, VACC, VECCI, VTA, UDIA	Brian Negus, General Manager, Public Policy, RACV
Grandparents Victoria Inc	Anne McLeish, Director
Brunswick Zebras Football Club Essendon Royals Soccer Club	Carlo Carli, President Christos Stathis, Member
Flemington Neighbourhood Renewal Board	Shadia Mohamed Aly Ahmed Dini
Bicycle Network	Jason den Hollander, Facilities Development Manager
Carlton Residents Association	Ian Bird, Convenor Traffic and Transport Reference Group
Vision Australia	Kevin Murfitt, Chair Leigh Garwood, General Manager
Victoria Transport Research and Action Group	Mike Reece, Member Glenyys Romanes, Member
Moonee Valley Sporting Club	Frank Heyes, President
Royal Park Sport	Rick Boykett, President
Melbourne University Rugby Football Club	Rick Boykett, Member, Victorian Rugby Union Board
University of Melbourne Baseball Club	Vibeke Pederson, President Rob McClelland, Life Member and Player
Flemington Association, and Kelly Wright	Les Potts, President
Boroondara Bicycle Users Group	Peter Campbell, Spokesperson Peter Carter
Clifton Hill Primary School	Geoffrey Warren, Principal Nicholas Reece, President, School Council Melanie White, Member, School Council
Kororoit Institute	Tony Smith, Secretary
Moonee Ponds Creek Coordination Committee	Tony Smith, President
Friends of Royal Park, Parkville	Kaye Oddie, Secretary Gordon Ley, Convenor
Australian Garden History Society	John Dwyer
The Parkville Association	Robert Krelle, President
Safety Net for Royal Park, and Carli Ellinghaus	Anthony Peyton Sonia Sarangi and Michael Smith of Atelier Red and Black
Metropolitan Transport Forum	Tom Melican, Chair
Yarra Environmental Sustainable	Jo Southwell, Manager of Access and Diversity, and Co-Coordinator

Submitter	Represented by
Network	
Yarra Bicycle Users Group	Steven Barnett and Chris Star, Co-Coordinators
Friends of Banyule	Dennis O'Connell, President
Public Transport Users Association, with Ian Mack and Nicholas Bishop	Tony Morton, President
Public Transport not Traffic	Cait Jones, Campaign Manager
Flemington Road/Curran Street Residents	Michael Francis, Spokesperson
Play Australia	Barbara Champion, Executive Director
Essendon Community Garden	Derek Mortimer, Honorary Legal Adviser
Youlden Parkville Cricket Club	Paul Sinclair, President
Royal Park Reds Cricket Club	Ben Zika, Vice President
Pro-forma Submission No 1	Adam Bandt, Federal Member of Parliament for Melbourne and Deputy Leader Greens, and Rebecca Temple
Pro-forma Submission No 2	Jill Koppel, Andrew Herington, Michael Naismith
Protectors of Public Land Victoria and Royal Park Protection Group, with Cathy Drummond, Gabrielle Pretto and Jane Leitinger	Tom Pikusa of Counsel, instructed by Beaumont Lawyers
Kensington Association Inc., with Wendy Taylor, Rilke Muir, Paul Kippen and Justine Kippin	Mark Woodland, Spokesperson, with Rilke Muir, President
Friends of Moonee Ponds Creek	Kay Oddie, Secretary
Moreland Citizens Against East West Link Tunnel	Michael Petit, Spokesperson
Residents Against the Tunnel	David Hanna Ruth Clemens Cheryl Apperley Peter Harding James Milner Ande Bunbury Harriet Mantell
Cultivating Community	Michael Gourlay, Chief Executive Officer
Collingwood Historical Society, with Karen Cummings, Anne Holmes and Janet Taylor	Janet Taylor and Anne Holmes
Urban Camp	Jennifer Kanis MP Patrick O'Sullivan, Executive Director Jacqueline Whitby, Chair
Individual Submitters	Chris Lester

Submitter	Represented by
	Rose Iser
	Jogendra Sinha
	Andrew Saunders
	Russell Smith
	Nancy O'Toole and Crina Virgona, represented by Andrew Herington
	Alexander Swain
	Clare Walter, assisted by Rupert Watters of Counsel who called the following expert witness: - Louis Irving (Respiratory Medicine)
	Anthony Peyton
	Lucinda Peterson and Christopher Peck, assisted by Ian Pitt SC, who called the following expert witness: - Craig Czarny (Urban Design)
	Pauline Galvin, represented by Gordon Ley
	Wayne May
	Ross Nolan
	Suresh Wakhlu
	Graeme Loughlin
	Jennifer Bowen
	Michael Mossonidis
	Jack Anderson-McDonald
	Tony Bonanno
	Fiona Saint
	John Michael Saint, represented by Andrew Herington
	Gordon Ley
	Peter Geary
	Dennis Green
	Zoe and Benjamin Barclay
	Julia Cusack
	Pauline Galvin
	Damien O'Keefe
	Michael and Olivia Smith
	Jan Thomas
	Gerald Noonan
	Daniel Beuchat
	Allison Lamb
	Brent Lamb
	Lisa Ingram
	Andrew McDougall
	Andrea Leigh Tappe
	Helen Masters
	John Gibson
	John Stone

Submitter	Represented by
	Penelope Somers
	Michele Summerton
	David and Millicent Boag
	Nicholas and Susan White
	Lina Maroun
	Ian Wallis
	Graeme Stewart
	David Chachs
	Jillian Blythe
	Tina Choong
	Anne Isaac
	Carlo Ursida
	David Ettershank
	Michael Ingram
	Christine Di Muccio ad James Milne
	Nigel Jones and Kentia Boyle
	Renee Wood
	Brent and Harley Gorman
	John Widmer
	Enid Hookey
	Maritza and Francisca Araneda
	Jennifer Bowen
	Alister Huth
	Alexeena Murphy
	Frances Xie
	Helene McNamara
	James Cusack
	Meg Colasante
	Christopher Dalli
	Petra Stock
	Christopher Fox
	Peter Campbell
	Mary Healy
	Kristen Bell
	William Unkles
	Susan Pepper
	Joseph Edmonds
	Roy Burrows
	Janet Rice
	Neil Barker
	Andrew Kelly
	Michael Thong

Submitter	Represented by
	Nicholas Williams
	Paul Hobson
	William Fooks
	Stephen Alomes
	Bernard and Amina Flinn
	David Hanna
	Keith Fitzgerald
	Tony Benson
	Ande Bunbury
	Christopher Boutsinis
	Simon Moodie
	Omni Ioannou
	Mara Silvestro
	Tom, Paul and Noela Steinfort
	Beatka Provis
	Christopher Dalli
	Mark Metelman
	Anne Richards
	Tony Marjoram
	Lulzim Allpici
	Branca Merkal
	Bernadette O'Connor
	Jane Treleaven and Michael Main
	Richard and Annette Oppenheim
	Roslyn Nataprawira
	Rosamund Krivanek
	Lorrian A O'Reilly
	Stewart Denmead
	Elizabeth Frances Gherardin
	Dario and Chris Rizio
	Josephine Croci
	Nigel Lewis
	James Turnbull, represented by Jenelle Cramer of Gadens Lawyers
	Robin Vowels
	Michael and Tania Fletcher
	Abdikashur Qalinle
	Gary Dickinson
	Terry Croft
	Heather Reva Sharp
	Kenneth Duxbury
	Lindis Masterman
	Alison Clarke

Submitter	Represented by
	Malcolm Brown
	Margaret Rolfe
	Rosemary Elliot, represented by Andrew Herington
	Andrew Herington
	Sue Casey and Peter van Leeuwen
	Michael Mazur
	Rohan Dwyer
	Margaret Fried
	Julie Rudner
	Dan Musil
	Tom England

The Committee expresses its appreciation for the way in which all parties and submitters presented to it, and for the generally excellent quality of the submissions made. The material provided to the Committee has greatly enhanced the Committee's understanding and knowledge of the key issues before it. Further, the input of all parties ensured an excellent public Hearing process, where all were able to listen and present in an open and frank manner.

The Committee has approached its review and assessment on an issues based framework. That is, it has grouped the key issues in accordance with the 'hearing matters' specified in its Terms of Reference, and as part of its assessment, has highlighted some of the matters raised by submitters as relevant. Not all submitters have and can be individually named, or have particular issues ascribed to them. However, it will be clear that the Committee has considered the relevant hearing matters and the properly made submissions as part of its analysis, findings and recommendations as appropriate.

As explained at the Preliminary Hearing and again during the course of the Hearings, there were significant time constraints placed on all parties, due to the requirements of the MTPF Act to complete the public Hearing process within a 30 day timeframe. This meant that time limits needed to be applied on all presenters, and while this did constrain some presentations, it ensured that all witnesses and submitters needed to be focussed and succinct in their presentations. This generally worked well, because it ensured that witnesses and submitters went to key points. In particular, some of the community organisations joined together to present in a cohesive way, and some individual submitters 'gave' their allocated time to community groups. This was appreciated by the Committee as it allowed comprehensive submissions to be made by various groups.

However, it meant that some evidence was not able to be presented and some witnesses were not called. Further, cross examination was curtailed as a result and the Committee and other parties were frustrated that key evidence was not able to be adequately explored; both by it and by opposing parties. Given the limitations placed on the parties (for example, the LMA sought 13 days in which to present its case and it was allocated seven days, and the City of Melbourne sought six days and it was allocated three days), decisions by each party had to be made on who they should rely on for the giving of evidence and how it presented

its primary submissions. There were some small gaps in the Hearing where some parties were able to catch up and provide further submissions, but this was rare.

5.5 Scope of the Committee's Assessment

There were legal submissions about the following matters:

- The role, the function and the powers of the Committee;
- The Reference Project; and
- The relationship between the MTPF Act and the TI Act.

The Committee deals with each of these in turn.

5.5.1 Role, Function and Power of the Committee

During the course of the Hearing, submissions were made concerning the role, function and power of the Committee and any constraints imposed by its Terms of Reference.

The Committee is a creature of the MTPF Act. It is established under Subdivision 2 of Division 5 of Part 3 of the MTPF Act for the purpose of assessing any relevant CIS. In establishing a Committee, the Minister for Planning must give it Terms of Reference under which it is to make the assessment.[1] Section 36 provides a non-exhaustive list of matters that may be included in the Terms of Reference including a direction to confine the matters under consideration at a public hearing.[2]

Subdivision 9 of Division 5 of Part 3 deals with the Committee's recommendations. Section 73(1) requires that a Committee must recommend to the Minister for Planning as to whether the Minister should make an approval decision that grants all or some of the applicable approvals, or refuse to grant all of the applicable approvals. Sub-section (2) provides that the Committee must not make a recommendation that is inconsistent with the Committee's Terms of Reference. Sub-section (3) provides that if the Committee recommends a grant of approval, it must specify the conditions and relevant applicable law under which the conditions are imposed, as well as the body to administer compliance.

Section 73(4) requires the Assessment Committee to have regard to:

(a) the project proposal;

(b) the comprehensive impact statement; and

(c) all properly made submissions; and

(d) any issues raised in, as the case requires –

(i) meetings and correspondence referred to in section 56; and

(ii) a preliminary hearing; and

(iii) a formal public hearing; and

(e) the comments of the persons the committee was directed by the Planning Minister to consult with under this Division; and

[1] *Major Transport Projects Facilitation Act* 2009, Section 35(b).
[2] Ibid. Section 36(ba).

(f) any consultation with or advice received from an applicable law decision maker under this Division; and

(g) subject to this section, every applicable law relevant to the declared project, including the applicable law criteria under that law.

Sub-section (5) provides that the Committee may have regard to any other matter the Committee considers relevant. Part 8 of the Act deals with the establishment of the Committee and hearings conducted by it. In this case, the Committee has been provided with its Terms of Reference dated 21 October, 2013. In response to question 1 of the s57(4) request, the LMA discussed the Committee's powers, functions and discretions under the MTPF Act in terms of any constraints imposed by the Terms of Reference.[3]

(i) The Main Area of Dispute

The LMA observed:

> *The Committee cannot, however, assess an alignment for the Project (either above or below ground) if that alignment cannot be implemented within the Proposed Project Boundary.*
>
> *Furthermore, the Committee is precluded from making any recommendations to the Planning Minister that will require the Project to be aligned outside the Proposed Project Boundary as part of its ultimate assessment committee recommendation, as to do so would be inconsistent with the terms of reference.*[4]

Thus the LMA submitted that the Committee's consideration of the CIS and its ability to make recommendations that potentially involve alignments falling outside the *Proposed Project Boundary* are circumscribed by the Terms of Reference.

LMA addressed a number of other constraints that it said flow from the proper interpretation of the MTPF Act, and the Terms of Reference. In particular, it suggested that the Committee's ability to have regard to *"any other matter the Committee considers relevant"* under s73(5) and s236(2) does not expand the scope of the Committee's powers or functions to look beyond the matters contained in the Terms of Reference.

Further it said:

> *The Committee is required, in making its recommendations to the Planning Minister in respect of whether he should make an approval decision that grants any, some, or all of the applicable approvals that are necessary for the Project, to confine its assessment to a project that may be implemented (in the sense of aligned) on land that is within the Proposed Project Boundary. It is entitled to assess alternative alignments for the Project that may be implemented within the Proposed Project Boundary but not beyond.* [5]

[3] LMA response to s.57(4) request 11 February, 2014, p.3 – 7.
[4] Ibid. p.7.
[5] Ibid. p.7.

As to the discussion about what constitutes the *Proposed Project Boundary,* the LMA relied on its interpretation of the same in its answers to questions 2 – 4 in the s57(4) response.[6]

The constraint or limit that the LMA submitted the Committee is bound by was contested by a number of parties, in particular, the City of Melbourne, City of Yarra and Mr Herington.

The opening submission for the City of Melbourne addressed this issue (Document 10), in particular in section 1 *"Framework for Assessment"* which included the following:

> *1.1.11 It follows that the Committee is given the task of assessing the appropriateness of impacts that might flow from any design that provides a freeway standard road linking the Eastern Freeway at Hoddle Street with CityLink at Flemington and with a connection to the Port of Melbourne that meets whatever are ultimately the Performance Requirements and any conditions of any approval decision.*

The opening submission on behalf of the Yarra City Council (Document 12) did not agree with the LMA's interpretation of either the MTPF Act or the Terms of Reference (paragraph 33). It suggested that the Committee is perfectly entitled, indeed obliged, to:

> *(a) consider the whole of the "project" such as it is; and*
>
> *(b) form judgments as to whether it is satisfied on the evidence that the project, taken as a whole, including the impacts of the project, are in the net community benefit.*

Yarra suggested that:

> *40. Nothing in a direction made under s.36(1)(b) can have the effect of robbing the Committee of the choice which it is empowered to exercise by s.73(1) of the Act. Any interpretation of the provisions which lead to such conclusion would be inconsistent with the purpose and objects of the Act.*
>
> *41. If the LMA is right, it would be possible for terms of reference to be issued to a committee which expressly compelled it to proceed upon the basis that approval will be granted, and to direct the Committee to make no recommendations whatsoever.*
>
> *…*
>
> *44. The terms of reference clearly confine the public hearing to certain specified matters, namely whether the variously identified impacts have been "appropriately addressed".*

Mr Herington (Document 35) challenged the LMA's *"assertions"* that the powers of the Committee are limited by the Terms of Reference. In particular, he addressed the Minister's response in his paragraphs 4 – 6, and noted:

[6] Ibid p.8 – 10.

> *The planning officers of the department are approaching the "Proposed Project Boundary" as being consistent with the references to "Precinct Boundary" and "Proposed Project Boundary" throughout the CIS Mapbook.*

As to the interpretation of the words *"Proposed Project Boundary"* Mr Herington took issue with the LMA submission. He further took issue with the constraint urged by the LMA on the Committee's consideration of other matters under s73(5) and s236(2).

In its closing submission (Document 525), the LMA addressed the Committee's Terms of Reference in section B1 and sought to clarify what it said are misunderstandings relevant to its position. It said in paragraph 7:

> *The LMA accordingly also maintains its position that the Committee cannot assess an alignment for the Project – as opposed to elements that are not properly regarded as part of the alignment – that falls outside the Proposed Project Boundary.*

(ii) The Proposed Project Boundary

To say that there is confusion surrounding the words *Proposed Project Boundary* as contained in paragraph 1(3)(b) of the Terms of Reference is an understatement. The full text of that sub-section of the Committee's task is:-

> *The Assessment Committee is directed to:*
>
> *…*
>
> *(b) consider the alignment, design and performance requirements for the project that may be implemented within the Proposed Project Boundary identified in Figure 1 (dated 2 October, 2013) of the Mapbook in the CIS.*

It appears that all parties accepted the date is a typographical error and should refer to 3 October, 2013. Figure 1 in the Mapbook bearing that date does not have a *Proposed Project Boundary* that can be identified as such, apart from the coloured lines in the legend depicting various elements of the road structures proposed to be built. This is in contrast to the Key Plan following Figure 7 that contains a dotted blue line identified in the legend as *Proposed Project Boundary*. That dotted blue line then appears in Sheets 1 – 27.

It is interesting to consider the Minister's submission in response to the s.57(4) request, noting that the response is made not in the capacity of the Minister for Planning pursuant to the MTPF Act, but rather pursuant to the *Planning and Environment Act* 1987. In that sense, the Minister is wearing a different hat and therefore does not seek to direct the Committee as to the interpretation to be placed upon the Terms of Reference. However, it would appear that the DTPLI officers adopted the narrower interpretation urged by LMA. This places the Committee in a difficult position. If it adopts a broader interpretation of the task as urged by City of Melbourne for instance, and makes recommendations based on that interpretation to the Minister for Planning, it is conceivable that the Minister might say the Committee has misinterpreted its Terms of Reference and therefore made recommendations that are inconsistent with the terms (cf. s.73(2)) of the Act).

It seems that if the LMA proposition was to have any credence, Task 1(3)(b) would have used the term *"Proposed Project Boundary"* and would have referred to a different figure or sheet number or numbers in the Mapbook. The term *"project"* is defined in the preamble to the Terms of Reference as being the East-West Link (Eastern Section) Project. This accords with the Premier's announcement of December 2012 of the declared project. In addition, as pointed out on behalf of the City of Melbourne (Document 103, paragraph 1.1.6), the Figure 1 of 3 October, 2013 *"directly reflects the CIS at Figure 4.1, Chapter 4, page 2 (page 3), which is a definition of the route of the Reference Project in an imprecise way"*. Figure 4.1 is described as *"Proposed Project Boundary and precincts"*. The legend defines precincts which perhaps, by implication, seek to define the Proposed Project Boundary, although no legend notation to that effect is included.

The term *"Proposed Project Boundary"* is not a defined term in the Act although *"project area"*, *"project land"* and *"project proposal"* are.

Adopting the ordinary English definition of "*propose*" and the term project in the sense of being a "*declared project*" which was "*the proposed freeway – standard link between the Eastern Freeway and Tullamarine Freeway generally along the Alexandra Parade corridor, with a further southerly connection to the Port of Melbourne area*", the legal opinion provided to the Committee is that a broader interpretation of task 1(3)(b) should be adopted whereby the Committee is assessing the "*alignment, design and performance requirements for the project that may be implemented … between the Eastern Freeway and Tullamarine Freeway generally along the Alexandra Parade corridor with a further southerly connection to the Port of Melbourne area*".

(iii) Powers and Functions of the Committee

The closing submission on behalf of the LMA (Document 525) observed:

> *5. So that there is no confusion, the LMA wishes to make clear that it takes no issue with the following propositions concerning the operation of the terms of reference:*
>
> *(a) first, that the Minister has not sought to exclude consideration of the economic benefits of the project as part of the Committee's ultimate recommendation to the Minister;*
>
> *(b) second, the Minister has not sought to preclude consideration by the Committee of the matters set out in s.73 of the Act;*
>
> *(c) third, the Minister has not sought to preclude consideration by the Committee of any of the applicable law criteria; and*
>
> *(d) fourth, that the specified public hearing matters are not expressed to confine the Committee's ultimate evaluation of all of the applicable law criteria for the purpose of making an Assessment Committee recommendation.*
>
> *6. The LMA maintains its position, however, that Division 5 of Part 3 of the Act, properly construed, does require that the Committee:-*

(a) must conduct its assessment of the CIS in accordance with the directions contained within the terms of reference;

(b) must, in doing so, have regard to those matters identified in s.73(4) of the Act; and

(c) must not make an Assessment Committee recommendation that is inconsistent with the terms of reference.

7. The LMA accordingly also maintains its position that the Committee cannot assess an alignment for the Project – as opposed to elements that are not properly regarded as part of the alignment – that falls outside of the Proposed Project Boundary.[7]

The conclusion reached as to *"Proposed Project Boundary"* is not consistent with paragraph 7 above to the extent that the alignment as shown in Figure 1 can be understood to be generally in accordance with the declared project. On the other hand, a recommendation for an alignment along Bell Street (as suggested by some submitters) would clearly be inconsistent with the Premier's declaration.

There does not appear to be a great difference of opinion between the parties that the Committee has, in effect, two separate components to its consideration. The first are the public hearing matters while the second are the applicable law criteria. Submitters can only address the first due to the definition of *"properly made submissions"* and the limitations imposed by the Terms of Reference. In addition, the Committee must also consider the above criteria. In terms of s73(5) and s245(1D), the Committee is required to constrain its enquiry to the matters relevant to the above criteria or public hearing matters, and not go beyond them. Within that limitation, however, it has a wide discretion to pursue matters if it is not satisfied the CIS or evidence has addressed them.

Having regard to the concessions referred to in the above paragraphs 5 and 6 of the LMA's closing submission, the area of dispute between the parties appears to revolve around the confusion relating to what constitutes the Proposed Project Boundary and whether the CIS has appropriately addressed the public hearing matters. This is ultimately a matter for the Committee to resolve having regard to the view it takes on the adequacy of the Performance Requirements and the Incorporated Document proposed for Planning Scheme Amendment GC2. To that extent, this is a similar task to that performed by a Panel dealing with an Amendment or an Inquiry or Advisory Committee considering an Environment Effects Statement.

5.5.2 Reference Project

In its opening submission, Yarra City Council addressed the issue of what project the Committee is considering in paragraphs 13 – 18 as follows:

13. Further and alternatively, the Council contends that "the project" which is the subject of the CIS, the current exhibition and the forthcoming public hearings, is not a relevant project for the purposes of the Act, but instead a

[7] Document 525, pages 6 and 7.

hypothetical possible project which is unlikely to be constructed in the form presented in the CIS.

14. *As a consequence, the impacts (positive and negative) ostensibly identified by the CIS are not the actual impacts that the project, if constructed, will have.*

15. *In many respects, the proposal is insufficiently precise to make any, or any proper, assessment of the impacts (positive or negative) of the project.*

16. *Where some level of detail is provided, there is insufficient certainty that the project either can be delivered as proposed, or indeed will ultimately be delivered as proposed, such that the assessment of impacts is rendered entirely academic in all probabilities.*

17. *In any event, there is insufficient certainty concerning the nature of what is actually proposed to be constructed to justify the grant of approval sought under the applicable laws, including but not limited to, the Planning and Environment Act 1987.*

18. *Alternatively, even if it can be said the project is amendable to consideration under the Act, the nature of the Reference Project and the CIS renders impossible the proper consideration of the project as a whole within the context of the relevant applicable laws as required by the Act.*

Further the City of Yarra (Document 206) observed:-

4. *The use of the Reference Project approach by the LMA is, at best, inappropriate and, at worse, unlawful:*

   (a) on any view, the use of the Reference Project is inappropriate:

   (i) the purpose of putting forward the Reference Project is said to be to enable members of the public to participate effectively in the CIS process;

   (ii) self-evidently, the best way to enable the public to participate in the CIS process would be to provide it with accurate and clear information about what is actually proposed to be developed. The Reference Project does not do that. Indeed, it does quite the opposite. Both the CIS and the LMA in answer to the Committee's section 57(4) request, have generated confusion where accuracy and clarity was sought; and

   (iii) as has been demonstrated throughout the hearing, the use of the Reference Project has done little, if anything, to enhance understanding of the Project. For example, we still have no clear idea of whether the Eastern and Western sections will be developed at the same time – the basic fact upon which many of the alleged benefits of the Project depend.

   (b) it is likely that the use of the Reference Project is unlawful:-

[7 Grounds are relied upon to support this proposition]".[8]

The City of Melbourne in its opening submission (Document 10) observed:

> *1.1.10 In this context it is submitted that the Reference Project is in many respects a "straw man" because it does not define what the actual project will be within the broad ambit of the "declared project" contained in the declarations of 19 December, 2012 and accordingly the proposition in the CIS that the Reference Project provides the basis for assessing the expected impacts and risks of the project (CIS page 6) is in issue.*
>
> *1.1.11 It follows that the Committee is given the task of assessing the appropriateness of impacts that might flow from any design that provides a freeway standard road linking the Eastern Freeway at Hoddle Street with CityLink at Flemington with a connection to the Port of Melbourne but meets whatever are ultimately the Performance Requirements and any conditions of any approval decision.*

The LMA's closing submission addressed the legitimacy of the Reference Project in its section B2. Footnote 7 detailed 16 submitters who contended that the Reference Project as a tool of assessment *"may be"* unlawful.[9] In this regard, the LMA submitted

> *10. This is clearly not a matter that can be properly agitated before the Committee.*
>
> *11. It is noted, however, that nothing in the terms of the Act precludes a "transport project" being defined in terms that would allow for a variety of physical manifestations. A "transport project" must be a project for the development of "transport infrastructure" or "transport infrastructure together with non-transport infrastructure".*
>
> *12. The declaration in question identifies the transport project to be a "proposed freeway – standard link between the Eastern Freeway … Port Melbourne area."*
>
> *13. Having regard to the definitions set out above, this can clearly be regarded as comprising "transport infrastructure", and the Project should consequently clearly be regarded as being a "transport project".*
>
> *14. More importantly, however, it is not correct to assert (as has the City of Yarra and others) that the impacts of a transport project that is defined in this way cannot be properly assessed by the Committee, or that this assessment cannot be made using a reference design.*

[8] Submission on behalf of Yarra City Council, document 206, page 2 – 4.
[9] Closing submission of behalf of the LMA, Document 525

15. *A reference design, properly understood, is a tool that assists the Committee to assess the range and extent of likely impacts of the declared transport project.*

16. *The decision-making framework that is proposed to be established by the performance requirements, the applicable approvals, and any other conditions imposed by the Planning Minister, will ensure that the impacts of the ultimate proposal can be appropriately managed (regardless of the final detailed design of the Project).*

17. *Section 30 of the Act requires the Minister to prepare directions for the preparation of a CIS that "specify the kinds of impacts and other matters that must be considered and addressed in a comprehensive impact statement".*

18. *Significantly, the Scoping Directions that were prepared for the Project in accordance with a section specifically contemplate the use of "a reference concept design".*

19. *The role of the CIS is, therefore, to engage in the process of considering and addressing the impacts and other aspects of the Project in accordance with those directions.*

…

22. *A consideration of impacts may result in a conclusion by the Committee that the full extent of impacts is either uncertain or unable to be conclusively determined, until such time as the Project is completed and in use.*

23. *In view of this, it is submitted that the obligation imposed by the Act to address impacts neither suggests, nor demands, that the nature and/or extent of each impact be conclusively and finally determined in the assessment process. Rather, impacts (or possible impacts) can be properly addressed by providing a management framework that allows for the monitoring and management of impacts as they occur.*

On the basis of its legal advice, the question of whether or not the use of a Reference Project as a basis for proceeding with the consideration of the CIS is valid or invalid is not a matter that should be considered by the Committee. The Committee is directed by its Terms of Reference. As such it is required to assess the CIS and make recommendations based upon that assessment. Whether the CIS complies with the requirements of the Act or indeed the scoping directions, is not before the Committee. As mentioned by Mr Morris at the Hearing, if a submitter wished to challenge that they could do so, but not in this forum.

Accordingly, the Committee accepts the opinions of the LMA and the City of Melbourne that the task of the Committee is to deal with what is before it in the CIS. The fact that the LMA has elected to proceed with a Reference Project as a means by which it can identify Performance Requirements that it says deals with any likely impacts of the declared project, is a matter for it. The task of the Committee is to assess whether those Performance

Requirements and the management and structure surrounding them is appropriate having regard to the public hearing matters and the applicable law criteria.

It follows that if the Committee concludes that the CIS does not appropriately address such matters, it can recommend refusal or part-refusal, or approval subject to conditions which may see the Performance Requirements amended to address relevant concerns.

The election by the LMA to proceed in the manner it has is open to it, and whether it adequately or appropriately addresses the various matters is a fact finding exercise about which opinions legitimately differ. It is clearly a matter for the Committee to reach conclusions upon which it can make its recommendations.

On a more general level, and regardless of any legal issues, there is no doubt that the use of a 'Reference Project' approach has caused considerable difficulty and angst for the Committee, other parties and the community.

As the Reference Project is a concept and not a 'real' project, it has made it difficult to fully assess the impacts of the Project, as they may occur or not, depending on whether the final Project is quite similar or very different to the Reference Project. In practical terms this has caused the following issues:

- Lack of certainty on key technical issues such as tunnelling approach leading to difficulty in fully assessing potential impacts;
- Lack of certainty on other issues such as social and economic effects;
- The generation of significant community concern and stress about Reference Project elements that may not be in the final Project.

The approach has also led to difficulties for expert witnesses from the LMA and other parties who have tried to provide an expert opinion based on a Reference Project whose impacts, as far as they can be assessed given the uncertain design, may be significantly different to the final Project.

The Committee considers that in a high intensity urban environment such as that to be encountered by the Project, a more transparent, measured and structured approach to options identification and discussion with the community would have resulted in a superior process and Project outcome.

5.5.3 MTPF Act and TI Act

Section 3 of the TI Act provides a series of definitions including *"interface bodies"* which mean in the P&E Act, a planning authority and the MTPF Act, an Assessment Committee established under s35 of that Act. *"Interface legislation"* means, inter alia, the MTPF Act and the P&E Act.

Likewise, s3A of the MTPF Act identifies it as interface legislation within the meaning of the TI Act.

"Transport Body" includes the LMA.

"Transport Infrastructure Project" means any project declared to be a Transport Infrastructure Project by an order made under s49.

The relevance of interface bodies and interface legislation becomes apparent when considering Division 5 Part 2 of the TI Act. Section 23 states that it is the intention of Parliament that the TI Act is to be administered and interpreted having regard to the following:

(a) the vision statement;

(b) the transport system objectives;

(c) the decision making principles;

(d) the statement of policy principles.

Section 24 requires a transport body e.g., the LMA to have regard to the above. Importantly, s25 requires that an interface body, for example, the Committee must have regard to the transport system objectives when exercising powers and performing functions under any interface legislation which are likely to have a significant impact on the transport system. In addition, an interface body must have regard to the decision making principles which are likely to have a significant impact on the transport system.

Section 26 provides that for the purposes of s24 and s25, an interface body may determine the weight to be given to each transport system objective whilst s27 enables the interface body to determine the weight to be given each decision making principle.

Hence the transport system objectives and decision making principles are relevant to any decision made by the Committee in its capacity as an interface body.

The transport system objectives are set out in Division 2 of Part 2 and, in particular, sections 7 – 13. Section 8 deals with social and economic inclusion and provides:

The transport system should provide a means by which persons can access social and economic opportunities.

Section 9 deals with the economic prosperity and provides:

The transport system should facilitate economic prosperity by

(a) enabling efficient and effective access …

(b) increasing efficiency through reducing costs and improving timeliness …

Section 10 deals with environmental sustainability and provides:

The transport system should actively contribute to the environmental sustainability by:

(a) protecting, conserving and improving the natural environment;

(b) avoiding, minimising and off setting harm to the local and global environment, including through transport-related emissions and pollutants and the loss of biodiversity;

(c) promoting forms of transport and the use of forms of energy and transport technologies which have the least impact on the natural environment …

Section 11 deals with integration of transport and land use and provides:

(1) The transport system should provide for the effective integration of transport and land use and facilitate access to social and economic opportunities.

…

(3) Without limiting the generality of subsection (1), the transport system and land use should be aligned, complimentary and supportive and ensure that –

(a) transport decisions are made having regard to the current and future impact on land use;

(b) land use decisions are made having regard to the current and future development and operation of the transport system;

(c) transport infrastructure and services are provided in a timely manner to support changing land use and to associated transport demand.

(4) Without limiting the generality of subsection (1), the transport system should improve the amenity of communities and minimise impacts of the transport system on adjacent land uses.

Section 12 deals with efficiency, co-ordination and reliability and includes, inter alia:

(1) The transport system should facilitate network wide efficient co-ordinated and reliable movements of persons and goods at all times.

(2)(b) maximise the efficient use of resources including infrastructure, land, services and energy;

(c) facilitate integrated and seamless travel within and between different modes of transport.

Section 13 deals with safety and health and wellbeing and includes, inter alia:

(1) The transport system should … support health and wellbeing.

(2)(b) Avoid and minimise the risk of harm to persons arising from the transport system;

(c) Promote forms of transport and the use of forms of energy which have the greatest benefit for, and the least negative impact on, health and wellbeing.

Division 3 of Part 2 deals with the decision making principles. Section 15 deals with integrated decision making which is to achieve Government policy objectives through co-ordination between all levels of the Government and Government agencies. Section 16 deals with triple bottom-line assessment which means an assessment of all economic, social and environmental costs and benefits taking into account externalities and value of money. Section 17 deals with principles of equity, s18 deals with the transport system user perspective, s19 requires the application of the precautionary principle, s20 requires stakeholder engagement and community participation while s21 requires transparency.

Mr Morris on behalf of the LMA submitted to the Committee (Document 100) as follows:

8. *The obligation to have regard to the transport system objectives and decision making principles is an obligation cast on the LMA and the Assessment Committee. It is not an obligation cast on any individual member or officer of the LMA or any individual member of the Assessment Committee; nor is it an obligation cast on any consultant employed by the LMA. It is quite proper for the Committee or the LMA to engage a person to consider an aspect of the EWL (eastern section) in isolation.*

9. *The obligation of the LMA and the Assessment Committee is to <u>have regard to</u> the transport system objectives and decision making principles. This means these objectives and principles must be considered; it does not mean the objectives and principles, or any particular objective or principle, must be applied.*[10]

10. *Indeed, it is clear from section 26 of the TIA that both the LMA and the AC may determine "the weight" to give to each decision making principle.*

11. *The transport system objectives extend to social and economic inclusion, economic prosperity and environmental sustainability. Moreover, there is an intention that the transport system provide for the effective integration of transport and land use and facilitate access to social and economic opportunities. Moreover, these objectives extend to efficiency and co-ordination; as well as reliability, safety and health and wellbeing.*

12. *The nature of the transport system objectives is such that, in some instances, there will be a tension between different objectives. When this occurs, each of the objectives must be considered, but a judgment can be made as to which objective ought to be accorded priority.*

13. *The decision making principles include principles relating to: integrated decision making; and assessment of all the economic, social and environmental costs and benefits taking into account externalities and value for money; the principle of equity; considering the transport user's perspective; the precautionary principle (as defined); stakeholder engagement and community participation; and transparency.*

14. *The nature of the decision making principles is such that, in some instances, there will be a tension between different principles. When this occurs, each of the various principles must be considered, but a judgment can be made as to which principles ought to be accorded priority.*

15. *What this means is that it is inappropriate and irrelevant to grasp upon one transport system objective or one decision making principle (or one part of such an objective or principle) and to "require" that that objective or principle be satisfied.*

It can be seen from the above that there is an interrelationship between the MTPF Act and the TI Act to the extent that the Committee must have regard to the objectives and

[10] See *Glen Eira CC v Gory* (2011) 9 VPR 101, per. Bamford J.

principles of the TI Act as part of its overall assessment of the CIS. The exercise required of the Committee is not dissimilar to the usual balancing exercise undertaken by any decision maker in planning matters, where a number a competing objectives and policies need to be weighed and balanced having regard of the overall objective. The overall objective of the TI Act is perhaps contained in section 6 which is the vision statement that provides:

> *The Parliament recognises the aspirations of Victorians for integrated and sustainable transport system that contributes to an inclusive, prosperous and environmentally responsible state.*

An obvious conflict in this particular assessment process is the visual, social and emission (noise and air) impacts of the proposal, versus the cost of providing a transport project that would appear to clearly provide a much needed connection between the Eastern Freeway and CityLink, amongst other benefits.

If follows that it is ultimately up to this Committee the weight it places on the objectives and principles of the TI Act in seeking to reconcile the need for a transport project at what one would assume to be a reasonable cost, against the likely impacts the Project is likely to cause.

Part B: Assessment

6 Traffic and Transport

6.1 Introduction

6.1.1 Terms of Reference and Applicable Approvals

In addition to its overarching tasks of assessing the CIS and evaluating all applicable law criteria for applicable law approvals, Part 7(a) of the Committee's Terms of Reference includes the following *Public Hearing Matters* relating to traffic performance, the road network and connectivity:

> *Whether the impacts of the project on the traffic performance of roads connecting to the project, and the surrounding road network, as well as on connectivity for public transport, cycling and pedestrians, have been appropriately addressed.*

The applicable approvals relevant to traffic and transport are contained in the *Road Management Act* 2004. Schedule 2-1 of the Act requires the written consent of VicRoads to connect the project road to an existing freeway and Schedule 7-16 requires VicRoads' consent to work on a road.

The requirements of the *Transport Integration Act* 2010 were considered in the CIS assessment.

6.1.2 Conclusion of the CIS

In relation to traffic and transport, the CIS concluded that from a citywide perspective, the Project would address Melbourne's poor east west connectivity by making it easier and faster to travel across the city:

> *The additional capacity provided for east-west movements would reduce Melbourne's increasing reliance on the M1 corridor and relieve pressure on existing east-west arterial routes. It would also reduce traffic 'rat running' through Melbourne's inner north. Access to the Port of Melbourne and Melbourne Airport would be improved, with flow-on benefits for business productivity and efficient movement of freight.*

The main traffic benefits offered by the Project as stated in the CIS include:

- *A substantial improvement in travel times for east-west trips and improved travel time reliability;*
- *Reduced levels of congestion across the metropolitan and regional road networks and at specific locations in the local study area;*
- *Decreased traffic along Alexandra Parade;*
- *Less traffic on local streets;*
- *An alternative east-west route for freight;*
- *Improved road safety; and*
- *Potential improvements to on-road public transport services.*

A number of operational impacts and capacity upgrades are identified to the existing road network. The overall traffic and transport conclusion of the CIS is that the East West Link –

Eastern Section is not forecast to have any major adverse impacts on the existing transport network and that provided the performance requirements are followed, traffic impacts associated with the Project's construction and operation would be mitigated sufficiently.

6.1.3 Objectives and Performance Requirements

The CIS evaluation objective (set by the Scoping Directions) for Traffic and Transport is:

> *Transport connectivity – to improve road based transport connectivity between the east of Melbourne and the Port of Melbourne and the wider metropolitan region and the State, while maintaining the connectivity of existing local transport routes.*

There are four corresponding Traffic and Transport Performance Objectives in the CIS:

- *Improve road based transport connectivity between the east of Melbourne and the Port of Melbourne and the wider metropolitan region and the State, while maintaining the connectivity of existing local transport routes;*
- *Minimise disruption to motor vehicle traffic, parking, bicycle and pedestrian movements during construction;*
- *To minimise disruption to public transport and rail freight during construction; and*
- *To minimise potential for accidents by managing road safety for all new road linkages.*

An extensive list of Performance Requirements is specified in Chapter 7 of the CIS (Table 7-7) to meet these Performance Objectives. The CIS stated that it "*would be up to the contractor(s) to determine the best approach to meeting the performance requirements, subject to legislative and other requirements*".

6.1.4 Issues

The Committee heard traffic and transport evidence from the following experts:

- Mr Michael Veitch of Veitch Lister Consulting for the LMA on traffic modelling;
- Mr Stephen Pelosi of Movendo for the LMA on traffic;
- Mr Jim Higgs of TTM Consulting for the City of Melbourne on traffic/road design;
- Mr Eric Keys of Eric Keys and Associates for the City of Melbourne on strategic traffic modelling;
- Mr Peter Thompson of Pitt and Sherry for Yarra City Council on traffic;
- Dr Michelle Zeibots of the Institute of Sustainable Futures for Yarra City Council on induced traffic;
- Mr Andrew O'Brien of O'Brien Traffic for the Moonee Valley City Council on traffic/road design; and
- Mr Tom Brock of GHD for the LMA on road design.

At the request of the Committee, all experts met to discuss the relevant issues and determine points of agreement and dispute. At the conclusion of the conclave and further discussions an '*Agreed Statement*' (Document 30), was provided to the Committee.

At the meeting attended by Messrs Brock, Veitch, Pelosi, O'Brien, Higgs, Thompson, Keys and Dr Zeibots a total of 19 issues were discussed.

One of the issues raised concerned cost/benefit analysis (and by reference the detailed business case). This matter is outside the Committee's Terms of Reference and therefore is not discussed.

The following topics were discussed and generally **agreed** by the experts at the conclave.

- Whether the forecast traffic volumes support the need for Part B:
  - It was agreed that the CIS proposes that the East West Link – Eastern section can be built with or without Part B. If Part B is not built, access (possibly congested) to the Port would need to occur via CityLink.
  - The performance of CityLink under various options is somewhat dependent on future upgrades both north and south of the section of interest. Further information about these future projects would assist to inform the CIS. This matter was put forward by Mr Keys.
  - Traffic performance indicators presented in the CIS show the upgraded 4-lane section of CityLink (the viaduct between the proposed Eastern Section junction and Footscray Road) operating well within its capacity.
- Alignment decisions re Western Section of East West Link with respect to Part B:
  - It would be helpful to understand the previous deliberations on the Western Link as part of the formal planning investigation that took place.
  - There is a scarcity of data in the CIS, to help understand why the current scheme (including Part B) has been put forward.

The following topics were discussed and generally **not agreed** by the experts at the conclave.

- That an option assessment that considered the whole East West Link alignment (both Eastern and Western sections) could potentially identify a significantly superior outcome that didn't require the Part B section (Eric Keys).

Based on its consideration of the evidence, and the written and verbal submissions relevant to its Terms of Reference relating to traffic and transport, the Committee has grouped its assessment under the following headings:

- Traffic Performance;
- Precinct 1: Hoddle Street (Eastern Portal);
- Precinct 2: Alexandra Parade;
- Precinct 3: Royal Park (Western Portal);
- Precinct 4: CityLink;
- Precinct 5: Port Connection;
- Precinct 6: Footscray Road; and
- Other Traffic/Transport related issues.

6.2 Traffic Performance

6.2.1 Introduction

LMA retained the services of VLC to undertake a strategic modelling exercise to determine the impacts of the Project upon the wider transport network. The Zenith travel model, one of a family of models developed by VLC, "*which simulates travel demand during an average weekday in each forecast year*", (Average Weekday Daily Traffic - AWDT) was used and includes travel by all modes of transport. This model identifies changes in travel demand

based upon land use and population scenarios through to 2031 for a scenario "*that assumed EWL would not be built, and a scenario where EWL is built in conformance with the Reference Scenario".* These forecasts were reported in Chapter 7 and Appendix E of the CIS. In addition the forecast volumes were used by GHD as a basis for the microsimulation component of its work.

The output from the model determined that significant growth would occur in vehicle trips and public transport trips between 2011/13 and 2031 with and without the Project. However, only minor variations in trip making were determined in 2031 with and without the Project. This is shown in Table 2.

Table 2: Comparison of Metropolitan Vehicle and Public Transport Trips 2031 with and without EWL

	Measurement	Percentage Change
Total vehicle trips	+ 6000 vpd	+ 0.04%
Vehicle hours travelled	- 4300 hrs	- 0.11%
Average speed	53 kmh	0%
Total public transport trips	- 700 trips	- 0.03%

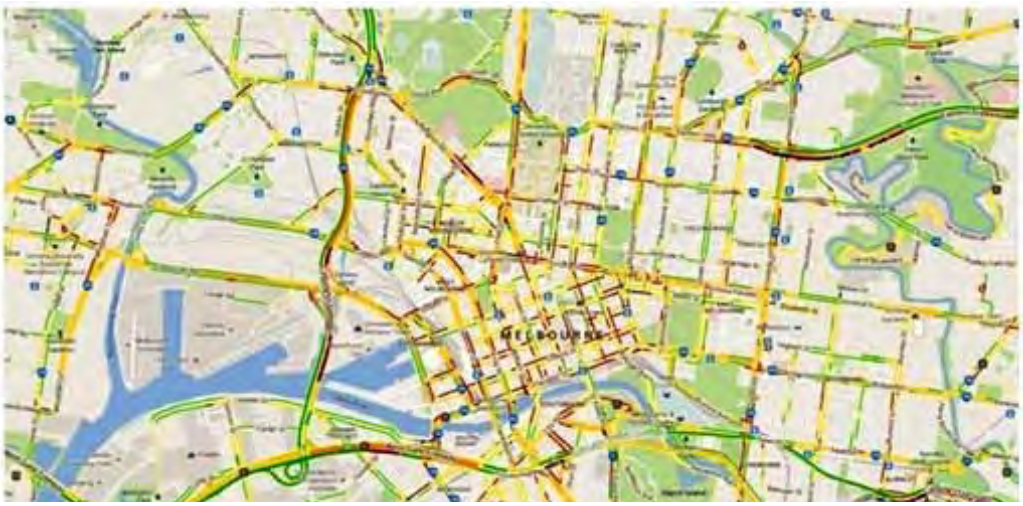
Source: GHD TIA

6.2.2 Existing Traffic Conditions

LMA retained GHD to assess the potential impacts and benefits of the Project to inform the CIS. A report titled" *East West Link – Eastern Section, Traffic Impact Assessment, October 2013*" was prepared by GHD.

Section 9.1.1 of the GHD report outlines the key congestion locations. These locations were obtained from the VicRoads website. Figure 10, which is a reproduction of GHD Figure 11, shows traffic conditions between 8.30 and 9.00 am, in August 2013, which is said to be "*an average weekday*".

Figure 10: VicRoads Congestion Locations for Existing Conditions



Source: VicRoads 2013, http://traffic.vicroads.vic.gov.au

The key congestion locations are summarised as follows:

Table 3: Summary of Key Congestion Locations

Road	Comments/reasons for congestions
Alexandra Parade	Significant congestion occurs on approach to the intersection with Wellington Street. This is the first intersection following the Eastern Freeway. Significant congestion also occurs on approach to the intersection with Brunswick Street as large volumes of traffic access Alexandra Parade from Queens Parade.
Brunswick Street	Congestion occurs from the high volumes of left-turning vehicles from Alexandra Parade combined with the south-bound traffic already travelling along Brunswick Street.
CityLink (Western Link)	CityLink (Western Link) is a primary arterial route providing access into the city. Traffic volumes along the link are high during the peak periods, particularly for the south-bound carriageway in the AM peak. The congestion along CityLink is also partly due to ramp interactions (vehicles merging with high volumes along the main line) and extended queuing from the M1 corridor (CityLink Southern Link / West Gate Bridge / Monash Freeway).
Chandler Highway	Significant congestion occurs along Chandler Highway near the bridge over the Yarra River. The road narrows to one lane in each direction at this bridge and then signals provide priority to Heidelberg Road.
Eastern Freeway	Significant volumes exit the freeway onto Hoddle Street creating congestion on the freeway as the intersection with Hoddle Street limits the volumes entering Hoddle Street.
Elliott Avenue	Elliott Avenue forms part of the east-west route connecting the Eastern Freeway with the western suburbs. The road link has two lanes in each direction. Congestion along Elliott Avenue is primarily due to the restricted capacity along the road link and the limited allocated 'green time' at the intersection with Flemington Road due to priority of the trams and requirements of other roads at this intersection.
Flemington Road	Significant volumes exiting the freeway and competing with east-west traffic travelling along Elliott Avenue / Racecourse Road cause congestion.
Hoddle Street (north of Alexandra Parade)	Significant congestion occurs on approach to the Alexandra Parade which is likely to be due to signal delays for vehicles exiting the Eastern Freeway and travelling south along Hoddle Street. There are also significant delays north of Ramsden Street as large volumes of traffic enter the road from High Street and Heidelberg Road merging at this location.
Hoddle Street (south of Alexandra Parade)	Hoddle Street is widely considered to have significant congestion south of the Eastern Freeway. Observations of operations along Hoddle Street indicate there are a number of large intersecting roads requiring significant traffic signal 'green time' which creates delays for traffic travelling along Hoddle Street. This is particularly the case for the approaches to the intersections with Johnston Street and Victoria Street. Victoria Street has Tram Route 109 which is a premier tram route requiring significant priority to reduce delays and allow for 10 minute frequency services in the peak periods. Johnston Street requires priority for the multiple bus routes travelling along the road. The conflicting priority is balanced between the key arterial roads at each intersection although it also causes delays for traffic along Hoddle Street due to the large volumes travelling along the road.
Johnston Street	Congestion occurring along Johnston Street is primarily due to completing time for signals due to the north south orientated trams.

Road	Comments/reasons for congestions
Macarthur Road	Macarthur Road also forms part of the east-west route connecting the Eastern Freeway with the western suburbs. The road link narrows to one lane in each direction. Congestion along Macarthur Road is due to the constrained capacity of the road and the volume of traffic travelling along the link.
Nicholson Street	Congestion occurs from the high volumes of left-turning vehicles from Alexandra Parade, combined with the south-bound traffic already travelling along Brunswick Street.
Ormond Road	Congestion along Ormond Road is primarily due to the capacity constraints at either end of the road. CityLink ramps at the eastern end attract trips to/from the area and the on-street parking and trams along Mount Alexander Road constrain the operation of the intersection between Ormond Road and Mount Alexander Road.
Smith Street	Moderate congestion occurs from the high volumes of left turning vehicles from Alexandra Parade combined with the south-bound traffic already travelling along Smith Street.
Wellington Street	Moderate congestion occurs between Alexandra Parade and Mater Street. This is likely to be due to vehicles utilising the road as an alternative to Hoddle Street to access Victoria Parade.

Source: CIS Summary Report

6.2.3 Travel Time

The September 2013 VLC report prepared for LMA had as its focus "*the validation of the base year (2011) Zenith model*." The report includes comparisons between observed conditions and model outputs in terms of a number of parameters including travel times. "*This is to demonstrate the validity of the model in replicating observed travel behaviours".*

Section 5.2.5 of the report stated: "*The Eastern Freeway/Alexandra Parade/Elliott Avenue corridor is a key travel time route amongst the 201 travel time routes used in validation".* The report further states: "*However, the modelled average travel times are underestimated for the peak direction of each peak period*. *The model does not accurately reflect the levels of congestion in the peak directions due to delays caused by queues propagated from upstream intersections"*. While it is acknowledged that this is a limitation with strategic models, VLC's efforts to overcome this problem have met with "*little success".*

At the hearing Mr Veitch acknowledged that the Zenith model did not take into consideration intersection delays when modelling travel time.

The GHD report indicated that a "*key benefit of East West Link is expected to be the travel time savings for east-west traffic movements*". Travel time surveys were undertaken during the 'am' peak period along the approximate project alignment between Footscray Road and the Chandler Highway interchange on the Eastern Freeway. Table 4 summarizes the results of these investigations.

Table 4: Existing Travel Time Survey (AM Peak Period)

Starting location	End location	Travel time range	Average travel time
Chandler Highway (Eastern Freeway)	CityLink	20 to 46 minutes	32 minutes
Racecourse Road	Footscray Road	3 to 6 minutes	4 minutes
Total west-bound travel time from western end of the Eastern Freeway to Footscray Road		**23 to 52 minutes**	**36 minutes**
Footscray Road	Racecourse Road	2 to 4 minutes	3 minutes
CityLink	Chandler Highway (Eastern Freeway)	14 to 18 minutes	15 minutes
Total east-bound travel time from Footscray Road to western end of the Eastern Freeway		**16 to 22 minutes**	**minutes**

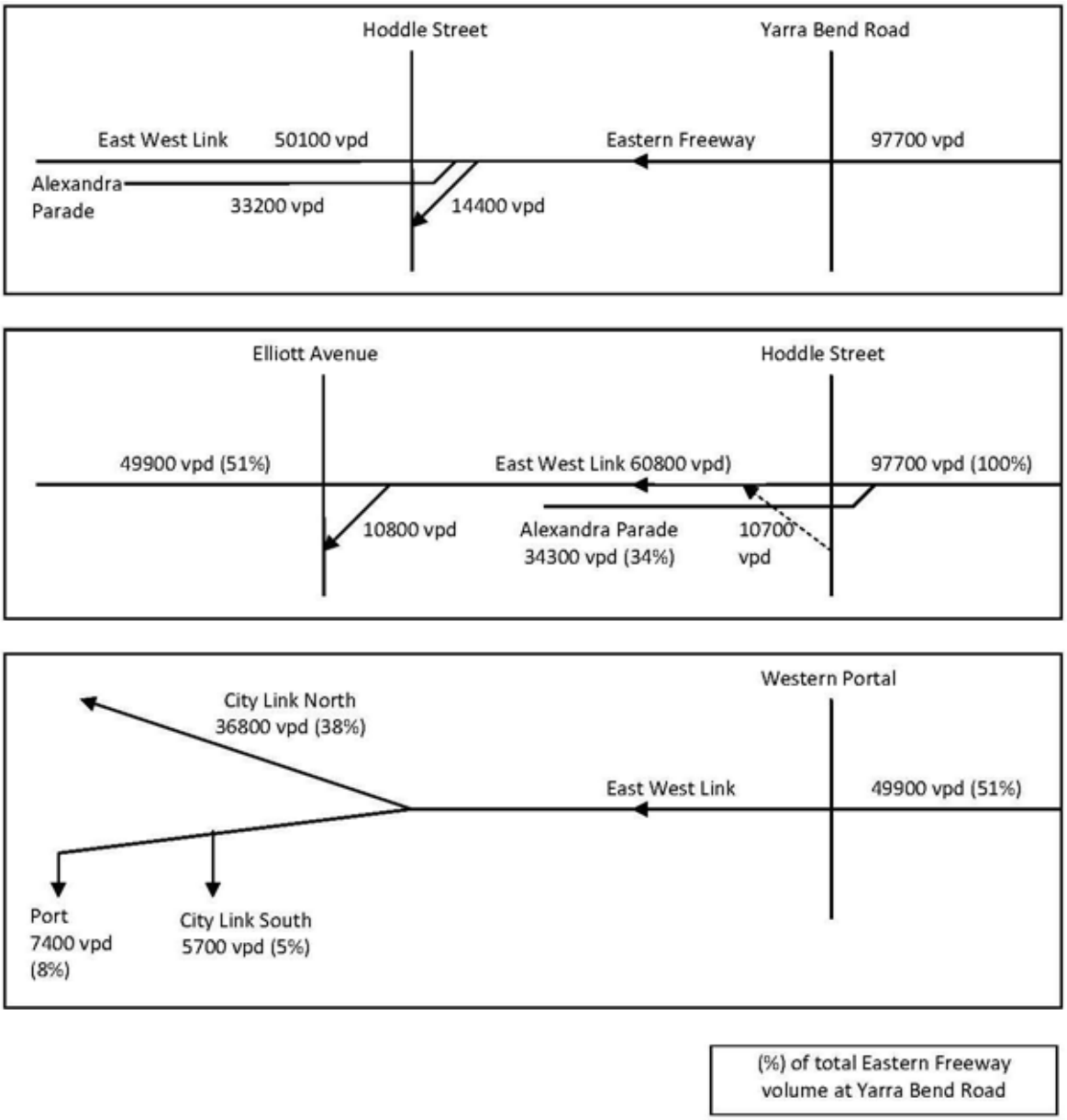
Source: GHD TIA

6.2.4 Forecast Traffic Volumes

The VLC Zenith model was used to derive 2031 forecast traffic volumes on a number of routes and part routes, within the road network. The LMA highlighted "*that volume should only be considered as an indicative volume*" and it "*cautions against using those model outputs as definitive volumes*. *This reflects the uncertainties associated with the use of any strategic traffic model for periods of around 18 years from the present day and the need to recognise the possibility of variance for modelled outputs on individual links within the modelled network*". However, as the Committee has no other forecast traffic volume data to rely upon it must use the strategic model outputs. The Committee appreciates that the best use of the Zenith model is for comparative purposes, say between alternative routes or options. The only comparator is "*do nothing*" or build the Project, which is the focus of the Committee's deliberations, rather than comparing the benefits/disbenefits of two separate options.

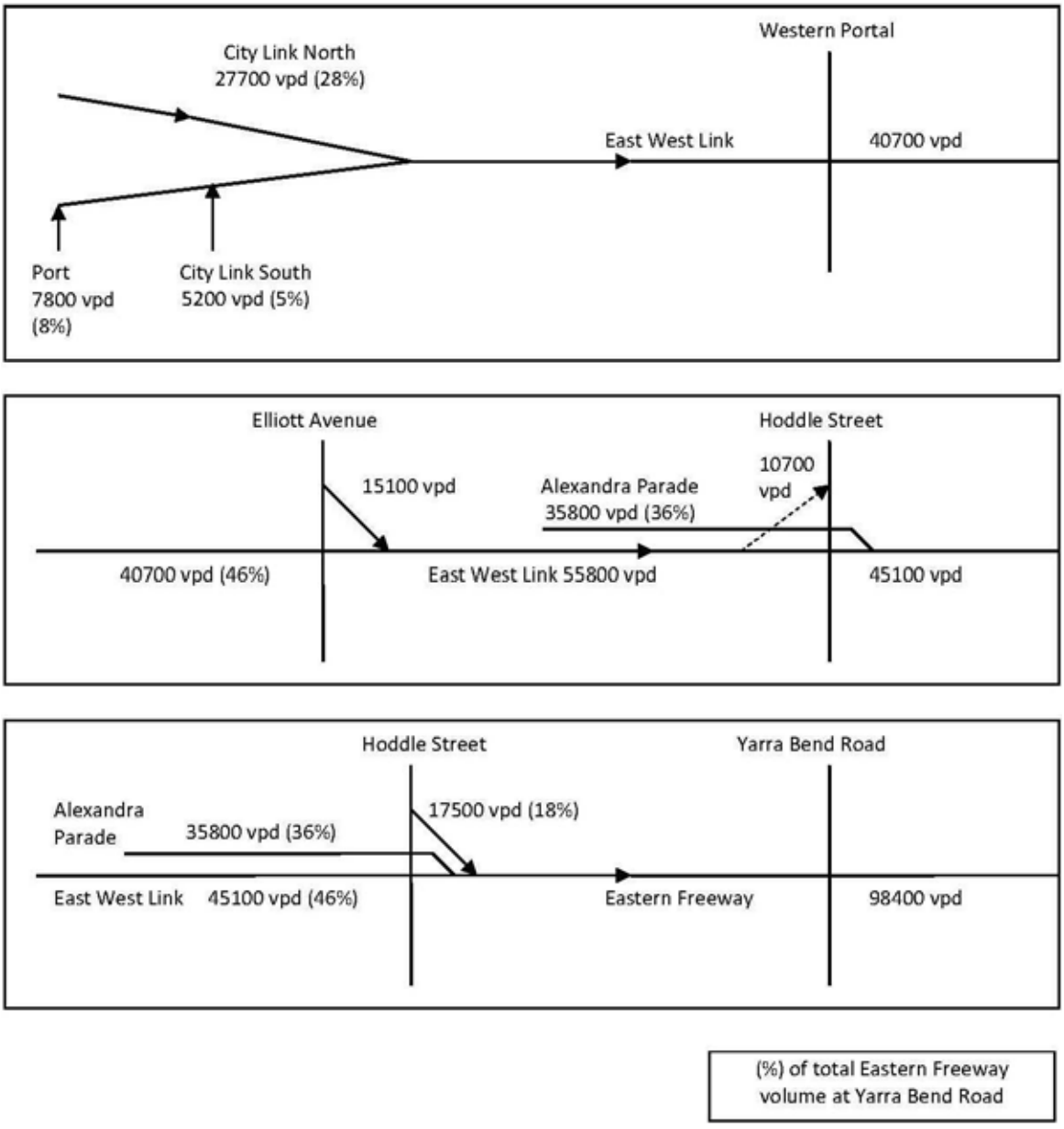
Forecast 2031 traffic volumes have been provided for sections of the Project, Part B, interchange ramps, arterials and local roads. These volumes and their impact will be further discussed under each individual Precinct of the Project. The following diagram/figure summarises the daily volumes forecast along the Project corridor, interchange ramps connections to Part B and CityLink.

Figure 11: 2031 Forecast Daily Volumes - Westbound



Source: Assessment Committee

Figure 12: 2031 Forecast Daily Volumes - Eastbound



Source: Assessment Committee

Reference to Figure 11 shows that 50,100 vpd (51%) of daily west bound traffic on the Eastern Freeway at Yarra Bend Road enters the tunnel. Forty-nine percent of Eastern Freeway traffic exits onto Hoddle Street and Alexandra Parade. It is not possible to determine the proportion of this traffic destined for the CBD or its environs. Almost equal volumes enter the tunnel at Hoddle Street as exit at Elliott Avenue and therefore the westbound volumes at both portals are similar. At the western portal the majority of westbound vehicles are destined to CityLink/Tullamarine Freeway. However, ignoring movements into and out of the tunnel at Hoddle Street and Elliott Avenue respectively, this volume only represents 38% of the total westbound traffic on the Eastern Freeway at Yarra Bend Road. Sixty eight percent of eastbound vehicles entering the western portal travel south on the Tullamarine Freeway/CityLink. This volume represents 28% of the total volume

of east bound traffic on the Eastern Freeway at Yarra Bend Road. Eastbound traffic in the tunnel between Elliott Avenue and Hoddle Street (55,800 vpd) represents 57% of the total eastbound volume on the Eastern Freeway at Yarra Bend Road. The 35,800 vpd eastbound on Alexandra Parade west of Hoddle Street represents 36% of eastbound Eastern Freeway traffic.

6.2.5 Findings on Traffic Performance

By 2031 with the Project constructed, there will be marginal changes to total vehicle trips, vehicle hours travelled, traffic speed and public transport trips compared with not having the Project constructed.

The Project will clearly reduce travel time on the route between Hoddle Street and CityLink/Tullamarine Freeway. However, traffic volume increases on the approach routes and CityLink/Tullamarine Freeway, combined with the Zenith model neglecting intersection delays, show the benefits will not be as significant as the LMA document suggests.

Approximately half of the west bound traffic on the Freeway west of Hoddle Street does not use the tunnel. Similarly, 41% of the eastbound traffic on the Eastern Freeway east of Hoddle Street entered the tunnel at the western portal.

The Project will remove in excess of 100,000 vpd from the local and arterial road network.

6.3 Precinct 1: Hoddle Street - Eastern Portal

6.3.1 Introduction

This Precinct is shown on Figure 2 of the Mapbook extending from the Eastern Freeway at Yarra Bend Road to the west side of Smith Street. The Precinct extends approximately 250 metres north of Alexandra Parade on Hoddle Street, 350 metres south of the freeway off ramp on Hoddle Street and includes the Bendigo Street road reservation and the properties on the east side of Bendigo Street. The northern boundary of the Precinct varies between Smith Street and just east of Gold Street to include houses to be acquired for the proposed ‘sidetrack’.

Figure 13: Sheet 13 from CIS Mapbook

Source: CIS Mapbook

To the east of Hoddle Street, the northern boundary of the Precinct generally follows the title boundaries of Alexandra Parade East until it intersects the Merri Creek.

6.3.2 Key Issues

The key issues in this Precinct relate to the:

- Interface with the Eastern Freeway east of Yarra Bend Road;
- Impact upon the Chandler Highway and other approach routes;
- Hoddle Street on ramp/flyover;
- Location of the tunnel portal or portals and related vent stack;
- Impact upon properties in Bendigo Street and Alexandra Parade East;
- Future of the Doncaster Rail Reservation;
- Proposed sidetrack;
- DART bus service; and
- Impact of construction upon pedestrians and cyclists.

6.3.3 Submissions and Evidence

(i) Traffic

Table 5 shows the traffic volume data provided by LMA which indicated the following:

Table 5: Existing and Forecast Daily Traffic Volumes

Location	Daily Traffic Volumes	
	Existing 2011/13	**Forecast 2031**
Eastern Freeway at Yarra Bend Road	135,000	190,000
Eastern Freeway off ramp to Hoddle Street	30,000	14,700
Eastern Freeway on ramp from Hoddle Street	32,000 (U-turn)	17,600 (Flyover)
Alexandra Parade, east of Wellington Street	69,000	72,300
Tunnel west of Hoddle Street	Nil	111,900 or 116,600
Hoddle Street north of freeway off ramp	40,000	42,000
Hoddle Street north of Johnston Street	86,500	76,000

Source: GHD TIA

Forecast 2031 peak hour volumes for the Hoddle Street ramps with the Eastern Freeway, provided by LMA, showed that the 'am' off ramp volume would decrease by 27% and the 'pm' on ramp (flyover) volume would be 50% less than the current volume.

The Committee found that the traffic volume evidence presented by LMA and its experts was confusing. A number of attempts were made to explain current and future traffic volumes on Alexandra Parade and the Hoddle Street freeway ramps. Major problems related to the data source and the way the information was presented. For example, Table 22 in the GHD Traffic Impact Assessment (TIA) report showed a 2011, 2-way approximate volume on Alexandra Parade, between Gold Street and Brunswick Street of 80,000 vehicles per day (vpd). This section of Alexandra Parade is approximately 950 metres long and has four signalised intersections. Further information in Documents 44 and 59 provided by the LMA showed traffic volume data at three locations along this 950 metre length of road. At two of these locations, the data was obtained from VicRoads arterial traffic volume spread sheet February 2013 and was expressed as an Annual Average Daily Traffic Volume (AADT) and at one location VicRoads SCATS data 2011, expressed as an Annual Average Week Day Traffic Volume (AAWDT). Further information in Document 94 provided by the LMA indicated that the volume shown in the CIS "*was a typical week day taken from a SCATS count*", not an AADT.

VicRoads does not have a permanent counting station along Alexandra Parade, and the volumes provided were estimates based upon sample surveys factored to take into account seasonal variations in traffic volumes. The quality of the data derived in this manner can vary depending upon the sample size. It is recognised that SCATS data can be unreliable.

Document 94 included SCATS data recorded on Alexandra Parade at the Smith Street and Wellington Street intersections over a one week period from Monday 20 May to Sunday 26 May 2013. Westbound traffic was recorded at the Smith Street approach to the intersection

and eastbound traffic at the Wellington Street approach to the intersection. Weekday traffic volumes ranged from 67,141 vehicles to 76,008 vehicles, with an average two way five day volume of 71,665 vehicles. On Saturday 25 May 2013, 72,201 vehicles were recorded and the seven day average volume was 70,520 vehicles. The difference between the five day and seven day averages was only two percent. However, there was a 13 percent difference in daily volumes between Monday, the lowest count and Friday the highest count. LMA noted that the May 2013 volumes "*have not been seasonally adjusted and therefore could be higher/lower than the actual AADT for Alexandra Parade*". In Document 59, the 2012 AADT for Alexandra Parade, between Smith Street and Wellington Street, was shown as 62,000 vehicles. This significant variation from the May 2013 volumes highlights the potential confusion in quoting traffic volumes without adequate justification of the validity of the source.

In Appendix A to Document 354, the LMA provided further information in relation to existing and forecast traffic volumes on Alexandra Parade, and said: "*all numbers reported in the CIS and strategic modelling outputs are AAWDT not AADT. AAWDT will always be higher than AADT in inner urban areas, as weekend volumes are typically lower than weekdays*".

Further, the traffic volumes shown in the various LMA documents "*must be considered having regard to the disclaimers provided by VicRoads, and the estimation process undertaken by VicRoads to develop them*".

LMA acknowledge that between 2002 and 2011, traffic volumes on Alexandra Parade have decreased. However, they then referred to Figure 2 of Appendix A which shows "*change in traffic volumes along Alexandra Parade*" at four separate locations. The plot shows 2012 volumes, which in most cases the volumes are greater than the 2011 volumes. LMA concluded that traffic volumes on Alexandra Parade will "*continue to increase above current volumes*". Table 23 in the GHD TIA indicated that without the Project, daily traffic volumes on Alexandra Parade will increase by 0 to 10 per cent by 2031.

In Table 23 of the GHD TIA, 2031 daily traffic volumes are shown "*with East West Link – Eastern Section*" as a per cent volume change with and without the Project. Alexandra Parade, between Gold Street and Brunswick Street is shown having an estimated 80,000 vpd in 2011 and a 20 to 30 per cent reduction in 2031. Document 59, tendered by the LMA shows an AAWDT of 80,000 vehicles on Alexandra Parade between Brunswick Street and George Street. The Committee must therefore assume that this is where the 20 to 30 per cent reduction in daily traffic volume will occur, resulting in a forecast 2013 daily traffic volume in the range of 61,600 to 70,400 vpd.

Document 234 shows forecast 2031 traffic volumes at the Hoddle Street interchange and on Alexandra Parade east of Wellington Street. The daily volume shown for Alexandra Parade is 72,300 vehicles. By comparison, Document 59 shows an AADT 2012 volume of 69,000 vehicles at the same location.

Section 9.3.4 of the GHD report stated that the 20 to 30 per cent forecast reduction in daily traffic on Alexandra Parade post the Project would enable priority to be redistributed from east-west vehicles. A number of key north-south oriented public transport and cycling routes would receive increased priority and less delay "*should the signal timing be reallocated*". The LMA noted that the key benefits for this include:

- *Improvements to north-south public transport movements;*
- *Improved priority for north south traffic movements;*
- *Reduced congestion along Alexandra Parade; and*
- *Increased green time for north south pedestrians crossing Alexandra Parade.*

Chapter 10 of the GHD TIA report relates to 'Sensitivity Testing'. It stated that *"strategic transport modelling is a tool to forecast the impacts due to n*etwork *changes. The model is based on a range of assumptions and inputs and therefore the results may change if assumptions and/or inputs are altered*".

Population changes were said to be one of the factors that could have an impact upon the output from the model. To assess the impact of a variation in population forecasts from that used in the model, two scenarios were tested. A 'low growth' scenario with population levels five per cent lower than the 2031 forecast and a 'high growth' with population levels five per cent higher than the 2031 forecast. Table 25 of the GHD TIA report shows Forecast Daily Traffic Volumes with the Project for the base 2031 population as well as the (low) 2026 population and the (high) 2036 population for Alexandra Parade, east of Brunswick Street. The daily volumes forecast are as follows:

Table 6: Traffic Volumes Based upon Population Scenarios

	Daily Traffic Volumes		
	Base	**Low**	**High**
Population (Year)	2031	2026	2036
Alexandra Parade east of Brunswick Street	76,900	76,400	79,100

Source: GHD TIA

In Appendix A of Document 343, the LMA expresses concern that the Committee in comparing existing and forecast 2031 traffic volumes along Alexandra Parade. It said: "*This is because it does not compare volumes of the same location, or volumes of the same data type"*, that is, AAWDT with AAWDT. The Document then indicates that on a like for like basis there will be a reduction of 3700 vpd or five per cent on Alexandra Parade, east of Wellington St. This is "*between **current** daily traffic volumes against 2031 volumes with the East West Link".*

A comparison of existing and forecast peak hour volumes in Document 93, reveals a 30 per cent reduction in "*peak period volumes in the peak direction under 2011 conditions*".

Table 18 in the GHD TIA outlines existing and forecast travel times with and without the Project. In 2031, it is anticipated that there will be a saving of approximately 20 minutes during the morning peak hour for vehicles travelling from the Eastern Freeway at Chandler Highway to CityLink via the Project. During the same time period the eastbound movement from Footscray Road via CityLink to Chandler Highway is quoted as taking on average 18 minutes at present. In 2031 via the Project, Table 18 suggests this trip will take on average 15 to 20 minutes, which represents an asserted saving of approximately 10 minutes.

In his evidence, Mr Veitch quoted VicRoads daily traffic volume data for a number of locations. This data showed that daily traffic volumes on Alexandra Parade have declined between 2002 and 2012. One explanation for this decline was the upgrade of M1.

The Zenith model forecast "*an AWDT growth rate between 2011 to 2031 in the order of 0.15% per annum"* on Alexandra Parade*, "assuming the East West Link is not constructed*".

Mr Veitch suggested that "*a better indication as to how east-west traffic demand is increasing in Melbourne can be obtained by examining how traffic demand has been growing on VicRoads screenline 1D 902*." This screenline extends approximately 40 kms north-south from Port Phillip Bay to Epping along the alignment of Epping Road, High Street, Hoddle Street and Punt Road.

Vic Roads AWDT volumes show a 1.3 per cent increase in Compound Annual Growth Rate between 1995 and 2011. The VLC *"Zenith model forecasts a 2011 to 2031 growth rate of 1.3% across the same screenline should East West Link not be built".*

In response to a submission that the Project would move congestion from the inner east to the inner west, Mr Veitch prepared a diagram in reply. This diagram, shown on p65 of his February 2014 report, became known in the hearing as the "*demons diagram*" due to its colouration. The title given to the diagram "*Change in Total Daily Volumes*" did not necessarily reflect the message it was trying to convey. Increases in daily traffic volumes were shown in red and decreases in blue. East of Yarra Bend Road, the Eastern Freeway was shown as a relatively wide red band, narrowing as it proceeded east. West of Yarra Bend Road the "*band width*" not only changed colour to blue, showing a decrease in daily traffic, it reduced in width, showing less daily traffic. When the Committee indicated that it did not understand this diagram, Mr Tweedie responded that the band width and colour change reflected additional road capacity.

At the request of the Committee, the LMA was asked to extend the plan further east to take in feeder roads leading to the Eastern Freeway. An A1 size plan (Document 144) was tendered by the LMA which showed Eastlink and beyond.

Document 144 clarified that Eastern Freeway traffic would increase as far as Eastlink and that the Princess Street/Earl Street/Asquith Street routes would generate additional traffic. No change was shown for Chandler Highway north of the freeway, and the freeway ramps at Chandler Highway appeared to show reduced traffic volumes. Similarly traffic volume increases were shown on Doncaster Road, Thompsons Road, Manningham Road and Foote Street, yet Bulleen Road showed a reduction in daily traffic volumes.

The Alexandra Parade corridor from Yarra Bend Road to the Macarthur Road/Elliott Avenue intersection was also shown as a blue band.

The LMA tendered Document 196 to further explain the "*demons diagram".* It noted that the plots "*show the change in traffic as a band width, the greater the change in traffic volumes the greater the thickness of bandwidth. They show the quantity of change, not the percentage as has been provided in the CIS".*

The document explained how the band width and colour change occurred on the Eastern Freeway between Chandler Highway and Hoddle Street, i.e. where traffic selected one of three routes, the Project, the Hoddle Street off ramp or Alexandra Parade.

Further to the Committee's s57(4) request, the LMA provided the Committee with longitudinal sections of the proposed tunnels and interchange ramps. In addition typical cross sections and actual cross sections for the Reference Project were provided between Hoddle Street and Gold Street.

LMA retained the services of Mr Pelosi to *"peer review the Traffic Impact Assessment contained in the Comprehensive Impact Assessment (CIS) prepared for the East West Link (Eastern Section) Project*". Mr Pelosi indicated that "*the project provides opportunities to enhance public transport performance, improve pedestrian and bicycle amenity/connectivity, achieve vehicle travel time savings*". He stated that "*it also boosts efficiency of freight movements to/from the Port of Melbourne*". When questioned by Mr Wren, Mr Pelosi indicated that he estimated that 6-7% of vehicles using the Project would be trucks.

Mr Pelosi indicated other benefits of the Project included:

- *faster and more frequent bus services between Doncaster and the CBD;*
- *opportunity to increase the green time allocated for north-south routes crossing Alexandra Parade;*
- *an alternative route to the M1 corridor; and*
- *a greater number of kilometres travelled for less hours resulting in reduced congestion.*

(ii) The Reference Project Design

At the Preliminary Hearing in January, the Committee enquired whether LMA were providing road design evidence in support of its case. At that stage the LMA did not intend to lead any evidence regarding the veracity of the Reference Project or have anyone available for cross examination. Following a Direction of the Committee, the LMA retained Mr Brock of GHD to prepare a report on issues pertaining to road design.

Although GHD had assisted in the preparation of many aspects of the CIS, Mr Brock advised that he had not been directly involved in this aspect of the Project. (The Committee was later advised that Mr Brock and the civil department of GHD had tendered on the design of the Reference Project for LMA but were unsuccessful.)

In his evidence report, Mr Brock indicated that the proposed Hoddle Street flyover to the Eastern Freeway "*is certainly a viable solution, but other options are possible".* Mr Brock indicated that a "*loop ramp similar to the existing*" was a possible solution. He added it was "*likely to be able to provide acceptable performance, but very difficult to accommodate with the additional connections of EWL within the land constraints of the site*".

Mr Brock described a Diverging Diamond Interchange (DDI) as, "*an alternative form of interchange that is not common in the Victorian road network*". It was his view *"that the use of a DDI at the Hoddle Street intersection is likely to provide a less desirable outcome from a road design perspective than the design for this intersection set out in the Reference Project*".

Following Mr Brock's evidence, Mr Morris indicated that LMA had investigated "*hundreds*" of options for the Hoddle Street interchange. Mr Wren on behalf of the Committee requested that Mr Brock prepare a "*Q*" or "*P*" ramp arrangement for the Hoddle Street northbound to eastbound Eastern Freeway movement (similar to the current turning movement).

On Day 18, the LMA tended Document 236, 'Hoddle Street Alternative Option'. The purpose of the revised design was to reduce the impact of the elevated entry ramp from Hoddle Street onto the Eastern Freeway.

The design presented had an internal radius of 56 metres to allow a 50 kilometre per hour (kph) design speed. The ramp cross section allowed two traffic lanes, a bus lane and provision for the tracking of a 19 metre semi-trailer.

The design criteria selected required relocation of the Reference Design southern carriageway further to the south. This results in the Proposed Project Boundary shifting to the south between the west side of Bendigo Street and the middle of the block between Gold Street and Charlotte Street. Property acquisition was maintained for the majority of the properties on the east side of Bendigo Street. Properties abutting the south side of the Alexandra Parade 'service road' and in the north-west quadrant of the Alexandra Parade/Hoddle Street intersection would be acquired. The LMA rejected this option on a number of grounds.

On the same day, the LMA submitted Document 237 relating to the location of the eastern tunnel portal. This document was submitted in response to suggestions "*that the Hoddle Street interchange be reconfigured to move the tunnel portal east of Hoddle Street*".

The LMA response was that, "*in all likelihood, the portal would need to be situated at least 300 metres east of the railway bridge".* In summary, this relocation, in the opinion of LMA introduced the following concerns:

- Difficult to facilitate westbound traffic entering tunnel from Hoddle Street and eastbound exiting (need separate ramps and if done significant problems with ramp grades);
- Will reduce distance between Alexandra Parade eastbound, the two connections from Hoddle Street and the East West Link merge causing congestion and road safety concerns;
- May cause interaction with the water table associated with Merri Creek (need to manage the potential inflow of surface water into portals and may require significant Merri Creek works);
- Topography in this location changes therefore tunnel grades would be steep (in excess of 6%) causing capacity issues for trucks;
- It will complicate the decoupling of the Epping Railway Line from the Hurstbridge Railway Line (which is a necessary precondition to the delivery of the Doncaster Railway Line);
- Further east the portal is from Hoddle, the further east median works with widening of Eastern Freeway will need to commence (also maybe impacting on Doncaster Rail Line delivery);
- Undertaking cut and cover works necessary to establish the portals and approach works will require the closure of the western most section of the Eastern Freeway over an extended period of time (up to two years) limiting access to and from eastern suburbs with several impacts on surface road network; and

- Add considerably to cost of the Project both during construction and operation, increase length of tunnel, but it would increase the depth of the tunnel and the extent of the cut and cover works required.

Mr Finanzio for the City of Yarra indicated to the Committee that his client was opposed to the Project. However, if the Project was to proceed, Council would prefer a number of changes to the design shown as the Reference Project. One of the changes is the deletion of the Hoddle Street flyover and in its place construction of a DDI. An example of a DDI, (Document 51) was submitted by Mr Finanzio on behalf of Council.

Many submitters queried the need for the Hoddle Street flyover as it either required demolition of houses (including for some, their own house) or left them with an elevated roadway within 10 metres of their houses. Submissions were made on behalf of Provans Timber and Schotts Emporium located on the north side of the Eastern Freeway, west and east respectively of Hoddle Street. The former being acquired because of the 'sidetrack' and to relocate further east along Alexandra Parade, only to have their vehicular access impacted by the road works. Schotts, who have no on-site parking, rely upon on-street parking in the service road on the west side of Hoddle Street. This parking will be eliminated or significantly reduced by the road works shown on the Reference Project.

Mr Goodman made a submission on behalf of the 3068 Group (Document 303). His group opposed any proposal "*that links the Eastern Freeway to the Tullamarine Freeway*". Their reasons for opposing the Project include "*because it will increase traffic, air pollution and climate change*". The Group "*is completely opposed to this Reference Project, for its impacts on heritage and the residents of Clifton Hill (in particular*)". The Group suggested modifications to the Reference Project not as "*an endorsement of the proposal to link the freeways, but may help explain how poorly designed the reference project is*". The Group believed that the "*Hoddle Street Flyover is not part of the Declared Project*". They included quotes from various Acts and the LMA submission to support their contention that "*the overpass is solving a problem on VicRoads wish list. It is out of scope of this project".*

Mr Goodman stated that the flyover is "*over-designed for modelled traffic*" and he included a number of quotations from the CIS and a September 2008 GHD study entitled "*Hoddle Street Preliminary Traffic Advice*".

The submission included an alternative Hoddle Street interchange prepared on behalf or by the 3068 Group. This design contained components of the Reference Project, a 1999 Vic Roads, "*Interchange Concepts, Released to Northern Central Corridor Study*" and a *"Figure 9 Interchange Concepts*", indicative "*Deep Tunnels Concept No 3",* dated 26/10/1999. This interchange layout retained the current "*Q loop*" for the northbound movement from Hoddle Street onto the Eastern Freeway eastbound. In support of their alternative design, the Group included an aerial photograph of the off ramp from CityLink to Punt Road, highlighting the internal diameter of the loop, adjacent to an aerial of Hoddle Street at the Eastern Freeway. The photos showed that a similar diameter ramp could be accommodated between the entry and exit ramps on the east side of Hoddle Street.

Tables were included in the submission outlining Performance Criteria for both the Reference design and the Group's alternative option. The 3068 Group's conclusion: 'Remove the Flyover' noted:

- *The flyover (Hoddle Street loop Bridge) has no strategic justification;*
- *The benefits are only cost and temporary logistics; and*
- *The impacts on Collingwood, Clifton Hill and Abbotsford are unacceptable.*

Mr Goodman observed that north-south tram priority "*is again being promised in this CIS*". He said it was first promised in 1978 "*and it still won't be delivered according to traffic projections*". Yet he questioned that it is mandated in the performance criteria.

Evaluation Objective 1, CIS ch18.4.1 was quoted in the submission: *"Lower traffic volumes on surface roads would contribute to unlocking road space, which would relieve congestion and provide scope to improve connectivity for some road-based public transport and active transport modes such as walking and cycling*". Further, he said:

> *A reduction in traffic volumes along Alexandra Parade would improve connectivity in and around this road.*
>
> - *There is no commitment to improve connectivity in the CIS*
> - *Will future toll road operator allow buses to run along or adjacent to its asset?*
> - *Will the toll road owner demand compensation if Doncaster Rail or Metro is ever Built – inhibiting connectivity?*
> - *Will Alexandra Parade simply be repossessed by motorists and rat runners?*
> - *Plan is to retain all existing lanes for motoring – no bus lane proposed.*

The submission referred to the proposed Skybus express lane to the airport and the Eastern Freeway Rail Reservation.

The rhetorical question "*How many lanes are required for Alexandra Parade*?" was asked and a number of benefits by realigning the central median of Alexandra Parade were outlined in the submission. The side track was commented upon as "*No Temporary road in Clifton Hill".* Several unacceptable impacts of the temporary road were outlined and the question was asked about what alternatives have been considered, including:

- *Boring instead of cut and cover to Hoddle Street*
- *Portals near Hoddle Street instead of Gold Street*
- *Use of wide median in Alexandra Parade and Queens Parade detours.*

The Northern Central City Corridor – Draft Strategy 2003 was quoted, with a recommended demand side management initiative as follows: "*To encourage greater use of public transport and non-motorised modes in conjunction with physical proposals*". The 3068 Group state that "*Demand management is the elephant in the room*". They asserted that both the Eddington report and LMA are "*silent on this".*

Mr Herington made a submission on behalf of Yarra Campaign for Action on Transport (Document 314). This submission stated that "*The Reference design for the East/West Link prevents the Doncaster Rail line being built in the most direct and lowest cost manner"*. It further stated that the "*Eastern Freeway Lands Act 1971 remains in force today*" and therefore "*The rail reservation should be protected and not allowed to be taken for the purpose of the East West Link*". Mr Herington quoted extracts from the *Doncaster Rail Study, Engineering and Environmental Investigation, December 2012,* describing the proposed rail alignment between the Victoria Park area and Chandler Highway. He stated

that "*The Doncaster Rail Study team made it clear that this option* (i.e. the alignment) *was imposed on them to avoid conflict with the design of the East West Link*".

Slides in Mr Herington's submission showed the proposed rail alignment and indicated that the alignment passes through an "*important natural and heritage parkland*" which is "*expensive and would never get planning approval*". Furthermore, the proposed route "*would impact, five of the historic sites featured in Mr Lovell's evidence*". Mr Herington suggested that "*the existing provision for a rail line in the median should be retained – to be built as planned before 2031*". He also stated that "*LMA has tried to make life easy for itself by developing a reference design assuming it can take over the rail reservation* " and "*it has failed to do the work needed to design the proposal in a way that doesn't take over the rail corridor*".

Mr Herington noted that "*little has been said about buses in the evidence*, *despite the obligation under the Transport Integration Act to consider an integrated approach to public transport facilities when considering new road projects*". He observed and noted the non appearance of PTV, Department of Transport, Metro Trains Melbourne, Yarra Trams or Transdev.

The submission made reference to the proposed bus lane on the Hoddle Street on ramp and a number of public transport recommendations in the Eddington report, particularly the DART service. Mr Herington provided the Committee with Document 318, consisting of two A3 plans, sheets 4 of 4, being a longitudinal section of the eastbound tunnel and sheet 26 from the Mapbook.

An alternative Hoddle Street interchange was superimposed on sheet 26 and a section of the tunnel had been regraded from chainage 4640 to chainage 4100. The aim of the regrading was to extend the cut and cover section to a portal located between Hoddle Street and the Hurstbridge/South Morang railway line. The tunnel regrading allowed the north to east on ramp to be regraded to pass under Hoddle Street. An A4 sheet was also included which stated "*LMA use the wrong relevant comparator".*

Submitters from Hilton Street, Wellington Street, Gold Street and Noone Street who resided beyond the Proposed Project Boundary requested that their properties be acquired or they be compensated for the inconvenience of a five to eight year construction period. Submitters on behalf of the Clifton Hill Primary School expressed concern regarding children and parents safety, and interruption to access to the school during the construction phase. They raised the issue of the school's proximity to the tunnel vents.

Many submitters objected to the concept of a road tunnel and instead supported the introduction of a rail link to Doncaster via the freeway reservation. It was asserted that a partial rail tunnel had been constructed from Victoria Park railway station towards the freeway median as part of the Eastern Freeway construction. Many of these submitters expressed concern that widening of the Eastern Freeway "*shut out*" the option of a rail reservation and that the excessive cost of the Project eliminated any chance of rail or other public transport improvements.

Mr Huth presented Document 410 which proposed upgrading and extending the DART system into the CBD and providing new park and ride facilities on Bulleen Road. In addition,

he proposed upgrading the existing facility on Doncaster Road, and suggested deletion of the flyover at Hoddle Street. The alternative design involved raising the southbound carriageway of Hoddle Street to allow eastbound vehicles on Hoddle Street to turn right free of conflict with southbound vehicles.

Mr Negus of the RACV made a submission on behalf of the RACV and a number of other parties (Document 306). Mr Negus stated that the "*East-West Link is one of the key transport projects needed for Melbourne and Victoria*" and was part of RACV's Transport Policy. This Policy included:

- *stronger investment and new funding approaches for transport projects; and*
- *an integrated and balanced transport plan to address congestion and improve productivity and the well-being of the community.*

Nine key projects were outlined, including seven rail projects. A number of benefits provided by the Project were outlined, including reduced "*delay for north-south trams and other road users*."

Mr Negus indicated that 38 per cent of the members surveyed indicated that the East West Link was a priority, compared with 18 per cent for the Metro Rail Capacity Project. Mr Negus quoted a number of traffic related statistics that he had taken from the CIS, including a 20 to 30 per cent reduction in daily traffic on Alexandra Parade by 2031. Other projects required in conjunction with EWL stage 1 included:

- *upgrade Tullamarine Freeway/City Link;*
- *Port Link; and*
- *delivering total East West project.*

In response to a question from the Committee, Mr Negus indicated that the RACV had not done any original research and its opinion of the traffic impact of the Project was based upon the CIS. When it was put to Mr Negus that the Project may have very little or no long term impact upon reducing traffic volumes on Alexandra Parade, he suggested that the capacity of Alexandra Parade could be reduced, by forcing traffic into the tunnels, and increasing green time for north-south traffic movements.

In December 2013, the City of Boroondara made a submission to the Committee outlining its concerns in relation to the Project. In summary Council *"provided conditional support for the EWL as part of its submission to the Eddington Study"*, with a caveat that city exits are required to address queuing issues on the Eastern Freeway and to minimise diverted trips on Chandler Highway, Bulleen Road and other parallel road networks. However, the Council indicated that improvements are required to public transport and expressed concern about increased traffic volumes on roads accessing the Eastern Freeway.

Boroondara acknowledged that the CIS proposed widening of the Eastern Freeway east of Yarra Bend Road which is beyond the Proposed Project Boundary. However, it said *"no details are provided as to how the widening is to be achieved east of Yarra Bend Road and ultimately, through to Tram Road".*

Council indicated that it would strongly object to property acquisition, loss of parkland and vegetation and loss of the median *"earmarked for the Doncaster Rail",* as part of the Freeway widening. Council requested that the Freeway widening integrate bicycle path

works with the widening. The CIS indicated that traffic volume increases of up to 30% were forecast for some of the routes feeding the Eastern Freeway. Council said *"These projected increases are of concern as these roads are already carrying high levels of traffic".* Council indicated that it would not support *"the removal of parking, introduction of clearways and widening"* in order to improve the capacity of these approach routes.

Dr and Mrs Oppenheim who have resided in Kew "*immediately south east of Chandler Highway for almost 40 years"* presented Document 456. They have *"unsuccessfully sought evidence in CIS to support some claimed outcomes in CIS".* They submitted that the TIA:

> *does not consider impact of current traffic or expected traffic on:*
> - *Chandler Highway traffic*
> - *Surrounding area traffic and public amenity*

Further, the Oppenheim's submitted that Appendix E to the CIS *"fails to make any consideration about increasing travel time on or approaching Chandler Highway (and access roads) before entering or after leaving EWL. The increased travel time will result from the increased congestion on Chandler Highway (and access roads)".* The Oppenheim's requested that as part of the Committee's assessment of the Project, *"adequate traffic management studies be required to be undertaken, published and assessed for the Chandler Highway area and that consideration be given to duplicating the Chandler bridge across the river".*

6.3.4 Discussion

(i) The Reference Project

The Council, community and resident submissions presented to the Committee were very clear, in that they did not want the Project. The Committee asked numerous submitters that if the Project was to proceed, how could it be improved? The general response was that if it was to proceed, the following design features/components remained unacceptable:

- The Hoddle Street flyover;
- The sidetrack; and
- The portal location.

Evidence presented by the LMA indicated a significant reduction in daily and peak hour traffic volumes using the eastbound on ramp from Hoddle Street to the Eastern Freeway and the westbound off ramp. As the stated aim of the Project is to connect the Eastern Freeway to CityLink, the rationale for a new flyover to carry less traffic which requires property acquisition is unclear. The LMA advised that "*hundreds*" of alternatives were considered for this interchange, but these were not provided to the Committee. The Committee does not consider that the flyover in the Reference Project is a sound and reasonable traffic and design response.

If the design brief was to minimise property acquisition, while still maintaining a better standard of design than the current arrangement, the design would arguably be much different and could consider other alternatives that minimise or prevent property acquisition and the other impacts of the flyover.

In relation to submissions that opposed the demolition of houses and business north of Alexandra Parade to enable the construction of a temporary sidetrack, examination of the

tunnel longitudinal sections and cross sections provided by LMA for Precinct 1 has led the Committee to the conclusion that the Reference Project could be modified to eliminate the sidetrack. This may include:

- Minor relocation of the tunnels to the south;
- Extension of the bored tunnel construction further to the east;
- Regrading of the main carriageways and the construction of a trafficable or non-trafficable '*lid*' over the tunnels where the '*roof*' of the tunnels match the adjoining natural surface.

Examination of the longitudinal sections of the tunnel indicates that the design level of the nose of the westbound entry ramp from Hoddle Street is approximately 20 metres below the natural surface. The design level of the tunnel at the eastbound exit nose is approximately 21 metres below the natural surface. Providing a 'lid' over the tunnels at the ramp noses may not require any change to the vertical alignment of the ramps or the through carriageways in the tunnels. At chainage 4100, which is approximately where the Hurstbridge/South Morang rail bridge crosses the Eastern Freeway, the Reference Project shows the tunnel level coincident with the current freeway level. The Portal could be moved east of chainage 4100 either by regrading to lower the tunnel level or by constructing a 'lid' over the tunnel carriageways.

If the tunnels were to be regraded, the vertical alignment would match with the Eastern Freeway vertical alignment approximately 200 metres west of where the Merri Creek crosses the freeway. Furthermore, the Merri Creek bed is shown approximately 15 metres below the freeway level on the longitudinal section provided by LMA.

The exit nose of the Chandler Highway off ramp from the Eastern Freeway is approximately 2.05 kms from Trenerry Crescent. Clearly, any relocation of the portal would be well west of Trenerry Crescent, and the weaving distance along the freeway is not an issue.

The Committee is not able to comment upon the impact of relocating the portal upon "*the decoupling of the Epping Railway line*". However, it is difficult to understand how relocating the portal by constructing a lid over the tunnel carriageways could have adverse impacts.

The Committee accepts that extending the tunnels east, either via additional excavation or by constructing a trafficable or non-trafficable lid over the tunnel carriageways will be a more expensive solution. However, this may be offset by a lower cost for the Hoddle Street interchange, but Committee is unable to consider cost issues. If it were, the proposed funding model would certainly require further investigation.

At the end of the day it is not up to the Committee to redesign the Reference Project. As put by LMA, the Reference Project is purely a concept for assessment purposes. However the Committee is concerned that even the Reference Project appears to be based on a limited design brief that would likely produce suboptimal outcomes when viewed across a range of community objectives, not just road design. It may be that the successful contractor for the Project will produce a more acceptable design, but the Committee is not privy to this information.

Given this inherent uncertainty in what the Project actually is, or might be, at the Hoddle Street interchange, the Committee has recommended modifying the Performance Requirements to avoid adverse impacts.

(ii) Traffic

It is interesting to observe that Mr Veitch did not conclude that traffic volumes along Alexandra Parade were indicating an upward trend.

Data has been presented as an AADT, AAWDT and as actual volumes by direction derived from the SCATS loops. The latter data, May 2013 showed that Saturday was the second busiest day of the week and that weekday volumes varied by 13% between the highest and lowest.

Mr Veitch indicated that the Zenith model "*simulates travel demand during an average weekday in each forecast year*." It is not clear what "*an average weekday*" is, however, LMA advised that all forecast volumes in the CIS are AAWDT volumes.

It may be assumed that the output from the Zenith model is a daily volume for each link specified by the model. It is therefore difficult to understand how a number of the forecast traffic volumes quoted in the GHD TIA were derived. For example, in Tables 22 and 23, 2031 volumes are shown with and without EWL. These volumes are shown as a range in Table 8.

Table 7: Existing and 2031 Forecast Traffic Volumes – with and without EWL

Road	2011 Volume	% Volume Change 2011-2031 no EWL	% Volume Change 2031 no EWL with EWL
Alexandra Parade	80,000 vpd	0 to 10%	-20% to -30%
Eastern Freeway	135,000 vpd	0 to 10%	40% to 50%

Source: GHD TIA

Perhaps the volumes shown in the Table were derived by GHD rather than VLC and include a "*factor of safety*." Many times during the Hearing, the Committee were advised by the LMA that the output from strategic modelling "*should not be considered as providing results with absolute accuracy.*" This makes it difficult for the Committee to assess the impact of the Project along the Alexandra Parade corridor, particularly when conflicting information is presented as noted in Tables 8 and 9 (which is a repeat of Table 6).

Table 8: Forecast 2031 Traffic Volumes with and without EWL

	Daily Traffic Volumes	
	No EWL	With EWL
Alexandra Parade east of Brunswick Street	80,000 to 88,000	61,600 to 70,400

Source: GHD TIA

Table 9: Traffic Volumes Based on Population Scenarios

	Daily Traffic Volumes		
	Base	**Low**	**High**
Population (Year)	2031	2026	2036
Alexandra Parade east of Brunswick Street	76,900	76,400	79,100

Source: GHD TIA

Furthermore, Document 234 shows a 2031 daily volume on Alexandra Parade east of Wellington Street of 72,300. By comparison, the 2012 AADT volume shown at this location on Document 59 is 69,000. If a 2% factor was applied to this volume to obtain an approximate AAWDT value, it would equate to approximately 70,000 vpd. The 2031 equivalent volume at the same location is therefore higher than the 2012 volume.

In his expert witness statement, Mr Veitch indicated that the Zenith "*model's forecasts were within 10% of the actual outcome*", of the Eastlink traffic volumes. He did not indicate whether the forecasts were 10% higher or lower.

The Zenith model forecast a 1.3% per annum growth rate across screenline 902 should the Project not be built. This growth rate, Mr Veitch advised was "*very closely aligned with VicRoads historical counts of east-west movements across Melbourne*," between 1994/5 and 2011. However the Committee notes that in 1994/5 the northern end of screenline 902 was vacant land or used for farming. Construction of the Western Ring Road, which crosses the screenline and other road improvements, such as the Hume Freeway (Craigieburn Bypass) in the northern metropolitan area has resulted in significant population and employment growth, particularly adjacent to and north of the Ring Road. The 1.3% growth rate across the screenline is an average value. It therefore follows that growth rates will vary along the screenline, with significantly higher growth rates in the recently developed northern section. By comparison traffic growth along the Alexandra Parade corridor is, in the opinion of the Committee, more likely to be negative.

6.3.5 Findings

The Committee finds that there is no justification for the Hoddle Street flyover shown in the Reference Project based on traffic volumes and other impacts discussed later in this report. There is insufficient justification for the construction of the proposed sidetrack. Further, the Committee considers there is an opportunity to investigate relocation of the tunnel portal or portals east of Hoddle Street, and it has recommended accordingly.

There is limited opportunity to provide additional green time for north-south traffic movement across the Alexandra Parade corridor unless steps are taken to constrain traffic movements on Alexandra Parade.

6.4 Precinct 2: Alexandra Parade

6.4.1 Introduction

This Precinct, shown on Figure 3 in the Mapbook, extends from the west side of Smith Street to The Avenue, which is the eastern edge of Royal Park. The north and south boundaries of the Precinct are generally parallel, however, east of Brunswick Street the north boundary varies and extends as far north as Queens Parade for the eastern half of the block between George Street and Smith Street. The Reference Project design shows Precinct 2 as bored tunnels.

6.4.2 Key Issues

The key issue in this Precinct relates to the interaction of Alexandra Parade with the major north-south crossing roads.

6.4.3 Submissions and Evidence

The LMA frequently highlighted the benefits to be derived for the north-south routes on completion of the Project. GHD in its reports outlined the benefits of decreased traffic along Alexandra Parade. An opportunity would be provided to "*increase the signal green time allocated for the north-south routes*". This would "*improve travel times for public transport, cars and cyclists using these roads*".

Existing and forecast 2031 traffic volumes have been discussed in detail in Chapter 6.3.3 of this report and will not be repeated.

6.4.4 Discussion

The amount of *'green time*' allocated to a particular movement or leg of an intersection is dictated by traffic volumes, public transport demands, pedestrian and bicycle movements. Under current traffic conditions, more green time would be allocated to east-west movement on the Alexandra Parade corridor than the north-south routes.

Although the Committee was advised that Alexandra Parade traffic volumes would be reduced once the Project was open, the evidence provided by the LMA's consultants appear to contradict this assertion.

Document 59 shows a 2012 AADT volume of 69,000 on Alexandra Parade east of Wellington Street while Document 235 shows a 2031 volume of 72,300 vpd at the same location. If the 2012 volume was converted to an AAWDT, the volume would still be less than 72,300 vpd. Table 22 of the GHD TIA shows 2011 daily volumes for Wellington Street, Smith Street, Brunswick Street, Nicholson Street and Rathdowne Street ranging from 10,000 to 20,000 vpd. Table 23 of the TIA shows post Project changes in volumes of negative 15% to positive 5%. On the basis of these volumes, more green time would be allocated to east-west movements rather than north-south without intervention.

The only other location on Alexandra Parade where a direct volume comparison may be made is between George Street and Brunswick Street. The 2011 volume quoted is 80,000 AAWDT and the 2031 post Project volume derived from Table 23 is 61,600 to 70,400 vpd. However, as previously highlighted, Table 25 of the TIA shows a 2031 forecast '*base*' volume

of 76,900 vpd, rising to 79,100 vpd with a '*high*' population growth and falling to 76,400 vpd with a '*low*' population growth.

The Committee is unsure of the origin of the volumes provided. The volume quoted in Document 235 was in response to a request for clarification from the Committee, and is assumed to be an output of the VLC model. The 2012 volume in Document 59 was obtained from VicRoads. The Committee was advised that the Zenith model "*simulates travel demand during an average weekday in each forecast year*," and on this basis, a single volume should be quoted, not a range.

It appears as though there will be a reduction in daily traffic volumes on Alexandra Parade east of Brunswick Street post the Project. However, the daily volume may be in the range of 62,000 to 77,000 vpd with traffic on the north-south routes ranging from 15,000 to 20,000 vpd. The Authority responsible for managing the traffic signals system would therefore need to make a decision to allocate more green time to north-south traffic.

An alternative solution would be to reduce the capacity of Alexandra Parade thereby forcing vehicles onto other routes to enable more green time for north-south traffic. This proposition accords with a recommendation in the Eddington report which stated *"the Government review its current policy of 'downgrading' roads or reducing capacity of roads as part of major toll road projects. If the opportunity is not taken to improve priority for public transport and to improve community amenity, the reductions in surface traffic when the tunnel opened would be eroded over time by natural growth in traffic".*

The Reference Project shows that the Proposed Project Boundary is 150 metres wide at the west end, reducing to 100 metres wide east of Lygon Street. Between Lygon Street and Station Street the westbound tunnel is located north of Princess Street. East of Station Street the westbound tunnel is located north of Alexandra Parade and it continues on this alignment to Smith Street.

No explanation was given as to the reason for the variation in width of the Proposed Project Boundary or the horizontal alignment of the tunnels.

6.4.5 Findings

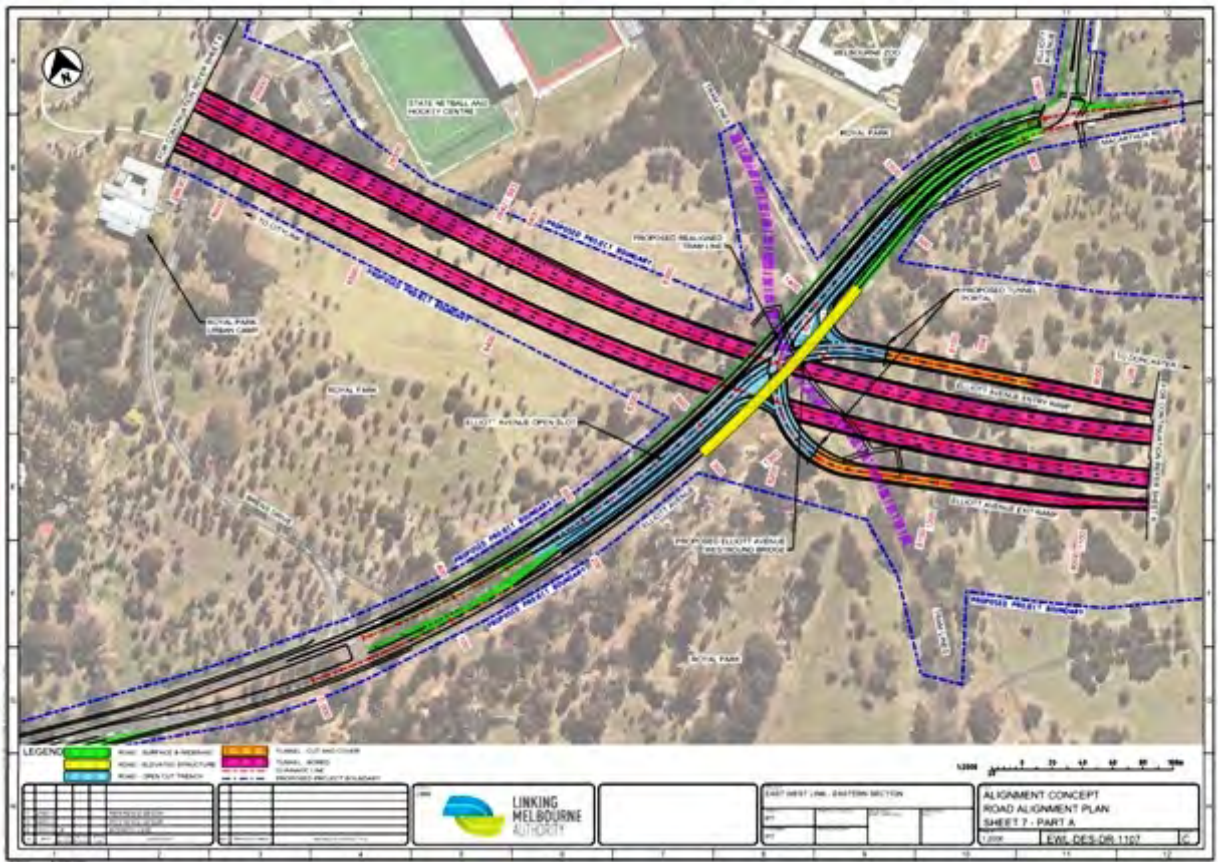
Additional green time for major north south routes crossing Alexandra Parade can only be achieved by constraining capacity on Alexandra Parade. The Committee recommends that the cross section of Alexandra Parade should be reduced to constrain traffic movement post construction.

6.5 Precinct 3: Royal Park (Western Portal)

6.5.1 Introduction

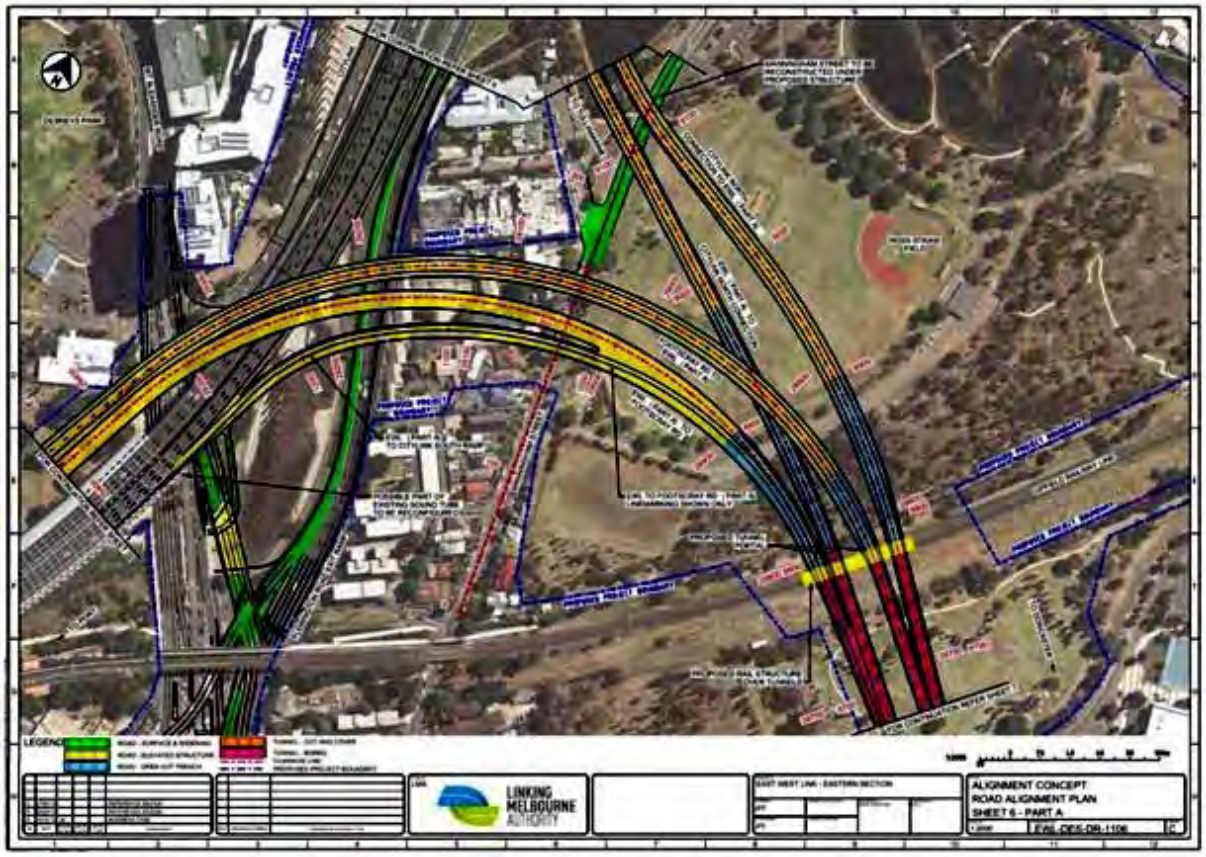
This Precinct, shown on Figure 4 in the Mapbook, extends west from The Avenue to CityLink. The Precinct includes Elliott Avenue, section of the tram line, the Upfield railway line, Manningham Parklands/Ross Straw Field, Trin Warren Tam-boore wetlands, part of CityLink and Flemington Road.

Figure 14: Sheet 7 from CIS Mapbook



Source: CIS Mapbook

Figure 15: Sheet 6 from CIS Mapbook



Source: CIS Mapbook

6.5.2 Key Issues

The key issues in this precinct relate to the:

- Elliott avenue interchange;
- Location of the western portal;
- Vertical and horizontal alignment of the ramps from the western portal to CityLink to the north;
- Connection to Part B from the western portal, and connection to and from CityLink to the south to the western portal;
- Ormond Road off ramp;
- Increase in traffic volumes on Ormond Road and in Moonee Valley; and
- Upfield rail line and Tram Route 55.

6.5.3 Submissions and Evidence

The Reference Project shows a single point diamond interchange, with south-east facing ramps, east of the existing Elliott Avenue alignment. The ramp configuration therefore only permits movements between Elliott Avenue and the east. The ramp portals are located approximately 60 metres east of Elliott Avenue.

The design requires re-alignment of approximately 250 metres of tram route 55 through Royal Park. Approximately 150 metres of the westbound carriageway of Elliott Avenue is shown on elevated structure as it passes over the turning movements to and from the ramps.

Table 22 in the GHD TIA indicated that Elliott Avenue carried approximately 40,000 vpd in 2011, between Flemington Road and the Zoo. By 2031 with no Project, it was forecast to carry 5 to 10% more traffic i.e. a maximum of 44,000 vpd. In the same Table, Ormond Road west of CityLink was quoted with an approximately 2011 volume of 20,000 vpd and a 2031 volume of 10 to 15% higher with no Project i.e. a maximum of 23,000 vpd.

Table 23 of the same document indicated that by 2031 with the Project, Elliott Avenue will carry 0 to 10% more traffic i.e. a maximum of 44,000 vpd, Ormond Road was forecast to carry 30 to 40% more traffic i.e. a maximum of 28,000 vpd.

In the s57(4) response, the LMA indicated that in 2031 it was forecast that 10,800 vpd would exit from the tunnel onto Elliott Avenue, 8,500 vpd would turn left towards Flemington Road and 2,300 vpd would turn right towards Royal Parade. Fifteen thousand one hundred vehicles per day would use the Elliott Avenue entry ramp, 12,200 vpd from the west and 2,900 vpd from the east. The majority of vehicles, 20,700 (80%) using the Elliott Avenue ramps pass through the Elliott Avenue/Racecourse Road/Flemington Road intersection. It is not known what percentage of these vehicles would use Elliott Avenue without the Project being available.

In his expert witness report, Mr Brock stated that the Elliott Avenue "*interchange as proposed in the Reference Project conforms*, *in the main, to the nominated road design standards"*. However, he further stated that the following matters should be considered in the detailed design phase:

- *providing a right turn from Flemington Road east into Elliott Avenue; and*
- *depressing the through carriageways of Elliott Ave to the same level as the ramps at the ramp terminal intersections.*

The s57(4) response indicated that 49,900 vpd were forecast to exit the western portal in a westerly direction. Seventy four percent, 36,800 vpd of this total are anticipated to travel north onto CityLink. Seven thousand four hundred vehicles per day (15%) were forecast to travel south onto Part B and 5,700 vpd (11%) were forecast to connect into CityLink to the south.

Twenty seven thousand, seven hundred vehicles were predicted to travel south on CityLink and enter the western portal to travel in an easterly direction. Seven thousand eight hundred vehicles per day were predicted to travel east through the western portal from Part B and 5,200 vpd were forecast to travel from CityLink south into the western portal. Sixty

eight percent of eastbound vehicles at the western portal travelled from the north on CityLink, 19% from Part B and 13% from CityLink south.

No information was provided to indicate how many vehicles per day predicted to use the tunnels, in either direction, were existing CityLink or Tullamarine Freeway vehicles.

Traffic volumes entering and exiting the western portal are shown on Figures 11 and 12 in Chapter 6.2.4 of this report.

The western tunnel portals are shown immediately north of the Upfield railway line. Beyond the portals the carriageways diverge north and south through Manningham Parklands/Ross Straw Field as open cut trench and elevated structure. A section of Oak Street beyond the Manningham Street intersection is to be regraded to enable the elevated ramps to pass over the road.

Beyond the western portal the Proposed Project Boundary includes the entire area bounded by the Upfield railway line, Oak Street/Manningham Street and the southern boundary of CSL and Orygen Youth Health.

The Flemington Road exit ramp from CityLink is to be re-aligned to pass over the wetlands and Oak Street, proceeding south across Manningham Parklands/Ross Straw Field to the western portal. A new exit nose from CityLink is proposed approximately 270 metres south of the reconfigured exit ramp nose. This ramp joins with the existing Flemington Road off ramp.

The Project to CityLink north connection passes over Oak Street, the wetlands and the CityLink carriageways, and continues north on the west side of CityLink for approximately one kilometre to Ormond Road and beyond.

Approximately 400 metres of four lane viaduct extending from Racecourse Road to Mount Alexander Road, on the west side of the existing CityLink structure, is included in Precinct 3. The carriageways diverge as they pass over CityLink and proceed on a curvilinear alignment to link into the tunnels at the western portal.

Ramps from and to the west portals also link the tunnels with CityLink south. The northbound to south link occurring near Mount Alexander Road and the northbound exit leaving CityLink approximately 180 metres south of Racecourse Road.

Mr Brock's witness statement referred to the "*Flemington Interchange*", which he described as "*a particularly difficult interchange to provide*". The term "*Flemington Interchange"* has not been used elsewhere, and the Committee assumes it refers to the Part B viaduct connections to the western portal. Mr Brock noted that "*the southerly oriented connections of this interchange will:*

- *Need to operate under two very different traffic scenarios; and*
- *Provide an alternative to the M1.*

He said "*Until the Western Section (or at least part B of the Eastern Section*) *is in place, the traffic volumes using the southerly connections will be relatively low"*. He said that when the Western Section (full EWL) is in place, there will be significant traffic volumes using these connections.

Mr Brock indicated that an alternative to the M1 can only be provided "*when the Western Section is in place (or at least part B of the Eastern Section*)". To operate as a viable alternative to the M1, Mr Brock indicated that the viaducts "*would need to have at least three lanes each way*. *To achieve this, the viaduct connections would need to be two lanes wide, with shoulders sufficiently wide to be operated as a three lane arrangement in the occasional circumstances under controlled conditions*".

In reviewing the '*Flemington Interchange*' design shown on the Reference Project, Mr Brock noted eleven issues "*that will require careful consideration as part of the detailed design of the interchange*". While these matters all represent areas that will require careful consideration and resolution, he said "*I am confident that* (they) *can be appropriately resolved during the process of design development*".

The LMA tabled Document 473, which was a response to the Committee's query concerning the alignment of Part B. The LMA indicated that the *"greatest design and construction challenges in relation to this connection (south) would occur in the sections between Racecourse Road and Flemington Road. The consortium investigation identified a number of options for this connection".* One option generally followed the alignment of the Upfield railway line, across Flemington Road and Racecourse Road and *"be located immediately east of the CityLink viaduct".* This option was assessed as not feasible as insufficient width was available to accommodate all movements. Another reason for rejecting this option was *"it would have very significant negative impacts on Royal Park in relation to removing parkland, disruption to sport facilities including community facilities such as Urban Camp and visual amenity as the viaduct would need to start at Elliot Avenue".*

Another option investigated was keeping the road in tunnel until it passed under Flemington Road and Boundary Road, with a portal on the north side of Sutton Street. This option was rejected by the LMA in favour of the layout shown in the Reference Project.

Analysis of peak hour intersection operating conditions, with 2031 forecast volumes, at the Elliott Avenue/Racecourse Road/Flemington Road intersection revealed that the intersection would be at capacity. This resulted in the introduction of an off ramp from CityLink/the Project onto Ormond Road, which was announced on 30 October 2013. The LMA s57(4) response indicated that the exit ramp would carry 12,100 vpd, with no indication of the proportion of westbound or eastbound traffic.

Figure 18 in the GHD, TIA report purports to show "*the traffic volume change between the 2031 conditions without East West Link and the* 2031 conditions with East West Link". Reference to this Figure shows that the volumes are expressed as a percentage, with the band width increasing as the percentage change increases. Increases in traffic volume are shown in red and decreases in blue.

Elliott Avenue from Flemington Road to Macarthur Road is shown as a red band. Manningham Street and Oak Street are also shown in red. Other streets west of CityLink, outside the Proposed Project Boundary are also shown as red bands of varying width. CityLink from north of Brunswick Road to Footscray Road is shown as a varying width blue band, which infers a reduction in traffic volumes.

The GHD Figure 18 has been reproduced with the same title as Figure 7-20 in Mr Veitch's evidence report and simplified under issue 11 in Mr Veitch's power point presentation (Document 37). The simplified diagram was presented by the LMA as discussed earlier in this report, and became known as the "*demons diagram*. Nothing in the title of any of these diagrams refers to road cross section. However, in his explanation Mr Tweedie referred to the fact that in some locations additional lanes had been added. As a result the traffic volumes are reduced.

Mr Pitt on behalf of the City of Melbourne called Mr Higgs of TTM Consulting to present traffic evidence "*within the term of reference of the Review Panel".* Mr Higgs stated "*most of the Elliott Avenue interchange work proposed in the reference design is unnecessary and is way over engineered*". Mr Higgs provided an alternative design, that he said "*can deliver an adequate traffic capacity, without changing much of the existing roadways".* Mr Higgs stated that "*it was agreed in the* (traffic) *conclave that my concept is better than the reference design from a road design perspective*". Mr Higgs was advised that the City of Melbourne did not like the concept of an Elliott Avenue interchange, either the Reference Project or the TTM alternative design. He was asked to "*see if another option might be available*". The 'Flemington Road' option (Document 389) was submitted as an alternative to the Elliott Avenue interchange.

The LMA tendered Document 110, a "*Response to the Possible Intersection at Flemington Road*", and indicated it did not support the alternative TTM design due to issues discussed under the following headings:

- Tunnel portal at Flemington Road;
- Construction;
- Geometry; and
- Traffic and Transport.

Mr Higgs offered an alternative design linking the western end of the tunnels with CityLink (Document 109). This concept involves moving the western portals of the north connecting ramps further to the west in the vicinity of Oak Street and the wetlands. Oak Street will be relocated east and elevated to enable the ramps to pass under the local road. Ross Straw Field will be retained at a higher level and smaller scale. The portal for the west to south connection to CityLink is proposed between the Urban Camp and the Upfield railway line. The portal for the CityLink northbound ramp to the tunnel eastbound is proposed west of the railway line. This concept deletes the Part B connection to the tunnels.

Mr Higgs stated "*I cannot see the necessity or value in the separate Part B section of the roadway when the modelled usage is as little as 10-20,000 vehicles per day and there are alternative routes that can be used for travel options provided by Part B".* Further, he said:

> *The northerly exit ramp at Ormond Road is a benefit to the project that would allow greater travel convenience for some users of the East West Link. The ramp will reduce some traffic through Parkville and Travancore that would otherwise use the local streets to connect with the precinct around the Ormond Road interchange.*

This opinion was not shared by Ms Hicks representing Moonee Valley City Council, its traffic witness, Mr O'Brien, and a number of residents and sporting club representatives from Travancore, Ascot Vale and Moonee Ponds.

Mr Brock referred to the "*proposed northbound entry ramp from EWL to CityLink*" and indirectly to the Ormond Road exit ramp. He indicated that the alignment shown in the Reference Project impacts upon Ormond Park, (Moonee Valley City Council concern) and Holbrook Park, (Moreland Council's concern). Mr Brock suggested that modification to the Reference Project "*could be further explored in the detailed design phase, to reduce the impact upon the Council assets whilst retaining adequate road design standards".*

Mr O'Brien indicated in his evidence statement that "*it is important to note the significant differences between the "full" East West link proposed by Eddington and the currently proposed project*". *MVCC has a particular concern that by not completing the "full" project, additional traffic will be drawn into the arterial roads and local streets of Moonee Valley*". The current proposal "*does nothing to provide additional capacity*" across the Maribyrnong River screenline.

Mr O'Brien said "*Two of the main east-west crossings of the Maribyrnong River (Maribyrnong Road and Smithfield Road/Princess Highway) would link-in to the proposed ramps at Ormond Road and Elliott Avenue*". He added that the resultant increase in traffic volumes will "*have a significant impact upon local amenity within Moonee Valley*".

He indicated that the Performance Requirements outlined in the CIS "*are intended to guide what the project must achieve during its construction and operation, regardless of any specific design solution*" therefore, "they are about project outcomes rather than *specific design requirements*". Mr O'Brien further noted that "*the scope of the objectives is fundamentally deficient in that there is no objective to minimise the impact of additional traffic on the local network*". The CIS does not propose any mitigating measures, apart from those that "*maintain local connectivity in the vicinity of the project boundaries*". Mr O'Brien said:

> *There are a number of other deficiencies associated with the transport related performance objectives outlined in the CIS, including: The CIS Evaluation Objective category is "Traffic", but should have a wider scope, for example "Transport" to reflect the impact of the project on all transport modes such as rail, tram, bus walking and cycling; The wording of the CIS Evaluation Objective reflects the focus on road-based connectivity, and does not incorporate an aim to minimise any adverse impacts of the project on transport more broadly. …*
>
> *The performance requirements could also be altered to reflect such changes as outlined above. It is also considered that they should be related to effects, rather than specifications. For example, the requirement "Maintain and where feasible enhance traffic movements at interchanges", presumes that enabling additional movements is beneficial, when in fact it may have negative impacts, such as having an adverse impact on travel times, creating congestion, or increasing 'rat-running' in local streets.*

Mr O'Brien outlined eight issues which he claimed were "*substantive deficiencies in the CIS"* and associated documents, which limited a proper evaluation of the traffic impacts on Moonee Valley. The O'Brien Traffic report includes Figure 4 '*Local Study Area',* which is an enhanced reproduction of Figure 2 in the GHD, TIA. Mr O'Brien suggested that "*the local study area is now deficient, as it was initially defined on the results of the strategic modelling, prior to the inclusion of an off ramp to Ormond Road*". The Ormond Road off ramp will spread the traffic impact further north. Therefore, Mr O'Brien believed "*that it is likely that the local traffic impacts on the Moonee Valley Area are underestimated in the analysis".*

Mr O'Brien agreed with the GHD assessment of existing traffic conditions on a number of key arterials in Moonee Valley. However, the TIA did not include traffic conditions on Racecourse Road and Mount Alexander Road.

Mr O'Brien reproduced Figure 18 from the GHD report as Figure 6 in his report, and pointed out that traffic volume increases will be significant in Moonee Valley. He quoted peak hour volumes from the CIS for the Elliott Avenue off ramp to determine that 1,900 vehicles per hour in total "*exit the link into Moonee Valley*". This volume equates "*to one third of the westbound capacity of the East West Link tunnel section*". He therefore disagreed with the thesis that the Project is "*for cross-city connections, the proportion of traffic accessing the link from Moonee Valley suggests otherwise*". Mr O'Brien stated:

> *It is a combination of traffic using the alternative routes, and being attracted to the East West Link accesses at Elliott Avenue and Ormond Road which results in the significant increases in traffic across the Moonee Valley network as a result of the connectivity designed into the link. To mitigate this impact, major design changes to the project should be considered.*

In Section 7 of the O'Brien report '*Local Impacts*' are discussed. However, due to limited availability of predicted traffic volumes on the Moonee Valley network within the CIS "*a detailed analysis of the localised impacts on the Moonee Valley network is not feasible until such data is made available".*

Mr O'Brien noted that "*potential increases in traffic volumes, particularly in the peak periods are limited in the area due to a lack of capacity, with most roads in the base case (2031) scenario being close to or exceeding their traffic carrying capacity".* He observed that:

> *Should part B not be constructed, the traffic local impacts would be more severe as drivers to many destinations that would be served by the link would be required to exit the freeway system and continue on the arterial road network. If part A is to proceed, part B would also need to be constructed to minimize the traffic impact on Moonee Valley.*

Mr O'Brien believed that the Ormond Road off ramp from CityLink will result in "*rat-running through the local street network via Pattinson Street*". This will occur because the Ormond Road/Mount Alexander Road is "*currently saturated*" and there is no ability for the intersection to accommodate the predicted traffic increase.

Mr O'Brien considered that local mitigating works will not adequately address potential traffic problems on the Moonee Valley road network. He urged that "*More strategic level*

changes are required", such as constructing the western section of the Project and removing the Ormond Road ramp and possibly the Elliott Avenue ramps. After considering the potential benefits and disbenefits of deleting the ramps Mr O'Brien concluded *"further investigation and traffic modelling is needed to ascertain the impact of not providing the Elliott Avenue and Ormond Road ramps".*

In order to facilitate removal of the Ormond Road exit ramp Mr O'Brien proposed modification of the Elliott Avenue/Flemington Road/Racecourse Road intersection. The suggested modification will facilitate the right turn from Elliott Avenue and provide a separate left turn lane into Flemington Road.

If it is determined that the Ormond Road off ramp is to be retained, Mr O'Brien has suggested an alternative design to that shown on the Reference Project. The Project (Part A) to CityLink, north connection shown on Mapbook Sheet 5 is to be re-aligned to join the northbound carriageway of CityLink approximately 1300 metres south of the Reference Project connection. The Ormond Road off ramp is then re-aligned to provide greater clearance to the Essendon Community Garden. Minimal construction works are required under the Ormond Road bridge. The design modifications suggested by Mr O'Brien reduce the impact upon Holbrook Reserve and Ormond Park.

Mr O'Brien commented on the ramp connections between the western portal and CityLink southbound. In his opinion "*it is not possible to design an east to south ramp split between the current exit from the tunnel and the connection to CityLink southbound*". He believed that there are geometric design and safety issues with the northbound off ramp from CityLink to the Project shown on sheet 22 of the Map book. Mr O'Brien supported the TTM option for the Elliott Avenue interchange, as "*it has far better operational safety characteristics*". He suggested that the TTM east to south ramp "*has enough merit to pursue further*". However, he could not support the TTM proposal for a direct ramp to Flemington Road, as it creates problems at the Racecourse Road intersection.

Mr Craig Griffiths of Moreland City Council made a submission to the Committee on behalf of Council. Council's primary traffic related concerns may be summarised as follows:

- Traffic modelling and local traffic impacts;
- Impact of the Ormond Road exit ramp; and
- Impacts upon public transport.

Council believed that *"there is a historical tendency to underestimate the traffic projections on non-tolled roads".* At the same time there is *"a tendency to over estimate the traffic projections for a tollway".* Based upon their past experience, Council compiled a list of 44 sites where it believed that traffic counts should be recorded to establish *"benchmarks"*. Counts should be undertaken immediately and every two years including the construction period and beyond opening of the Project. Mr Griffiths said:

> *Council refute the LMA assertion that traffic volumes on Brunswick Road will be reduced concurrent with an exit ramp at Ormond Road.*

Council sought guarantees from the LMA that if traffic volume increases occur on local roads, financial and infrastructure approval support for local area traffic management will be forthcoming.

Council traffic volume data indicated a *"massive rise in traffic volumes on local roads, as drivers sought to avoid tolls" post opening of CityLink".* As a result of the traffic increases in the local road network Council were *"forced to design and implement a raft of local area traffic management measures to discourage through traffic ("rat-running")".* Council's concern relating to *"being burdened by the external cost of having to address increasing local road volumes"* have resulted in it adopting a demand management strategy, this strategy promotes the growth of sustainable transport modes.

Works associated with the Project to CityLink north connection and the Ormond Road exit ramp encroach upon Holbrook Reserve. Council are therefore concerned about the impact upon their recreation facilities.

Construction through Royal Park, particularly a cut and cover method *"is likely to result in a concurrent disruption to the operation of both the Upfield Railway Service and Route 55 Tram".* Council experienced disruption to the Upfield line during CityLink construction and looked to LMA to develop *"innovative measures to ensure that rail patron inconvenience is minimized".* Council believed that suspension of the Upfield rail service will result in increased tram passenger boardings, particularly route 19. The frequency and traffic priority for this service *"should be boosted dramatically".* Council are further concerned about the impact of construction upon the Capital City Cycling Trail, and sought *"the early development of a safe and legible alternative route"* for this facility.

A number of submissions were made from residents of Manningham Street and Parkville Gardens, the former Commonwealth Games Village. The Manningham Street residents are located beyond but generally very close to the Proposed Project Boundary. Their concerns related to the elevated roadways linking the tunnel portals with CityLink and the Part B viaducts. Another major concern for residents of both areas is the potential Manningham Street/Oak Street construction traffic route. They perceive that significant truck traffic volumes will not only restrict access to their neighbourhood but will also create safety problems for motorists and pedestrians.

One submitter described the four potential haulage routes and deduced that there would be one "*light vehicle equivalent"* traffic movement every 5.1 seconds, for 12 hours per day. This resident stated *"I implore that Route 1 be avoided at all costs, and that Route 3 be adopted".* The same submitter raised the issue of the need for 500 staff car parking spaces in Precinct 3. Mr Smith raised the possibility of spoil from the tunnel construction being transported via rail on the Upfield line.

Ms Cusak of Ascot Vale made a submission on behalf of 89 residents in the area. Ms Cusak said she *"will be directly impacted by the proposed Ormond Road off ramp".* The off ramp was first announced as part of the design on 30 October, 2013, the day before the CIS was released. She said the community is concerned with the proximity of the elevated ramp to the eastern end of Brisbane and Fenton Streets, as well as increased traffic on Ormond Road and Myrnong Crescent.

Mr Peyton made a submission on behalf of Safety Net for Royal Park (SNRP), (Document 335). SNRP put forward two alternative designs for the western end of the Project with connections to CityLink. This submission indicated that residents approached the LMA with

an alternative design concept in May 2013. Subsequent submissions were sent to LMA in June and July 2013.

Option 1 shows the tunnel alignment diverging south-west from the Reference Project alignment from the eastern end of Royal Park. The route exits from Royal Park near the Flemington Road/Dryburgh Street intersection and proceeds west through the northern portion of the North Melbourne Community Centre, as a bored tunnel. In the vicinity of Melrose Street, the alignment bifurcates north to CityLink and south to a new viaduct running approximately parallel to the east side of CityLink between Macaulay Road and Arden Street. South of Arden Street the alignment crosses CityLink and connects into the southern end of the Part B Reference Project alignment. The northern connection to/from CityLink is achieved via elevated structures and roads passing under the CityLink structures.

Option 2 from SNRP proposes relocating the tunnel alignment to the east across the Upfield railway line passing between Ross Straw Field and the Trin Warren Tam-Boore Wetlands. Oak Street adjacent to the wetlands is elevated and relocated to the east allowing the north and south connections to CityLink to pass through the wetlands on the west side of Oak Street.

The SNRP submission suggested a number of reasons why their alternatives were a better solution than the Reference Project. The submission included a plan presented by Mr Ken Mathers of the LMA to the Municipal Works Officers Association in September 2012. This plan showed the "*port connection"* from the Project running parallel to and east of CityLink south of Racecourse Road.

The SNRP submission indicated that the *"CIS did not meet requirements"* as alternative design options were not assessed. Furthermore, SNRP were critical of LMA in that they consider the Terms of Reference were ignored.

Mr Wallis, a North Melbourne resident provided a written submission and appeared at the hearing (Document 395). Mr Wallis who is an engineer with over 30 years experience designing and planning infrastructure was involved with the SNRP group and supported their submission. Mr Wallis supported the proposal to connect the Eastern Freeway to the Western Ring Road. However, he believed *"that a number of major and minor variations to the proposed Reference Design are required to achieve an effective and satisfactory outcome".*

The CIS noted that the Eastern Freeway is a *"stranded asset",* however Mr Wallis suggested the proposal put forward by LMA repeats *"the problem by terminating the EWL Stage 1 well before it gets to the west".* The Reference Project deposits *"tens of thousands of vehicles a day into Royal Park, Flemington Road, the already congested CityLink and surrounding streets".* He said the unconnected East West Link will add traffic to the Elliott Avenue/Flemington Road/Racecourse Road intersection which is already congested.

Mr Wallis suggested the best way to manage the risk (more congestion) is to *"eliminate the risk by extending the tunnel the relatively short distance under Flemington Road".* Mr Wallis provided *"A Better Alternative (option 1)*", which is a northern variation of the SNRP Option 1. His option runs under Royal Park roughly parallel to the west end of Elliott Avenue, crossing under Flemington Road near the Melrose Street intersection. The alignment turns

south west at Boundary Road and travels south, parallel to and east of CityLink. This alignment, he argued, enables integration with the Arden-Macaulay Precinct, located in Precinct 5.

Mr Wallis acknowledged that the northern connection is more difficult. His solution for this connection is similar to that proposed in SNRP Option 2. However, the connection is less complicated as there are only two carriageways buried under a regraded Ross Straw Field.

The Kensington Association made a detailed and well thought out submission to the Committee, (Documents 400 and 401). The Association opposed the Project on the basis that *"the merits of the current East West Link are unclear"* and *"the negative impacts to both the environment and Community are manifest".* However, in the event the Project proceeds, the Association advised it would be prepared to negotiate to try and mitigate the negative impacts.

The Association *"submit that the case to construct a new road link to the Port (i.e. Part B of the proposal) has not been made".* Construction of this road *"would have very substantial impacts on inner Melbourne and on the Kensington community in particular".* The Association offered the following alternatives *"because the current proposal is so patently flawed, and many 'less worse' alternatives exist".* Through Mr Woodland, it said:

> *If the Committee is convinced that the Eastern section (ie Part A of the East-West Link (Eastern Section) should proceed, then we support the City of Melbourne's submission that this road should be connected to the Port via the existing CityLink, not via the elevated roadway proposed as Part B. This is all that is needed to cater for the 2031 traffic volumes between the Port and the eastern suburbs;*
>
> *If the Committee considers that a separate roadway is warranted to link to the broader western metropolitan region, then this roadway should be a tunnel, and it's design and alignment should separately considered as part of the future planning for the Western Section of the East West Link, and be separately assessed via a future EES process. According to the LMA figures, that link might carry 60,000 vehicles per day, and no proposal has been put before this Committee for the Western Link. The Western Link (of which catering for future demand for 60,000 vehicles clearly is part) is outside the scope of what this Committee is being asked to determine;*
>
> *If the Committee considers that an elevated roadway is warranted to link to the Port as part of the current project, then this road should be located on the eastern side of City Link, so as to minimise impacts on the creek, existing residents and businesses;*
>
> *If the Committee cannot consider this alternative because it falls outside the designated project area, and if it is of the view that an elevated roadway should proceed, then the Moonee Ponds Creek should be realigned to allow for the road to abut City Link, which will in turn create a wider, higher amenity open space and waterway edge to Kensington than would be the case if the road was built on top of it.*

> *We offer the above "fall back" ideas with great reluctance, but because the current proposal is so flawed, and there are a number of "less worse" alternatives to it, we feel compelled to address the Committee in relation to them.*
>
> *The "less worse" alternatives are not ones that the Association embraces, but rather are seen as means of mitigating the impact of the proposal should the government see fit to charge ahead with this project.*

This Association stated that the forecast traffic volumes for Part B:

> *… are usually accommodated on 2 lane collector roads, not freeways. Given these modelling results, there is no traffic or other problem solved by Part B.*
>
> *Part B has been opportunistically bolted on to the Eastern link project. It is not needed to link the eastern suburbs to the Port, it is not the optimal solution to link to the western leg of the EWL.*

The LMA s57(4) response acknowledged that Part B is only required to cater for the ultimate western link, it was included to: *"secure the corridor ... at the earliest possible opportunity and provide certainty for land use changes as proposed in the Arden Macaulay precinct".*

The CIS stated that:

> *The project would have the potential to reduce through traffic and assist in restoring the original role of the local road network in the area, increasing residential amenity and contributing to the overall urban renewal of the area. In the case of Kensington, the data doesn't corroborate this statement.*

The LMA analysis demonstrated that:

- The East-West Link will not improve future traffic conditions in Kensington;
- Roads like Macaulay Road will still be at saturation during peak times over the period to 2031, with or without the Link;
- The LMA's own assessment (the GHD assessment) shows that a number of streets in Kensington will be worse off with the E-W Link than without it;
- The GHD assessment shows that there will be growing pressure for drivers to 'rat run' in local streets to avoid the congestion on roads such as Macaulay Road. The modelling shows that this 'rat running' will be 'significantly worse' (ie 30%+) with the E-W Link than without it.

The Association argued that:

> *The Committee should also exercise caution in relying on the results of the GHD assessment. Their modelling suggests that Elizabeth/Chelmsford/Eastwood Streets will be subject to increased traffic volumes during the AM peak.*
>
> *The existing traffic controls in these streets are designed to prevent this rat-running from occurring. For instance south bound traffic is prohibited from entering these streets during morning peak-hour by right hand turn bans on Macaulay Road. The top of Elizabeth and Chelmsford Streets are one way, thus northward afternoon peak-hour flow are also blocked. So it is not possible for traffic to flow through these streets in the way that the GHD assessment suggests.*

The GHD assessment of traffic impacts in this location is superficial and incorrect. These issues would have been readily picked up by looking at a Melway map and Google, or visiting the area. The GHD modelling results for these streets is wrong, unless it is intended to remove existing traffic control treatments in these streets.

In conclusion, the Association opposes the East-West Link proposal in its entirety.

…

A range of legitimate alternative solutions have not been properly considered, and instead everything has been dumped on the lap of this Committee to sort out, in ridiculous timeframes and under significant legal and other constraints.

As recently as yesterday, the LMA advised the Association that the alternative alignment canvassed in our submission has merit in principle but it would require detailed consideration. LMA is not in the position to be undertaking such detailed assessments at the moment as the hearings are currently underway.

Documents 430 and 431 (Residents Against the Tunnels (RATs)) indicated that safety was a major issue; being vehicle safety in relation to the proposed merge on the eastbound tunnel beyond Elliott Avenue and pedestrian safety. A number of Performance Requirements were suggested in the submissions. The submission was critical of the CIS for not defining "*routes for necessary and significant waste materials and equipment cartage, local traffic diversions and parking*". As a result, the "*boundary of the project impact remains unknown*". The traffic modelling was criticised for not attempting "*to differentiate and quantify the types of vehicles this road is planned to induce as a freight logistics solution*".

6.5.4 Discussion

The Cities of Melbourne and Moonee Valley are opposed to the Elliott Avenue interchange. The former for its impact upon Royal Park, and the latter because it believes that the interchange will direct traffic into its Municipality.

A significant number of groups and individual submitters are opposed to the Elliott Avenue interchange because of its impact upon Royal Park. An interchange in Royal Park appears contrary to the findings of the 2008 Eddington Report which supported an 18 km long *"cross City road connection extending from the western suburbs to the Eastern Freeway".*

Chapter 9.3 of the Eddington report under "*Further Recommendations*" stated "*the Study Team has not provided city access ramps on the Eastern Freeway to CityLink section. It would be difficult to provide city access without adding to current congestion problems and possibly causing queuing in the tunnels*". It further stated that public transport should be the priority for daily work and study trips to the city.

The forecast 2031 traffic volumes using the Elliott Avenue interchange are heavily biased towards Flemington Road, 80% compared, with 20% to the east.

The interchange design shown on the Reference Project appears to have no consideration for *"minimising"* the impact upon Royal Park. An alternative design prepared by TTM Consulting reduces the impact upon Royal Park, however, this design was rejected by the City of Melbourne.

A further option, eliminating the Elliott Avenue interchange by directing the tunnels south-west to Flemington Road was prepared by TTM. This concept, which resulted in minimal long term impact upon Royal Park by locating the portals adjacent to Flemington Road was supported by Professor Catherin Bull. This option was rejected by LMA on 13 grounds (Document 110).

Mr O'Brien, for Moonee Valley opposed the TTM Flemington Road intersection option due to the adverse impact upon the Elliott Avenue/Racecourse Road/Flemington Road intersection. This rejection was in spite of TTM providing SIDRA analysis for the intersection showing that it would operate at an acceptable level during peak periods.

Prior to receiving the TTM Flemington Road option, Mr O'Brien indicated that *"further investigation and traffic modelling is needed to ascertain the impact of not providing the Elliott Avenue and Ormond Road ramps".*

A significant proportion of the Moonee Valley area is located between Moonee Ponds Creek and the Maribyrnong River. Between Bell Street in the north and Ormond Road in the south, there are very few continuous east-west roads crossing Moonee Ponds Creek. The Committee therefore considers that a significant proportion of Moonee Valley residents destined for Doncaster, Ringwood or further east or south-east, would travel along the Mount Alexander Road corridor to Ormond Road or Elliott Avenue, rather than cross the creek further north. The additional traffic forecast for the Mount Alexander Road corridor may be Moonee Valley residents diverted from the east-west streets. A connection to the Project from Flemington Road or Elliott Avenue may therefore not be detrimental to the City of Moonee Valley.

The horizontal alignment of the tunnels north-west of the State Netball and Hockey Centre and the lack of clarity about the construction technique concerned many submitters. The Reference Project design has significant adverse impacts upon sporting groups, residents and users of the north-west section of Royal Park and the wetlands. It also adversely impacts upon the City of Melbourne's irrigation water collection system.

If Mr O'Brien's comments regarding the vertical alignment of the north-west bound link between the tunnel portal and CityLink are correct, the Reference Project should not be constructed as shown for that particular movement. It is clear to the Committee is that the potential to *'disconnect'* the northern and southern links to CityLink, at a different location than shown in the Reference Project, warrants further investigation.

This concept was raised by Mr Herington (Document 372) and is implicit in the options suggested by Mr Wallis. Furthermore, the southern section of the Y (as described by Mr Herington) will trespass beyond the Proposed Project Boundary east of Elliott Avenue. The ability of the Committee to consider such alternatives is considered in Chapter 5.

The re-aligned northern alignment moves the tunnel away from the Urban Camp and passes between Ross Straw Field and the wetlands. The tunnel portals may be located east of Oak Street on the basis of Ross Straw Field being raised or the tunnels bored. The significant benefit of this option is that no residential property acquisition is required in addition to the amenity benefits. Cost savings will be achieved by avoiding property acquisition.

Clearly, more work is required to develop the viability of this concept from a road design and cost aspect. However, in the opinion of the Committee, a more important issue to be addressed is the ability of CityLink (north) to cater for the forecast traffic volumes.

Other parties may be aware of capacity constraints on CityLink/Tullamarine Freeway. Project Zebra was mentioned at the Hearing by Mr Brock and redacted at the request of LMA. Since the Hearing concluded, there have been significant announcements outlining the proposed widening of CityLink/Tullamarine Freeway.

The Committee has no information regarding how the proposed widening is to be achieved and what, if any, property acquisition will be required. Any widening of CityLink/Tullamarine Freeway between Delhi Reserve and Ormond Road ie in Precinct 3, combined with the concept shown in the Reference Project, may have a significant impact upon residential properties, public open space, the Essendon Community Gardens and Moonee Ponds Creek. However, as no information was put before the Committee, no comment can be offered.

The southern connection from CityLink/Part B to the western portal is more complex, even before the introduction of additional roadworks suggested post Hearing. However, there appears to be more options available than those considered by LMA. Options proposed by SNRP, Mr Wallis, TTM and Mr Herington appear to have a lesser impact upon Parkville West and the recreation reserves. The TTM Flemington Road option may have the potential to be continued west as a bored tunnel and connect into an elevated structure on the east side of CityLink.

Based upon the findings of the Eddington report the design may be simplified. In Chapter 9.3 of the Eddington report it states the "study *team did not identify any significant demand for a southerly connection to CityLink."* The forecast 2031 daily traffic volume of 5700 vehicles supports that finding.

The Committee agrees with the submitters that commented upon the *"over design"* of Part B and Mr Brock who indicated that the Part B cross section would be inadequate when the full Project was constructed. The Committee does not agree with Mr O'Brien's statement that *"should Part B not be constructed, the traffic local impacts would be more severe",* particularly with regard to the impact upon Moonee Valley. Nor does it agree with Mr Brock's statement that *"part B of the Eastern Section"* can provide an alternative to M1.

Since the Committee hearing concluded, there have been a number of statements issued by the State Government in relation to works on CityLink, and in particular the CityLink connection to the West Gate Freeway. This connection was mentioned a number of times during the Hearing as being a major contributor to congestion on the Bolte Bridge, even though CityLink appeared to have spare capacity.

Document 473 presented by the LMA relates to the alignment of Part B, stating *"the consortium investigation identified a number of options for this connection*". One option was an elevated roadway, assumed to be departing from the Reference Project north of Elliott Avenue, turning west to follow the Upfield railway line, passing over Flemington Road and Racecourse Road. This option was rejected "*as the viaduct structure could not be constructed in the narrow space between the rail line …. and the existing multi story buildings on Racecourse Road*". Another reason for rejection was that it would "*result in a*

greater impact on Royal Park as the viaduct to the south would need to commence from Elliott Avenue".

The Committee is unclear on this response. If the alignment was to *"generally follow the alignment of the Upfield railway line"* the Committee cannot understand why there would need to be a viaduct commencing at Elliott Avenue.

A further option assessed by LMA would *"keep the road in tunnel until it had passed under Flemington Road and Boundary Road with a portal on the north side of Sutton Street".* This option was also rejected as it would *"require two pairs of two lane tunnels"* and *"the merging of these tunnels would be in the eastern section of Royal Park close to The Avenue".* The Committee does not understand this response as it does not see a need for the tunnels to diverge/merge east of Elliott Avenue and certainly nowhere near The Avenue. If the LMA had their option confused with that of Mr Wallis', the tunnel diverge/merge would be closer to Elliott Avenue than The Avenue.

The LMA stated *"the road (Part B) must be on the western side of CityLink to facilitate the ultimate connection to the East West Link – Western Section".* A further reason given why the Part B connection could not be on the east side of CityLink was *"disruption to sport facilities including community facilities such as Urban Camp and visual amenity as the viaduct would need to start at Elliot Avenue".* This comment appears contradictory. On the alignment shown in the Reference Project, the Urban Camp appears to be 400 metres north of Elliott Avenue and it is a further 250 metres from the Urban Camp to the west boundary of Royal Park. The Committee cannot understand the nexus between the Urban Camp, Elliott Avenue and a viaduct. Furthermore, the Committee is surprised that the LMA would consider an option requiring a viaduct in Royal Park when the CIS highlights the benefits of a tunnel compared to a surface road or a viaduct. In referring to the document presented by Mr Mathers in 2012, the Committee finds it difficult to understand why the 2012 option would not still be valid.

The location of the Ormond Road exit ramp is dictated in part by the design of the Project and CityLink North Connection, as shown on Sheet 6, in the Mapbook. However, as Mr O'Brien has shown, other options are available which would reduce the impact of the ramp on the Essendon Community Garden and Brisbane Street. The other benefit to be derived from modifying the ramp design as per the O'Brien proposal is the reduced impact upon Council Reserves.

The Committee acknowledges that an exit ramp will increase traffic volumes on Ormond Road and most likely Brunswick Road. However, the Committee anticipates that a number of these vehicles will be destined for Moonee Valley and Moreland. If the Ormond Road exit ramp was deleted, some of these vehicles would use Mt. Alexander Road or other roads in Moonee Valley or the Moreland Road exit from CityLink.

The Committee acknowledges the concern of the City of Moreland in relation to increased traffic in the Municipality and the impact upon their Reserve.

The safety issues raised by the RATs should be addressed by a Road Safety Audit of the Project. This approach, in addition to incorporating the Performance Requirements suggested by the RATs, should reduce some concerns.

Although the Project has been suggested as an alternative route to the M1 and to "*provide an efficient, high capacity connection to major freight destinations*", little evidence has been provided regarding freight traffic.

As discussed in Precinct 1, the Committee is not in a position to, and it is not its role, to attempt to redesign the Reference Project through its assessment. However, as for Precinct 1, the Committee considers there are a number of high impact design features in the Reference Project in Precinct 3 that are not supported by a thorough assessment against community objectives and there is little demonstration that the LMA has sought to reduce impacts to an acceptable level.

6.5.5 Findings

The Committee finds that the Elliott Avenue interchange as shown in the Reference Project is unacceptable and it recommends that it be reviewed. If a city connection is required, then alternative interchange designs, including the proposed alignment adjacent to Flemington Road by TTM Consulting, should be examined.

The location of the western portal shown in the Reference Project is unacceptable, as is the horizontal and vertical alignment of the ramps from the western portal to CityLink. The Committee recommends further alternatives be investigated.

The Committee believes that insufficient published research has been undertaken into the impact of the forecast 2031 volumes on the Project on the Tullamarine Freeway/CityLink. The northbound ramp from the western portal to CityLink/Tullamarine Freeway should be redesigned to reduce the impact on the west side of CityLink. The options available for the abovementioned design change is unclear due to the recent announcements by the State Government and Transurban regarding the upgrade of CityLink.

The Ormond Road off ramp provides an acceptable traffic function, but the design shown on the Reference Project is unacceptable. The Committee recommends that it be reviewed as part of the final design process.

Based upon the limited traffic demand forecast for Part B, the high demand once the *"full"* Project is constructed and the uncertainty surrounding other works proposed on CityLink, the Committee believes that construction of Part B should be set aside at this stage. It considers a revised Part B can be picked up when planning for the proposed WestLink project commences.

The Committee further believes that the southern CityLink to the Project ramps are not warranted at this time, due to the limited traffic demand and the uncertainty regarding future works on CityLink.

The Committee considers that the alternative ramp connections within Manningham Parklands/Ross Straw Field should be bored or the Parklands raised to ensure that minimal length of elevated structure is constructed.

The Committee recommends that areas for traffic monitoring in selected local streets in the Moreland, Moonee Valley, Yarra, Melbourne, Darebin, Banyule and Boroondara Council areas should be identified, now and at two year intervals during construction and up to two years after completion of the Project, and funding for reasonable local area traffic

management works that need to be implemented to reduce identified adverse traffic impacts directly attributable to the Project, should be provided.

6.6 Precinct 4: CityLink

6.6.1 Introduction

This Precinct, shown on Figure 5 in the Mapbook, basically follows the alignment of CityLink from Ormond Road to Moreland Road.

6.6.2 Key Issues

The key issues in this precinct relate to the:

- Ormond Road off ramp;
- The additional CityLink carriageway extending from Ormond Road to Wilsons Street; and
- The impact upon Ormond Park and Holbrook Reserve;

6.6.3 Submissions and Evidence

Mr O'Brien on behalf of Moonee Valley City Council prepared an alternative design for the Project to CityLink north connection. The redesign of this ramp resulted in modifications to the Ormond Road on and off ramps, the objective of the redesign being to reduce "*land take*" on Ormond Park and as a consequence Holbrook Reserve.

Mr O'Brien criticised the Reference Design, as in his opinion, it is undesirable "*from a traffic management and congestion management point of view*". The design merges with the "*existing northbound Ormond Road on-ramp to CityLink with the Project prior to them joining CityLink*".

Moreland City Council submitted that the additional northbound carriageways on the west side of CityLink will have an adverse impact upon Holbrook Reserve. The removal of trees, relocation of services including lighting and irrigation will have significant costs. The loss of active and passive recreational space is another concern.

6.6.4 Discussion

All of the issues of concern in this Precinct are generated by the alignment of the Project with the CityLink North connection. This ramp connection exits the tunnel portal in Precinct 3, and therefore any modification to the northern alignment cannot be considered in isolation. The entire horizontal and vertical alignment of this ramp connection must be considered from the western portal.

A further complication beyond the Terms of Reference of the Project is the recent announcement regarding the widening of CityLink. Examination of the Proposed Project Boundary shown in the Mapbook reveals that any widening will extend beyond the Proposed Project Boundary in certain locations.

6.6.5 Findings

Based upon the evidence provided, a viable alternative design may be available which has a lesser impact upon the existing Ormond Road on ramp and therefore Holbrook Reserve. The Committee recommends that further design options be considered including an examination

of the merits and functionality of the alternative design proposed in the evidence of Mr O'Brien.

6.7 Precinct 5: Port Connection

6.7.1 Introduction

This Precinct, shown on Figure 6 in the Mapbook, commences at Racecourse Road, on the west side and generally runs parallel to CityLink as far as Dynon Road. Beyond Dynon Road, the alignment diverges west connecting into Footscray Road approximately 380m west of CityLink, opposite Appleton Dock Road. The alignment shown in this Precinct is essentially Part B of the Project.

6.7.2 Key Issues

The key issues in this Precinct relate to the:

- The geometry and need for the Project to CityLink south ramp; and
- The location of the Part B viaducts.

6.7.3 Submissions and Evidence

The Reference Project described the alignment as twin two lane viaducts. Traffic volume data provided by the LMA in the s57(4) response indicated forecast 2031 volumes of 15,200 vpd. The CIS Summary Report indicated that with the Full East West Link, the viaducts are anticipated to carry 60,000 vpd.

Document 473 submitted by the LMA indicated that it had investigated an alignment on the east side of CityLink. This location was considered unfeasible because:

> *There is insufficient space between the rail line, CityLink and existing multi story buildings on Racecourse Road;*
>
> *It would have very significant negative impacts in Royal Park in relation to removing parkland, disruption to sport facilities including community facilities such as the Urban Camp, and visual amenity as the viaduct would need to start at Elliott Avenue;*
>
> *Weaving distances between the entry ramp at Racecourse Road and the Dynon Road exit would restrict the connection to CityLink; and*
>
> *The Part B connection needs to be located on the western side of CityLink in the port area, so it can connect to the western section of East West Link.*

Mr Pitt on behalf of the City of Melbourne submitted that the Reference Project Part B does not appropriately address or mitigate its impacts in that:

- *It assumes a particular route for a link to the Western Ring Road which has not been determined, justified or demonstrated to be the optimum or appropriate;*
- *If an additional viaduct(s) were to be considered it should only be as part of a consideration of a link to the Western Ring Road;*
- *Because there is no commitment to build it or to determine whether it is to be built by a reasonable specified date, it would create planning blight*

thereby frustrating in large part the aspirations for urban renewal at Arden-Macaulay;

- *Ramps into Arden-Macaulay are the antithesis of the transport mode shift contemplated by the adopted Arden/Macaulay Structure Plan (Section 4.3 and Strategy 3) as the area shifts from traditional industry to service industries and higher density residential development identified as important in Plan Melbourne (pages 73 and 76), would benefit only those seeking to travel between Eastern Freeway and Arden-Macaulay and would add to the blighting impact of additional viaducts; and*
- *If constructed, Part B of the Reference Project would not appropriately address or manage the impacts on Moonee Ponds Creek and its environs for public use or adjacent lands identified for residential redevelopment by way of visual bulk, overshadowing, noise and intrusions into the watercourse.*

Mr O'Brien for Moonee Valley (Document 175) indicated that the exit ramp from CityLink to the Project northbound had safety problems due to a "*hidden nose only 200m along the existing off ramp*" and the new "*ramp pavement was visible for only 75m*".

Mr Brock indicated in his evidence statement that "*the separation between the Racecourse Road exit from CityLink and the EWL exit from the Racecourse Road exit ramp is only in the order of 200m. This spacing is close and effective signage will need close consideration".*

SP AusNet, the owner and operator of the West Melbourne Terminal Station, which supplies a significant amount of Melbourne's electricity supply, made a submission. Their site which is located west of CityLink and south of Arden Street, is bounded by roads, a railway track and the Moonee Ponds Creek. The Part B viaduct passes over the eastern portion of their site. SP AusNet planned to undertake upgrading works on this site, however, this has been deferred due to the uncertainty over the Project. It therefore sought resolution of the proposed road alignment.

The Kensington Association (Documents 400 and 401) highlighted that the LMA reports indicated that traffic volumes in the Macaulay Road area would increase as a result of the Project. It suggested that the location of the viaducts shown in the Reference Project was the "*worst possible location*" due to the impact upon Moonee Ponds Creek and the adjoining properties to the west. The Association put forward an alternative alignment which immediately abuts CityLink. This option requires realignment of Moonee Ponds Creek allowing "*a wider, higher amenity open space and waterway edge to Kensington than would be the case if the road was built on top of it*". This they said, was the "*option of last resort*".

The Association's preferred 'less worse' solution is to "*construct the road on the east side of CityLink,*" where there is considerable vacant and under utilised land. The Association stated that Part B will "*significantly impact on the realisation of the Arden – Macaulay Urban Renewal Project".*

Mr Peyton of the Safety Net for Royal Park (SNRP) made a submission supporting an eastern alignment of Part B that could be integrated with the Arden-Macaulay Structure Plan.

The Friends of Moonee Ponds Creek made a submission highlighting the adverse impact of the viaducts on the Creek.

A number of residents of 18 Bent Street, Kensington, which is located on the corner of Hardiman Street, made submissions to the Committee. The residents indicated that the LMA were not aware that their building was a recent residential conversion and extension of a former industrial site. As a result, they received very late notification that the Part B viaducts would be located "*within 15m of the eastern facade of their building*", some 8m above the level of Bent Street.

6.7.4 Discussion

The primary concern with respect to this Precinct is road geometry, and the location of the viaducts on the west side of CityLink.

It appears to the Committee that the LMA have not fairly responded to or considered alternative designs put to it by residents and/or resident associations. The majority of LMA responses put to the Committee are based upon proving that an alternative solution will be unacceptable, rather than objectively assessing the option and determining ways to make it more acceptable.

The alignment of Part B in Precinct 5 is dictated by the alignment shown in Precinct 3. If a more open approach was taken to developing the Reference Project, the LMA may not have considered a viaduct structure that "*could not be constructed in the narrow space between the rail line (Flemington Bridge Station), CityLink and existing multi storey buildings on Racecourse Road*" (Document 473). Clearly, this option could not be viable or acceptable on a number of grounds even if the structure could fit in the area suggested. Similarly, suggesting that a tunnel option passing under Flemington Road and Boundary Road required "*the merging of these tunnels … in the eastern section of Royal Park, close to the Avenue"* is difficult to understand. It is approximately 700 metres along the alignment of the Reference Project from The Avenue to where tram route 55 crosses the alignment. Any tunnel merge or diverge would therefore be at least 700 metres west of The Avenue.

Since completion of the Hearing a number of announcements have been made regarding modifications to CityLink, Bolte Bridge and connections to West Gate Freeway. All of these works will have a significant impact upon the Part B component of the Project.

6.7.5 Findings

The Committee is not convinced that the LMA has adequately researched design alternatives for Part B, including consideration on the east side of CityLink or further in-tunnel options. In addition on traffic grounds Part B is not justified in the short to medium term.

Notwithstanding, there is an opportunity to review the Part B component of the Project in the context of the recent announcements relating to the proposed widening of CityLink/Tullamarine Freeway, and the WestLink proposal, *Plan Melbourne* and the need to revise the Arden-Macaulay Structure Plan.

6.8 Precinct 6: Footscray Road

6.8.1 Introduction

This Precinct, shown on Figure 7 in the Mapbook, includes Footscray Road between Dock Link Road and Appleton Dock Road, and the adjacent former Wholesale Fruit and Vegetable Market.

6.8.2 Key Issues

- No issues were ventilated for this Precinct.

6.8.3 Submissions and Evidence

Sheets 23 and 24 in the Mapbook show the Reference Project road alignment.

Table 22 of the GHD, TIA shows Footscray Road crossing the Maribyrnong River i.e. west of the Precinct, carrying 40,000 vpd in 2011. By 2031 without the Project, Footscray Road is forecast to carry 35 to 45% more traffic i.e. a maximum of 58,000 vpd. By 2031, with the Project, Footscray Road at the River, is anticipated to carry a maximum of 63,800 vpd i.e. 0 to 10% more than without the Project, (Table 22, GHD TIA).

Table 25 of the GHD, TIA report which outlines forecast traffic volumes based upon population sensitivity shows the following:

Table 10: Traffic Volumes Based on Population Scenario for Footscray Road

	Daily Traffic Volumes		
	Base 2031	**Low 2026**	**High 2036**
Footscray Road – west of Appleton Dock Road	42,800	35,700	53,500

Source: GHD TIA

6.8.4 Discussion

The Reference Project shows an elevated structure along the alignment of Footscray Road, basically in the central median. What is not clear is the future status of the current Footscray Road pavement.

6.8.5 Findings

No information was provided regarding forecast traffic volumes on Part B in Precinct 6. The traffic volumes quoted in GHD Tables 22 and 25 are located approximately 1.9kms apart on Footscray Road.

Based upon the limited information provided, the Committee is unable to draw any conclusions in relation to this Precinct, and its findings are similar to those relating to review of the Project in the context of the recent announcements about the upgrade of CityLink and the Tullamarine Freeway, and the commencement of the planning process for WestLink.

6.9 Other Traffic/Transport Related Issues

6.9.1 Introduction

A number of submitters, organisations and Councils expressed concern regarding the impact of the Project on public transport, cycling and pedestrian movements. A major issue was the construction phase of the Project.

6.9.2 Submissions and Evidence

Submissions were made on behalf of a number of cycling groups to alert the Committee to the needs of cyclists and offer options for upgraded cycling facilities, during and post construction.

A number of submissions stressed the need for upgraded public transport services rather than construction of the Project. Pedestrian safety during construction and on completion of the Project was raised as an issue by many submitters. Many local submitters were concerned about reduced opportunities for safe and efficient walkability in the vicinity of the Hoddle Street and Eastern Freeway interchange.

Construction routes and car parking for construction workers have already been mentioned in earlier sections of this report. In response to these matters, the LMA suggested that this would be covered by the Performance Requirements and be the responsibility of the contractor.

The LMA tendered Document 493 to clarify that the *"East West Link is co-ordinated with the Doncaster Rail project, so that neither project precludes the other".* The Document stated *"The proposed rail line would cross from the median of the Eastern Freeway to the southern side of the freeway in a cut and cover tunnel. The eastern portal for the tunnel would be east of Yarra Bend Road and the western portal would be on the west side of Yarra Bend Road, crossing under the westbound carriageway of the freeway approximately between chainages 2500 and 3000".*

Document 314 presented by Mr Herington on behalf of Yarra Campaign for Action on Transport, contained a quote from the Doncaster Rail Study, (December 2012) which indicated that from the west the rail route would " *rise up into the central median* (of the freeway) *near Yarra Bend Road".*

6.9.3 Discussion

The option of providing a light or heavy rail connection from the Alexandra Parade corridor to Doncaster, rather than the Project, is beyond the Terms of Reference of the Committee. However, the Committee considers that the LMA must retain the option of providing a feasible rail alignment along the Eastern Freeway corridor.

The Eastern Freeway median, west of the Yarra Bend Road, shown in the Reference Project appears to be approximately 5m in width. Clearly, the rail alignment will not be able to "*rise up into the central median*" at this location. The rail reservation, unless elevated, will therefore need to be located south of the freeway, west of Yarra Bend Road. The combination of railway grades and minimum horizontal curvature will result in the railway tracks "*rising up*" into the median hundreds of metres east of the Yarra Bend Road.

Furthermore, if a cut and cover construction method was to occur the westbound carriageway of the freeway would be closed for an "*extended period of time*".

6.9.4 Findings

The completed Project should incorporate safe, efficient cycling and pedestrian facilities. Clearly, apart from pedestrian escape routes,–these facilities will be excluded from the tunnels. Pedestrian access in the area of the Hoddle Street and Eastern Freeway interchange is essential, and the final design should enhance safe and efficient pedestrian access opportunities.

The LMA should ensure that the final design for the Project incorporates a north east bicycle corridor along the Eastern Freeway and an extension along Alexandra Parade.

In the opinion of the Committee, the final design work should confirm that the opportunity for a Doncaster Rail service is maintained.

6.10 Applicable Approvals

Consent is required under Clause 1 of Schedule 2 of the *Road Management Act* 2004 which states that "*No road, private road or access point is to be connected to a freeway without the written consent of VicRoads*". Schedule 1 of the MTPF Act lists this consent as an applicable approval that the Minister for Planning is empowered to grant.

The LMA through Mr Mathers wrote to VicRoads on 20 September 2013 seeking its support for the Project to be connected to the Eastern Freeway and CityLink (Western Link) for the following:

On 27 September 2013, Mr Gary Liddle, Chief Executive of VicRoads wrote to the LMA and noted its support to the Minister for Planning to grant consent for the following connections:

- *Direct connection of the eastbound and westbound carriageways of East West Link with the eastbound and westbound carriageways respectively of the Eastern Freeway in Collingwood:*
- *Exit ramps from the southbound and northbound carriageways of CityLink in Parkville connecting to the eastbound carriageway of East West Link; and*
- *Entry ramps from the westbound carriageway of the East West Link connecting to the southbound and northbound carriageway of CityLink in Parkville.*

The Committee concludes that in relation to Part A, consent should be provided for the following new connections of the East West Link with the Eastern Freeway and CityLink:

- Direct connection of the eastbound carriageway of the East West Link with the eastbound carriageway of the Eastern Freeway.
- Direct connection of the westbound carriageway of the Eastern Freeway with the westbound carriageway of East West Link.
- Exit ramp from the southbound carriageway of CityLink/Tullamarine Freeway connecting to the eastbound carriageway of East West Link.
- Entry ramp to the northbound carriageway of CityLink/Tullamarine Freeway providing connection from the westbound carriageway of East West Link.

The Committee has recommended that Part B of the Project be set aside, however if that recommendation is not accepted, the relevant Applicable Approvals as confirmed by VicRoads should be granted.