Marrickville Council Submission – M4 East Environmental Impact Statement

Marrickville Council opposes the WestConnex project, incorporating the M4 East extension that is the subject of the present EIS. In September 2015 Council reaffirmed its "absolute opposition to the WestConnex project" at which time it also called for the immediate release of a business case and environmental impact statement for the proposal.

This submission responds to the M4 East EIS, currently on public exhibition, and evaluates the justification for the current project (as part of the broader WestConnex project) as well as the mitigation and management measures proposed and the level to which the identified impacts of the project have been addressed.

The main conclusions of this submission are:

- That the EIS does not justify that the significant expenditure proposed on transport improvements benefits the broader community including public transport users, pedestrians cyclists and communities generally and that the benefits for toll paying motorists indicated in the EIS are also dubious.
- There has been no real analysis on the assessment of alternatives to the M4 East undertaken in the EIS and that all of the alternatives that have been considered are assessed in isolation of integrated solutions.
- The EIS has assumed that all sections of WestConnex (with the possible exception of the Western Harbour Tunnel) are completed by 2031. If all sections are not completed simultaneously the traffic flowing from the M4 East will have adverse impacts on the inner west and central Sydney.
- To properly evaluate the WestConnex project there needs to be an over-arching EIS for the entire project, i.e. Stages 1, 2, 3, the Southern Gateway and The Sydney Gateway; possibly also the Northern and Southern extensions.
- The EIS itself acknowledges that the forecasted peak traffic patterns appear to be counter intuitive – westbound in the morning peak and eastbound in the afternoon peak. When compared to recent traffic trends in Sydney this outcome is hard to comprehend. The EIS explanation of this outcome is contrived and complicated and a more likely explanation is a miscalculation in the transport modelling.
- The EIS does not explain how toll levels and people's perception of tolls changes into the future. Given the impacts this can have on existing surface roads and the recent toll road failures in Sydney this appears a significant omission.
- The EIS is not very detailed in relation impacts from other components of the project such as the M5 extension/expansion and M4-M5 link and this shortcoming hides further impacts that would be experienced through the Marrickville LGA (i.e. M4 and M5 extensions without the M4-M5 link). Even with the 2031 'do something' case which includes all the Westconnex stages, there is still little detail on the impact on the roads south of Parramatta Road.
- The EIS must identify the likely impacts of induced traffic on residential streets in the LGA, by means of an appropriate local area traffic management study, and mitigate those impacts by LATM works. The study should include post implementation reviews to identify and address any unforeseen impacts.
- The transport model used by the M4 East EIS does not include public transport assignment or public transport demand forecasting. Due to the lack of a mode split process in the transport modelling, the competing disbenefits of traffic congestion and rail crowding have not been tested for the EIS.
- The implications of increased bus traffic along Parramatta Road into the Sydney city centre are not addressed by the M4 East EIS. How the central city road network will deal with increased bus traffic is unknown.
- The absence of a long term modelling (for example 2041) from the M4 East EIS means that any longer term traffic or socioeconomic impacts are not being identified, mitigated or monitored.

- The 'worst case' assessment presented in the Air Quality Assessment does not consider the maximum emission rates (in g/s); hence the worst case scenario is not in fact considered.
- The health impact assessment should be reviewed to include a comprehensive assessment of the health impacts, in consultation with affected people and communities, to identify positive impacts and better mitigation measures for negative impacts.
- The EIS does not satisfy the Director-General's Requirements *"consideration of the WestConnex Urban Revitalisation Project"* as evidenced by the location of the Powells Creek M4 on-ramp at the centre of a place that is earmarked for major urban amenity transformation in the Homebush Precinct under the Parramatta Road Urban Transformation Strategy.
- No pedestrian and cycling report has been included in the EIS on the basis that the M4 East would operate in parallel with Parramatta Road. Cycling is a viable transport option and it should reasonably be expected that the EIS would evaluate the strategic opportunities for providing cycleway and pedestrian transportation to create connectivity and integrate with the surrounding communities.
- The economic impact assessment in the EIS does not provide justification for the proposal as it lacks a comprehensive assessment of the impacts, based on detailed modelling, cost/benefit analysis, inclusion of opportunity costs and a business case.
- The social impact assessment needs to be reviewed to include a comprehensive assessment of the social impacts, in consultation with affected people and communities, to identify positive impacts and better mitigation measures for negative impacts.
- No scoping of the population groups who will potentially be affected undertaken – apart from the people whose land will be acquired (referred to as properties rather than people in the report) and a few social infrastructure (the people who use the social infrastructure are not mentioned,)
- No direct consultation has been carried out with the people and population groups who will be directly affected (had they been appropriately identified) – it would have been useful to ask them what they needed to manage the impacts on their lives
- The investigation undertaken and outlined with respect to contamination could only be considered a Preliminary Site Investigation as per the Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA 2011). The scale of the proposal, lack of information about past activities, and known presence of contamination and contaminating processes over the entire project site warrant a Detailed Site Investigation prior to approval, and not deferred to a later stage.
- There are significant gaps and inadequacies in the methodology used and assessment of biodiversity impacts.
- Commentary should be included on the comparison of car versus public transport emissions and how the NSW Long Term Transport Master Plan objective to grow the proportion of travel by sustainable modes such as public transport is being addressed.
- The EIS does not adequately address the impact of the project on future climate change. This project must be considered with reference to Australia's commitment to emissions reduction and Ecologically Sustainable Development as outlined in the Protection of the Environment Administration Act 1991 (NSW) and the Environment Protection and Biodiversity Conservation Act 1999.

It is evident based on the evaluation in this submission that the decision to proceed with WestConnex was made prior to a thorough assessment of whether or not the project was the best way to manage Sydney's transport needs in the context of the role that WestConnex is intended to serve. Moreover, it is evident that the role of the EIS for this project has been limited to an assessment of impact and mitigation measures that could be applied as opposed to a genuine consideration of alternatives to the proposal. For these reasons the project is and has been flawed from inception and should not proceed based on the assessment within the EIS.

Council's submission finds that the project has no basis to proceed and recommends that alternatives to the M4 East should be further evaluated, including:

- Expansion of the new Metro:
  - from Bankstown to Parramatta and Epping/Macquarie Park

    - from Parramatta to CBD via Ryde/Drummoyne and/or Strathfield/Olympic Park
    - from Strathfield/Burwood north to Macquarie Park and southeast to Green Square/Airport and Randwick/Bondi Junction
- New road connection from Port Botany to M5 to enable better dispersal of freight from port; upgrade A3/A6 for freight heading north
- Increased services along Western Rail Line
- Improved connections to stations along Airport/Revesby line including park and ride options at major stations; increase frequency of services along this line
- New stations on the Airport Line in the Green Square area
- New and improved bus or light rail connectivity/priority along Parramatta Road; investigate light rail
- Expansion of growing light rail network
- Light rail network for Parramatta City

The specific focus of a revised approach to WestConnex would ideally be based on the following principles:

- Creating healthy built environments by encouraging people to walk, cycle and recreate more and use active transport.
- Improving equity – pursuing an outcome that does not destroy one persons' amenity to improve someone else's amenity – that is not equitable.
- Actually committing to helping people to manage the changes (in their lives), rather than leaving it at suggestions (this help should be thought out and planned for implementation with the start of any project).

The submission has been organised to correspond to the chapter sequence within the EIS. Where a chapter is not addressed the submission has not made any comments concerning that issue.

Chapter 4 - Project development and alternatives

Strategic alternatives to WestConnex and the M4 East are outlined in this chapter. Options analysis using rigorous consultation and assessment is the best known means to determine a strategy to manage the traffic capacity and demand under baseline and projected conditions. This has not been undertaken and should have been prior to the EIS.

The assessment of alternatives in the EIS is based on qualitative alternatives. No comparison has been made using rigorous assessment to demonstrate the performance of these alternatives in quantitative forms.

The strategic alternatives that are presented are piecemeal strategies and no hybrid alternatives were considered and analysed (i.e. combination of private and public transport, such as road and rail infrastructure).

In contrast, the WestConnex strategy was presented considering the entire scheme (i.e. works to be undertaken in Stages 1, 2 and 3). This suggests that the best option has been predetermined with Chapter 4 and its interpretation designed to convey the WestConnex as the best proposition.

Strategic alternatives should have been presented using consistent criteria and analysis. Therefore, the process for assessing alternatives to the Project is fundamentally flawed, given that the objectives against which any alternative is assessed are the WestConnex Project objectives rather than overarching objectives focussed on resolving Sydney's current transport issues; *"Alternatives to the Project were considered based on the extent to which they could meet the Project objectives".* As a result, none of the alternatives considered could ever as closely match the Project objectives as the Project itself; *"there are no feasible strategic transport alternatives that would meet needs for travel in this corridor and address project objectives as effectively as WestConnex".*

Further to the above, it is noted that the original objective was to provide enhanced access between the growing areas of the west and the Port Botany/Sydney Airport precinct, but at present

(without the Sydney Gateway element, which is not currently within the project scope and only briefly mentioned in the EIS) WestConnex provides direct access to neither the Port nor the Airport. Furthermore, where assumptions are made regarding potential improved travel times to the Airport/Port, these are completely dependent upon the completion of Stage 3 and Sydney Gateway and there is currently no firm commitment to any such construction taking place.

The EIS, in order to assert its claim that the Project is the best way forward, suggests that key customer markets have been identified (for this project) as being highly dispersed and long distance passenger movements – this is:

a) Contradictory to the NSW Transport Master Plan[1] for this corridor; the TMP identifies Parramatta to CBD as a strategic corridor. Funnelling vehicles through the M4 & M4 East will result in traffic congestion occurring closer to the CBD and also greater demand for car parking in the CBD. Dense urban centres do not physically have the space for continuous growth in the numbers of vehicles entering.
b) Incongruous with the Initial Need for the Project as set out in 3-11 of the EIS[2] - This states that the overarching key driver for this Project is the growth Sydney is expected to see in the coming decades. Specifically, employment growth is expected to be predominantly in the eastern half of Sydney (Global Economic Corridor) whilst population growth is expected to be stronger in the west. This will increase the demand for travel between population in the west and employment opportunities in the east. Growth is also expected in other centres along the corridor between these two growth zones, such as Lidcombe, Burwood and Olympic Park. Therefore, a mass transit system would be the most appropriate way to address the main objective of the project. Similarly, the secondary driver for the project in this (regional) context, namely the demand for freight movement, between the airport and port to the west would be better accommodated by improved freight corridors instead of a road network that will be congested with commuter traffic into the CBD.

As noted previously, little detailed investigation has actually taken place within the EIS concerning the alternatives to the project – the EIS contains no description of any public transport alternatives that could be considered, only dismissive remarks that public transport cannot address the objectives set for this Project (objectives with a pre-determined focus, as per above); alternative road projects that are considered are rather insignificant in the context of the Project itself.

In addition, no consideration in the EIS has been given to the possibility of implementing numerous alternatives simultaneously – all are considered in isolation, which is highly unlikely to happen in reality, particularly given that several of the alternatives are stated as being complementary to other, larger projects

Furthermore, much of the justification for the dismissal of considered alternatives is unsound, apparently in the interests of ensuring WestConnex is presented as the only viable option:

- Unreliable buses – increasing unreliability along Parramatta Road is most likely due to pinch points in the bus lanes (having to merge with traffic), a lack of bus priority at intersections/other locations and poor enforcement of bus lane use by other vehicles; factors that could be addressed through enhanced bus priority measures

[1] whilst the EIS states that the TMP includes WestConnex as a leading project that should be tackled as a priority, it fails to acknowledge other priorities within the Master Plan such as that it will *"manage congestion on roads by encouraging the use of public transport"*; the EIS picks and chooses elements in the Master Plan where it is convenient.

[2] P78 of EIS: Workforce and employment forecasts between 2011 and 2031 indicate that employment will remain higher in eastern Sydney than in the west. This increase in population in Sydney's west (without a similar rate of jobs growth) will significantly increase travel demand towards the east (where the majority of jobs will exist) on an already constrained transport network, particularly along the M4 and Parramatta Road corridor. This corridor is the main east west corridor providing access between Sydney's west, and particularly the major economic precinct of Parramatta, and the Sydney CBD.

P92 of EIS: Public transport options such as rail, light rail or bus would be feasible potential alternatives if the project, as part of WestConnex, was primarily concerned with transporting people to and from centres.

- Improvements to Victoria Street and Queens Street, amongst others, are stated as being in conflict with the Project objective of enhancing north/south movement across Parramatta Road – however the significant expansion of Parramatta Road planned around Ashfield Park/Wattle Street will substantially exacerbate the situation yet is considered to be acceptable.

Given the actual focus and objectives of the Project, outlined in 3-11 of the EIS (and in the Transport Master Plan), as above, consideration should now be given to real alternatives that focus on the achieving these regional goals – i.e. demand for access between the western population growth centres and GEC employment growth, plus the demand for freight movement to the west from the port/airport:

- Expansion of the new Metro:
  - from Bankstown to Parramatta and Epping/Macquarie Park
  - from Parramatta to CBD via Ryde/Drummoyne and/or Strathfield/Olympic Park
  - from Strathfield/Burwood north to Macquarie Park and southeast to Green Square/Airport and Randwick/Bondi Junction
- New road connection from Port Botany to M5 to enable better dispersal of freight from port; upgrade A3/A6 for freight heading north
- Increased services along Western Rail Line
- Improved connections to stations along Airport/Revesby line including park and ride options at major stations; increase frequency of services along this line
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- New and improved bus or light rail connectivity/priority along Parramatta Road; investigate light rail
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Metro expansion would meet all of the benefits that WestConnex promotes, specifically it will bring time savings from Parramatta to the airport, bypassing 52 sets of traffic lights, halving of travel times from Burwood to the CBD, more reliable trips for those that do need to drive, more time with family, job creation etc.

The traffic and transport review of the proposal undertaken by SGS Economics and Planning (refer commentary on Chapter 8) also notes that no real analysis on assessment of alternatives to the M4 East has been undertaken in the EIS. In particular the report notes that a demand management options assessment would be expected for a project such as the M4 East.

Chapter 8 - Traffic and transport

Sydney City, Marrickville and Leichhardt Councils collaborated concerning the evaluation of the traffic and transport sections of the EIS. SGS Economics and Planning and Veitch Lister Consulting were engaged to review this section and the socioeconomic sections of the EIS.

A copy of the review is **ATTACHMENT A** to this submission.

The review has highlighted a number of issues, several of which demonstrate that the EIS is flawed and the project as currently proposed should not proceed, as follows:

- The M4 East EIS mentions alternatives to the M4 East (public transport and freight rail improvements and demand management policies) but provides no information on the outcomes of these alternatives. It is merely stated that the M4 East is the best solution to the challenges facing the corridor.
- The M4 East EIS has assumed that all sections of WestConnex (with the possible exception of the Western Harbour Tunnel) are completed by 2031. Given the scale of building required and early stages of planning of many sections of WestConnex this creates project risks. If all sections are not completed simultaneously the traffic flowing from the M4 East will have adverse impacts on the inner west and central Sydney. The M4 East EIS has

not addressed the risks in terms of the traffic and socioeconomic impact of the whole project.

- The M4 East is only evaluated post 2021 in combination with other WestConnex sections. There are risks that the M4 East will generate additional traffic that will only be addressed by other sections of WestConnex.
- The M4 East EIS itself acknowledges that the forecasted peak traffic patterns appear to be counter intuitive – westbound in the morning peak and eastbound in the afternoon peak. When compared to recent traffic trends in Sydney this outcome is hard to comprehend. The EIS explanation of this outcome is contrived and complicated and a more likely explanation is a miscalculation in the transport modelling.
- The origin and destination of the users of the M4 East is not explained in any detail within the M4 East EIS. Without this it is difficult to understand the impacts on the broad road network in eastern or western Sydney.
- The M4 East EIS does not explain how toll levels and people's perception of tolls changes into the future. Given the impacts this can have on existing surface roads and the recent toll road failures in Sydney this appears a significant omission.
- Assumptions around the location, supply and cost of car parking (a key component of travel cost to eastern Sydney) is not explained by the M4 East EIS.
- The M4 East EIS documents make no reference to sensitivity tests, nor does the EIS list any results. It should be expected that in a project of this significance, the sensitivity of the model to various assumptions would be tested and potential alternative outcomes be tested in some detail. In particular, the sensitivities to the impacts on the road network of differing toll levels and land use changes along Parramatta Road would be significant.
- The transport model used by the M4 East EIS does not include public transport assignment or even public transport demand forecasting. The M4 East EIS provides no information about the impact on public transport demand, including whether tolls would induce some people to switch to public transport. Due to the lack of a mode split process in the transport modelling, the competing disbenefits of traffic congestion and rail crowding have not been tested for the EIS.
- The M4 East EIS inclusion of bus lanes along Parramatta Road, which are not part of the project (or Westconnex), does reduce road space and traffic flows assuming that traffic does in fact divert into the M4 East tunnel. Based on public information, when these bus lanes will be delivered is unclear.
- The implications of increased bus traffic along Parramatta Road into the Sydney city centre are not addressed by the M4 East EIS. How the central city road network will deal with increased bus traffic is unknown.
- The M4 East EIS avoided car crash benefit has been based on total daily vehicle kilometres travelled and average crash severity. However, crashes in the off-peak periods are likely to be much more severe (and therefore more costly) because of higher possible speeds. If more crashes along the corridor occur in peak period then the car crash benefit could be overstated.
- The absence of a long term modelling (for example 2041) from the M4 East EIS means that any longer term traffic or socioeconomic impacts are not being identified, mitigated or monitored.
- The information contained in the EIS does not reduce any of the concerns around the adverse impacts previously raised in the Strategic Review and Transport Modelling of WestConnex prepared by SGS Economics & Planning and Veitch Lister Consulting. That is, WestConnex will not address the transport challenges being faced by Sydney in the future.

The following supplementary information is primarily concerned with the local impacts of the project and has been prepared by Council's traffic and transport officers:

> There should be more detail provided on the 2021 scenario in relation to the 'just the M4' East project and its impacts on the surrounding road networks in the inner west. It is indicated that Parramatta Road within the Marrickville LGA will experience around a 36% increase in traffic in some of the cases with flow on effects to intersections such as Crystal Street and West Street.

In the 2031 Scenario 'do something' (which includes the M4-M5 link) traffic volumes along Parramatta Road towards the city end are still high and Crystal Street still has a level of service F. The EIS itself recommends further investigation in relation to the Parramatta Road/Crystal Street intersection; however it states that it is outside the scope of the project.

In this regard, the EIS is not very detailed in relation to impacts from other components of the project such as the M5 extension/expansion and M4-M5 link and this shortcoming hides further impacts that would be experienced through the Marrickville LGA (i.e. M4 and M5 extensions without the M4-M5 link). Even with the 2031 case 'do something' which includes all the Westconnex stages, there is still little detail on the impact on the roads south of Parramatta Road.

This would be addressed through an over-arching EIS for the entire Westconnex project, i.e. Stages 1, 2, 3, the Southern Gateway and The Sydney Gateway; possibly also the Northern and Southern extensions. However, if Stage 3 is not to be built, a good proportion of the traffic that currently peels of the existing M4 at Centenary Drive and Silverwater Road heading towards Port Botany and Sydney Airport is likely to continue on from Haberfield and filter through the Marrickville LGA via Frederick Street, Ashfield, Old Canterbury Road and West Street, Lewisham, Crystal Street and Bridge Road. This will increase congestion on traffic routes in Marrickville LGA with the potential of increased 'rat runs' in residential streets.

In the absence of a LATM study that considers the impacts of through traffic on residential streets, it is assumed that such impacts of stage 1 (M4 East) will be considerable. Figure 2.1 on page 135 of Volume 2A refers to *"Stub tunnels for possible future M4-M5 Link"*. This implies there is a possibility Stage 3 may not go ahead. If that is the case then the Marrickville LGA will be subjected to additional surface traffic. Addressing those impacts through intersection improvements involving acquisition of additional properties and disruptive construction work will not be a palatable solution for the local community.

The EIS must identify the likely impacts of induced traffic on residential streets in the LGA, by means of an appropriate local area traffic management study, and mitigate those impacts by LATM works. The study should include post implementation reviews to identify and address any unforeseen impacts.

Chapter 9 – Air Quality

This chapter addresses several matters relating to the possible effects on human health of the proposed M4 East. The most significant likely impact concerns air quality impacts. To evaluate the impacts and mitigation measures proposed in the EIS Marrickville and Leichhardt Councils jointly engaged an independent peer review of this issue by environmental consultant's Air Noise Environment P/L.

A copy of the review is **ATTACHMENT B** to this submission. The overall conclusion of the assessment is that:

> *The Air Quality Assessment predicts compliance with the air quality goals for the majority of pollutants. The short term predicted non-compliances are related principally to road traffic emissions, and these impacts are also present for the existing environment. Overall reductions in pollutant impacts are predicted for the majority of receptors.*
>
> *Providing the issues identified in this review are addressed, and the conclusions of the Air Quality Assessment do not change significantly as a result, it is concluded that the local and regional air quality as a result of the Westconnex M4 East project is not likely to be detrimentally affected to a significant degree.*

There are issues that have been identified that require further analysis however and include:

- The 'worst case' assessment presented in the Air Quality Assessment does not consider the maximum emission rates (in g/s), hence the worst case scenario is not in fact considered. Furthermore, a peak congested scenario has not been considered in the air quality assessment. It is considered that these scenarios should be modelled/remodelled.
- Computational fluid dynamics of the interaction of the two ventilation outlets needs to be completed to accurately assess the dispersion of pollutants from the two ventilation outlets.
- Confirmation should be sought from NSW EPA to confirm that the GRAM/GRAL modelling methodology is acceptable.

Additional specific issues that have been identified in the review, and warrant further consideration, are as follows:

- Completion of a quantitative construction air quality assessment, focussing on the risk of particulate impacts and including the potential for release of crystalline silica;
- low efflux velocity for ventilation outlets at night, with potential for stack tip and building downwash issues to be enhanced;
- necessity of incorporating portal emission monitoring if a condition requiring no portal emissions is imposed;
- provision of dampers in the western ventilation outlet to allow for varying outlet diameters.

Chapter 11 – Human Health

The health report focuses on noise/vibration and air quality (discussed above) and suggests mitigation measures. According to the assessment, provided these mitigation measures are taken (and there is no indication they will be) there should be compliance with required standards. Noise/vibration and air quality are covered in dedicated assessments and the health impact assessment is a rehash of those technical assessments.

The health impact assessment should go beyond technical compliance and investigate the impact on people's lives and healthy living. For example the health impact assessment should investigate whether outcomes such as an increase in traffic in local streets, interruption to local pedestrian and bike access, relocation of social infrastructure and increased congestion at the on/off ramps will encourage people in the vicinity of the proposal, and in the wider community, to live healthier lives (by becoming more active) or live less healthier lives (by becoming less active).

By not directly consulting with the people and communities that will be affected (such as cyclists, walkers and joggers, people whose social and support networks could be disrupted, people who recreate in the area) the full health impacts of the proposal have not been explored and the suggested mitigation measures are entirely inadequate. The health impact assessment should be reviewed to include a comprehensive assessment of the health impacts, in consultation with affected people and communities, to identify positive impacts and better mitigation measures for negative impacts.

Chapter 13 - Urban design and visual amenity comments

Section 5.2.2 of the EIS addresses the urban design principles that have guided the design of the project. It considers design features of the interchanges and other surface infrastructure, landscape treatments and the exploration of opportunities to integrate the surface infrastructure elements with the surrounding features of the area. This relates to design of the portals, interchanges and surface infrastructure taking into consideration their visibility and landscape to ensure an appropriate design response that is congruous with the existing M4 and the local road network.

The urban design principles and objectives that have been developed for the WestConnex scheme in the Draft WestConnex Motorway Urban Design Framework are:

- *Objective 1: Leading edge environmental responsiveness – Planning, design, construction and long term management shall be based upon a natural systems approach which is responsive to the environment and promotes the highest levels of sustainability*

- *Objective 2: Connectivity and legibility – Build connectivity across the city, beyond the boundaries of the motorway corridor and promote increased legibility of places, buildings, streets and landmarks*
- *Objective 3: Place-making – Create beautiful places, streets, structures and landscapes that draw their form, character and materiality from local context, the intrinsic natural and cultural qualities of each locale*
- *Objective 4: Urban renewal and liveability – Enable opportunities for urban renewal and provide high levels of urban amenity and liveability*
- *Objective 5: Memorable identity and a safe, enjoyable experience – Provide a memorable project identity and experiences for road users and adjacent stakeholders which are safe, convenient and enjoyable*
- *Objective 6: A new quality benchmark – Provide design and construction quality of world class standard. WestConnex shall establish a new benchmark for integrated sustainability, engineering, art, architecture and urban design.*

These objectives provide a good basis for the project design and basis for evaluation of the proposal as outlined in the EIS.

Section 13 of the EIS provides an assessment of the urban design, landscape character and visual amenity associated with the project. A detailed urban design and visual impact assessment has been undertaken for the project, which is included in Appendix L of the EIS. The evaluation and list of proposed measures to achieve the objectives is rigorous, addressing many aspects to meet the above objectives and mitigate impacts. Table 13.1 provides a summary of the assessment of the key urban design aspects and elements of the project, which adequately addresses matters that need to be achieved at the design stage. Table 13.12 outlines environmental management measures relating to landscape character and visual amenity. While these give a good framework to achieve objective 6, it only states that these measures *"would be considered during detailed design and implemented where feasible and reasonable"*. Many of the specific measures are only being suggested as matters for further consideration, such as *"Consider having the detailed design regularly reviewed by an independent design and sustainability review panel to ensure design quality throughout each stage of works, in accordance with the WUDF Principle 6.6."* This substantially weakens the commitment required by WestConnex to achieve a new quality benchmark of world class standard. If world class standard quality is to be achieved these must be required to be committed to by the WestConnex Delivery Authority.

Whilst section 13 and Appendix L address urban design objectives relating to the motorway itself, there are some specific deficiencies relating to the broader context. It is noted that these are not within the Marrickville LGA. However, given Council's involvement with the related Parramatta Road Urban Transformation Strategy and detailed knowledge of the impacts that the M4 East will have on this project it is appropriate that this submission comment on these impacts.

The most significant impact from the proposal is the Powells Creek M4 on-ramp, which has been located at the centre of the place that is earmarked for major urban amenity transformation in the Homebush Precinct under the Parramatta Road Urban Transformation Strategy. The location is where a major green corridor linkage (Powells Creek open space) and an urban corridor linkage (George Street), across Parramatta Road is to be delivered. Also, this stretch of Parramatta Road is planned to be transformed with active building frontages, enhanced public domain and be the location for a strategic bus stop. This is a completely unsuitable location for the on-ramp, which will result in the road infrastructure and traffic having a major impact on the urban design amenity of the area and create a major conflict with proposed active and public transport, which must be prioritised for this area. It shows a lack of integration between these two major transformations and does not achieve the above objectives nor specific Director-General's Requirements *"consideration of the WestConnex Urban Revitalisation Project"*. This is an unacceptable option for getting westbound traffic onto the motorway that will be to the detriment of this urban transformation and should be abandoned or be relocated.

The project does not adequately address Objective 2 above. Specific matters relating to pedestrian and cycling transport required to be addressed in the Director-General's Requirements are:

- *details of how the following matters meet the traffic and transport objectives of the project, taking into account adjacent sensitive land uses, future growth areas, approved and proposed infrastructure projects, and traffic (vehicular, cyclist and pedestrian) needs;*
- *the preferred alignment and design;*
- *the proposed interchanges and connections to the surrounding road network, andassociated road infrastructure facilities;*
- *impacts on cyclists and pedestrian access and safety and consideration of opportunities to integrate cycleway and pedestrian elements with surrounding networks;*
- *identification of opportunities to utilise surplus or residual land, and utilise key structures (such as stacks) for multiple uses i.e. integration with other structures; and*
- *identification of measures to create, promote and enhance connectivity across Parramatta Road, where impacts to connectivity are associated with the project.*

A pedestrian and cycling report has not been included in the EIS. This would reasonably be expected to be prepared to enable evaluation of strategic opportunities for providing cycleway and pedestrian transportation to create connectivity and integration of the surrounding communities. This is of critical importance in an area that is divided by major roads, rail lines, motorways and stormwater canals. The EIS outlines that only a one-way eastbound cycleway to the north of the M4 and an on-ramp from Queen Street at North Strathfield will be provided. This would only cater for a minority of cyclists who would be comfortable riding on the motorway. Assessing the western part of the project, there is a major opportunity as part of such a substantial piece of infrastructure. For example a regional standard two-way pedestrian and cycling pathway adjacent to but separated from the M4 motorway (where necessary attached to/under the M4 motorway viaduct structures) all the way from Sydney Olympic Park to the Concord Road. This would allow linkage into existing region routes in the west and proposed regional routes to the east along Patterson St/Gibbs St/Queens Road (being delivered as part of the Urban Amenity Improvements under the Parramatta Road Urban Transformation Strategy). This would include bridging over the Northern Railway line that is currently a major barrier, using the M4 motorway viaduct structure. There is also opportunity to provide linkages down to the Powells Creek green corridor; down to Queen St (as proposed); and around the east of the Concord Road Interchange to Patterson St.

In terms of creating improved connectivity across Parramatta Road, there is opportunity to provide:

- a link via the east of the Concord Road Interchange to Ada Street, Franklyn Street and an improved level crossing over Parramatta Rd to Mosely Street (allowing link to Strathfield Station);
- a link over the disused rail bridge over Parramatta Road on the eastern side of the Northern Rail line (as identified in the Homebush Access and Movement Plan in the Parramatta Road Urban Transformation Strategy); and
- a link where the Powells Creek green corridor meets Parramatta Road, via an improved level crossing, and also given its strategic corridor status and the space available with park either side of Parramatta Road, provision of a pedestrian/cycle bridge over Parramatta Road, linking up to the regional western pedestrian and cycling pathway attached to M4 motorway viaduct structure (as above).

A clear integrated strategic plan needs to be established for this crucial urban transformation project achieving all the objectives, coordinated between all stakeholders (e.g. WestConnex, Roads and Maritime Services, Urban Growth NSW, Department of Planning, surrounding Councils and local community).

Chapter 14 – Social and Economic

Economic assessment

The economic impact assessment is rudimentary and too focussed on micro level considerations. Given the scale of the investment in the proposal a focus on macro level productivity and GDP is considered the appropriate focus of the economic impact assessment. Impacts on local businesses and the people they service are more appropriately considered in the social impact assessment.

The ongoing benefit is worked out simplistically using multipliers that are based on assumptions and, therefore, fraught with potential errors. It is not unreasonable to expect sophisticated econometric modelling to be undertaken for such a major project, with comprehensive cost/benefit analysis and a business case that clearly demonstrated justification for the project.

Notwithstanding, the long term financial contribution to the economy of $39 million per annum appears a paltry result in relation to the cost of the project, and is minuscule in comparison to the GDP of the Sydney Region and NSW. Similarly, the 110 potential ongoing jobs is paltry in relation to employment and unemployment in Sydney and NSW.

The boost to the economy during the construction period, touted as one of the major benefits of the proposal, will be short lived and there is no comparison with options that could have created longer term benefits to economic activity and productivity. Further, the drain on productivity from congestion and delays for commuters is generally accepted among economists. However, the economic impact assessment focuses on benefits for freight and, therefore, is not comprehensive.

By not focussing on the true economic benefits of the proposal the full economic impacts of the proposal have not been explored and the suggested mitigation measures are entirely simplistic, ill-conceived and inadequate, and benefits that might provide justification for the proposal have not been identified.

The economic impact assessment should be reviewed to include a comprehensive assessment of the impacts, and incorporating modelling, cost/benefit analysis, inclusion of opportunity costs and business case. These assessments will provide clarity and transparency. In the economic impact assessment that has been provided justification for the proposal is not apparent.

Social assessment

The social impact assessment satisfies some of the parameters for a social impact assessment but to no purpose (such as the community profile – it is there for some of the affected population groups but then not related to any of the (minimal) assessment).

All of the considerations within the assessment overlap with other documents dedicated to a singular topic and most are the usual planning impacts assessed in any planning assessment. The social impact assessment misses the fundamental aim of a social impact assessment, which is to:

> *Measure and manage social change processes invoked by the intervention (the proposal) with the aim of bringing about a more equitable and sustainable social/physical environment.*

The focus should be on how this project will cause change in people's lives and should be on change for the better such as:

- Creating healthy built environments by encouraging people to walk, cycle and recreate more and use active transport (nothing in the report on healthy environments or living healthy lives).
- Improving equity - this project destroys one persons' amenity to improve someone else's amenity – that is not equitable. The impacts are likely to force those who can afford it to move and the area will be populated with lower income households and more vulnerable people who put up with the impacts (because they have to) and will suffer the consequences.
- Actually committing to helping people to manage the changes (in their lives) that will be caused by the project, rather than leaving it at suggestions (this help should be thought out and planned for implementation with the start of the project – which was long ago).

Other fundamental failings in the report:

- No scoping of the population groups who will potentially be affected – apart from the people whose land will be acquired (referred to as properties rather than people in the report) and a few social infrastructure (the people who use the social infrastructure are not mentioned,)

- No direct consultation with the people and population groups who will be directly affected (had they been appropriately identified) – would have been useful to ask them what they needed to manage the impacts on their lives
- Assessment of construction impacts – given these are normally temporary they are not expected to result in permanent changes to a persons' life and are not a normal part of social impact assessment unless there will be on going impacts on people's lives from the construction period. Construction impacts should be, and usually are, addressed by conditions of consent, and don't include measures that "manage social change processes"
- Assesses operational impacts (with focus on what are usual planning considerations) but does not assess how people's lives will be change by the project.

The main mitigation measures identified in the report are:

- Pay for independent land valuations (required by just terms legislation)
- Provide relocation support services (no commitment to doing this)
- Compensation and assistance being negotiated to find alternate locations for affected social infrastructure (what if alternate locations can't be found)
- Open space to be leased without alternatives – interruption to service may impact on people's lives.

By not directly consulting with the people and communities that will be affected (such as those who use the streets, parks, bus stops, social infrastructure and social networks/support) the full social impacts have not been explored and the suggested mitigation measures are entirely inadequate. The social impact assessment should be reviewed to include a comprehensive assessment of the social impacts, in consultation with affected people and communities, to identify positive impacts and better mitigation measures for negative impacts.

Chapter 16 - Contamination

The investigation undertaken and outlined with respect to contamination could only be considered a Preliminary Site Investigation as per the Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA 2011). The scale of the proposal, lack of information about past activities, and known presence of contamination and contaminating processes over the entire project site warrant a Detailed Site Investigation prior to approval, and not deferred to a later stage.

Inadequate sampling for contamination

In some site areas there has been inadequate or no sampling undertaken. This is problematic as the area is known to have a long history of contamination and contaminating practices. The risk with inadequate sampling is that contamination may go undetected or the extent of contamination will be unknown. This is also an identified limitation of the EIS. In addition, the results have been used to justify classifying the vast majority of the spoil as VENM. Incorrectly classified spoil poses a risk to site workers, neighbouring residents, businesses and those at receiving landfill sites.

Despite the 'low risk' of contamination in residential areas, these areas pose a risk for high lead concentrations and the presence of asbestos and petrochemicals. Accordingly, any residential property proposed for acquisition for this project should have detailed contamination assessments prior to project approval.

A Detailed Site Investigation is required due to the limitations posed by few (or no) samples taken in most project areas. The results of this should inform areas for remediation or waste classification if required. This should not be deferred to later stages. Given this project is of a significant scale, the EIS should confidently provide an understanding of location and extent of contamination that can only be obtained by a Detailed Site Investigation that includes adequate sampling.

Failure to do this may result in incorrectly classifying waste or not remediating contaminated sites. This poses a risk to site workers, other users, neighbours and the environment.

Insufficient Laboratory Testing

The field testing for acid sulfate soils (PASS) showed evidence of further samples potentially being characterised as ASS according to the methodology described in section 3-5. It is recommended that more samples are tested for SPOCAS and Chromium Reducible Sulphur in the laboratory environment. In addition to this, Envirolab reports revealed exceeding levels of acceptable relative per cent difference (RPD) in some duplicate samples. Such results were deemed acceptable due to the non-homogenous nature of the samples. Such interpretation of results fail the quality control of the laboratory testing provided, as they do not represent accurate 'data representativeness' and 'completeness' of the measurements.

Dangerous Interpretation of Results

In most sites, varying levels of contaminants have been revealed, including heavy metals, petrochemicals and asbestos. In many samples, results that have exceeded guidelines have been ignored due to assumed 'background contamination'. While background contamination may be a factor for Sydney, it doesn't discount the human health and environmental implications for disturbing contaminated soil. When contaminated soils are disturbed they pose an environmental and human health, regardless of the source of contamination.

In just one example is the interpretation of the *in situ* waste classification for sample BH1353 (0.5 metres) where exceeding concentrations of benzo(a)pyrene were found. The interpretation of the EPA waste classification guidelines in Section 4-49 require further explanation.

In instances where contamination exceeds guidelines, appropriate remediation or waste classification should be undertaken as per the NSW EPA requirements. These should not be discounted with the assumption of background contamination.

Failure to correctly manage contamination poses significant risks to human and environmental health.

No plan to manage Acid Sulphate Soil (ASS)

The NSW EPA explicitly requires the EIS to provide an Acid Sulphate Management Plan. This has been deferred to 'prior to construction'. The detail provided is inadequate.

EIS identified potential for ASS at several locations with a low risk as a result of testing. Regardless of this, the ASS Management Plan should be included in this EIS.

A detailed ASS Management Plan should be prepared prior to project approval as per the EPA requirement.

An Acid Sulphate event resulting from this project may have significant ecological and economic impacts for communities in the Sydney Harbour catchment. This is the reason for the requirement to produce an ASS Management Plan for the EIS.

Limited Waste Classification produced

More detail is required to determine an appropriate waste classification and this is identified in the EIS as a limitation of the investigation. As previously mentioned, a Detailed Site Investigation is required to adequately determine a waste classification that is reliable. Significant human and environmental health implications may result from inadequately classified waste.

No management plans produced

Despite the limitations of the EIS and identified hazardous contamination, there have been no plans of management produced for environmental and human health. These are only suggested. This is an EPA requirement. More detail is required on how contamination risks will be managed instead of being deferred.

Significant risks have been identified, yet it is unclear if or how these will be managed.

Chapter 18 - Groundwater

Alteration to groundwater flow paths and tables are anticipated following construction of tunnels (5.5km long). The impact on the existing health of large trees which are dependent of groundwater has not been adequately considered. There may also be impact on groundwater dependent ecosystems in future when some of the existing lined channels are rehabilitated into natural sections.

Use of treated water

Seepage from the tunnels will be treated at a facility at Cintra Park, Concord and will be disposed of to the downstream creek. The treatment process should be adequate to allow reuse e.g. used for watering sporting facilities within Cintra Park and to meet the water demands of the transport infrastructure (i.e. the M4E).

Water quality

Drainage water from the proposed interchanges of the M4E will be collected and disposed of directly to the nearby creeks and channels. The EIS should have included options to treat the road runoff using bio-filter (or some treatment measures) prior to the discharge, in order to improve water quality.

Damage to riparian corridors

The existing riparian corridors of some creeks crossing the new works are likely to be damaged. These adverse impacts should be addressed (and/or mitigated) through the development of offset schemes for biodiversity corridors within these catchments.

Chapter 20 - Biodiversity

There are significant gaps and inadequacies in the methodology used and assessment of biodiversity impacts.

There was no consultation with local government regarding local biodiversity strategies or plans they or other landholders have adopted (e.g. Sydney Olympic Park).

Relevant historical biodiversity data held by local government, which is necessary to complete an effective and comprehensive assessment, was not considered.

Poor survey effort is demonstrated throughout the report and assumptions about local biodiversity have been made with little data to back them up.

There is a demonstrated lack of understanding of the importance of urban biodiversity throughout the report.

Cumulative impacts to all fauna, including Threatened Species, have been inadequately considered. A significant quantity (15.9 ha) of vegetation will be removed, including 12.9 ha of treed lands. The biodiversity impacts of this have not been adequately considered in either within this component or within the whole WestConnex project.

Removed trees should be reused in revegetation works to create habitat/bank stabilisation. This is not addressed in the EIS.

Chapter 21 - Greenhouse gas

EIS should address and minimise Scope 3 (indirect) emissions through sustainable supply chain management, including purchase of low carbon materials, emissions targets for contractors and enforced by competent contract management.

The comparison of operational road use emissions with the project should be extended to include other transport options such as those outlined in Chapter 4.2. This would provide a greater context of comparison.

Commentary should be included on the comparison of car versus public transport emissions and how the NSW Long Term Transport Master Plan objective to grow the proportion of travel by sustainable modes such as public transport as noted in the policy setting section (21.2.1) is being adhered to.

Figure 21.2 should be verified each year in the Annual Sustainability report as this project may encourage more people to drive instead of using alternative modes of transport.

Chapter 23 - Resource use and waste minimisation

The project will generate 2.4 million cubic metres of spoil. The EIS assumes that the majority of excavated spoil material would be uncontaminated crushed sandstone and shale, classified as virgin excavated natural material (VENM). This would generally consist of mixed size crushed rock, ranging from shale and sand to lumps of rock. This is assumption is of major concern. (See further detail under *contamination*).

There is no detail about the management of asbestos and disposal sites. No assessment of volumes has been undertaken to determine if there is sufficient capacity at accepting facilities.

Heavy metals, hazardous materials including lead and asbestos may be in materials and soils. The EIS should include criteria for what will be tested and when (e.g. residential and commercial areas, historic landfill sites), as well as how this will be done.

The method of demolition of homes should have been addressed and is not. Deconstruction is the best option to maximise material recovery and minimise the potential impacts of asbestos and toxic materials.

Absence of a Spoil Management Plan

There will be 12,000 cubic metres of spoil with the rest of the material identified as fill (e.g. landscaping, barrier mounds, land reclamation, capping) and land restoration (e.g. filling of disused mines and quarries). The EIS states that a formal spoil management plan will be developed and documented for the project before tunnelling works begin. It should be stated who will review the spoil management plan.

A Spoil Management Plan should be developed in consultation with Councils and the community, and approval for the plan received prior to project approval.

Construction resource use

Huge volumes of materials are involved. The EIS suggests a weighting for local supply and sustainability outcomes (including recycled content over raw materials) in tendering for resources. These should be required as part of the project.

Chapter 24 - Climate change risk and adaptation

THE EIS does not adequately address the impact of the project on future climate change. This project should not be viewed in isolation but considered in reference to Australia's commitment to emissions reduction and Ecologically Sustainable Development as outlined in the *Protection of the Environment Administration Act 1991* (NSW) and the *Environment Protection and Biodiversity Conservation Act 1999.*

It is unclear how the adaptation options outlined in this chapter will be addressed in the detailed design.

Chapter 27 - Sustainability

The objectives of the WestConnex Sustainability Vision are supported. To achieve these:

Table 27.2 should specify what reporting standard the annual sustainability report will use.
Table 27.2 should use stronger language to ensure objectives are met. For example, contractors "must" (not "would") implement actions in accordance with sustainability targets.

Conclusion

Marrickville Council is opposed to the WestConnex project on the basis that it is a poor solution to Sydney's transport problems. Based on the evaluation within this submission, the current M4 East project (as a component of the broader WestConnex proposal), has not been adequately assessed particularly with regard to viable alternatives. Similarly, a satisfactory business case for such a significant level of public expenditure has not been made. Many of the proposed mitigation and management measures proposed within the EIS have also been shown to be unsuitable or inadequately justified for the project.