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11 May 2017

Attention: Angus Morten

Dear Angus

Western Sydney Stadium (WSS) - Stage 2 DA - Comments on the Environmental Impact Statement (EIS)

This letter acknowledges comments issued by various stakeholders on the Western Sydney Stadium (WSS) – Stage 2 Development Applications (DA) – Transport Impact Assessment (TIA) as part of the Post Exhibition period for the WSS (Stage 2 Design and Construction), Parramatta (SSD 8175) – Comments on Environmental Impact Statement (EIS).

Specific comments and recommendations on the TIA report were received from the following stakeholders:

- Department of Planning and Environment (DPE) – Director, Social and Other Infrastructure Assessments.
- Joint response from Transport for New South Wales (TfNSW) and Roads and Maritime Services (RMS) - A/Executive Director, Transport Strategy, Freight Strategy and Planning.
- City of Parramatta Council (PCC) – Director Strategic Outcomes and Development.

The comments from each of stakeholders regarding specific queries in regard to the TIA will addressed in the following sections.

Joint Response from TfNSW and RMS

1. **Comment Location:** Event Management and Emergency Response/Evacuation, Page 2¹.

Comment: It is requested that the applicant undertake the following: A detailed crowd modelling for the public domain area for pre-game and post-game peaks.

Response: Pedestrian modelling using Legion software is being undertaken and will feed into the development of the final Event Management Plan (EMP). This pedestrian modelling builds on the pedestrian demand identified and discussed in Section 4 and 5.3 of the TIA.

2. **Comment Location:** Event Management and Emergency Response/Evacuation, Page 2.

Comment: It is requested that the applicant undertake the following: Preparation of a draft Event Management Plan and a draft emergency response and evacuation plan in consultation with TfNSW,

¹ Note, page references relate to stakeholder report locations and pages.

Road and Maritime Services and City and Parramatta. The draft Event Management Plan needs to include:

- Infrastructure required to support bus operations within the proposed Stadium precinct, including stop locations, and kerb side space, to be undertaken in consultation with TfNSW and Roads and Maritime Services.
- The draft Event Management Plan needs to be prepared with the preferred option that no road closures (especially O'Connell Street) are permitted and no event related vehicles are permitted and no event related vehicles are permitted to use O'Connell Street for parking and pick up/drop off activities.
- Estimation of expected service volumes on the light rail assessment and assessment of impacts on system performance.
- Details of the following;
 - ◆ Bus routes impacted and level of special event buses that would be required, and the level of reliability and service;
 - ◆ Pick up and drop off locations for point to point transport including taxis and rise share services within the proposed Stadium precinct.
 - ◆ Pedestrian management and controls along key pedestrian desire lines before and after events.
 - ◆ Parking and traffic management measures on the surrounding road network and off street parking facilities.

Response:

- Drop off locations have been identified in the Stage 2 DA revised masterplan. Further consultation associated with the final Event Management Plan will be undertaken. Specific bus stop locations within the Stadium Precinct and along O'Connell Street have been included in Section 2.2 of the updated Traffic Impact Assessment.
- Details regarding the final Event Management Plan will be discussed in consultation with the City of Parramatta, Roads and Maritime Services, and Transport for NSW. These discussions will also include the outcomes of pedestrian modelling. Pedestrian modelling is another level of detail beyond that required in a TIA. It is used to help inform and finalise the Event Management Plan.

As discussed in Section 6.1 General Measures of the TIA, there are a number of ways to manage the issues identified as part of the TIA. These include, but are not limited to a) managing the effect, b) managing the demand, and c) provide infrastructure interventions.

The outcomes of the TIA and subsequent discussions have identified infrastructure that will be beneficial to the operation of the proposed WSS. These infrastructure changes have been included in the revised Stage 2 Masterplan. Specifics regarding what this infrastructure achieves is discussed in Section 6.3 of the Updated Traffic Impact Assessment.

The final Event Management Plan, developed in consultation with relevant stakeholders will explore the most efficient and safe way to operate the stadium under certain conditions with the infrastructure provided.

- At the time of production of the TIA, no publically available information regarding expected demand and utilization of Parramatta Light Rail was available. Therefore, to estimate its potential demand, Section 4.2.4.1 of TIA identified anticipated demand and evaluated as a function of capacity. It also identified that the uptake in light rail during an event is unknown, and that event management plans around crowd management maybe required.

Due to the information available, we are unable to adequately assess the performance on the proposed light rail during an event, and any potential operational effects. Additionally, we unfortunately do not have information available to establish comparisons with the performance expected on Sydney CBD and South East Light Rail during events at Moore Park.

The applicant is committed to continue to liaise with Parramatta Light Rail during the development of the final Event Management Plan.

- The need for special event buses was not identified as a requirement as part of the TIA. This maybe a mitigation strategy to manage identified issues in the TIA as part of the final Event Management Plan.

The baseline performance of the future bus network was not available to the applicant at the time of the TIA. An assessment of the anticipated demand for bus services both existing and proposed was undertaken in Section 5.2 of the TIA. This indicated that it is anticipated that the contribution of the proposed stadium to existing bus network contributes a low proportion of the total available capacity. Additionally, trips are anticipated to be contra-peak or outside peak loading periods.

The TIA did however identify the need as part of the final Event Management Plan to identify specific bus stops where demand may increase, and develop management strategies to ensure safe behaviours.

On a day to day function, the proposed stadium is not expected to have an effect on the operation of the road and public transport network.

- Pick up and drop off zones have been identified in the Stage 2 Masterplan. Specific features associated with the proposed WSS are discussed in Section 2.2 of the updated Traffic Impact Assessment.
- Pedestrian desire lines were identified in Section 4 of the TIA. These desire lines were high level and included both the proposed WSS. Pedestrian modelling is being undertaken, which help inform the final Event Management Plan.
- Traffic management requirements, if necessary will be developed in collaboration with City of Parramatta, Roads and Maritime, and Transport for NSW as part of the final Event Management Plan.

3. **Comment Location:** O'Connell Street Impacts, Page 3

Comment: The proponent should liaise with TfNSW and Roads and Maritime to investigate alternatives to the closure of O'Connell Street during special events.

Response: It is intended that the final Event Management Plan (EMP) will be developed in consultation with City of Parramatta, Roads and Maritime Services, and Transport for NSW. The mitigation of the closure to O'Connell Street could form part of the EMP.

4. **Comment Location:** O'Connell Street Impacts, Page 3

Comment: A revised Traffic Report be submitted that comprehensively address the impacts of the proposed increase on the signalized intersection of Victoria Road/O'Connell Street.

Response: Section 5.1 of the TIA addresses a number of scenarios and modelling outcomes for the Victoria Road/O'Connell Street Intersection. This includes sensitivity tests regarding Light Rail, including potential amendments to the intersection form. These scenarios include:

- 2019 AM and PM peak periods of both existing and proposed stadium on a day-to-day function
- 2019 peak arrival half event for both current and proposed stadium
- 2019 peak departure half event for both current and proposed stadium
- 2019 peak arrival full event for both current and proposed stadium
- 2019 peak departure full event for both current and proposed stadium
- Sensitivity test with induced demand associated with Light Rail
- 2019 peak arrival full event for both current and proposed stadium with amended intersection configuration
- 2019 peak departure full event for both current and proposed stadium with amended intersection configuration

The impact on performance of these scenarios on the intersection in regard to operational efficiency are covered in Section 5.1 of the TIA.

5. **Comment Location:** O'Connell Street Impacts, Page 3

Comment: Further information be provided to support the proposal to remove the midblock pedestrian crossing and potential signalization of the carpark entrance to the south of the stadium. The proponent should liaise with Roads and Maritime Services with regard to this proposal.

Response: The removal of the midblock was a suggestion based on that change of intended function of the facility. Currently it provides a function for the adjacent Community swimming pool. In the proposed stadium, this swimming pool is removed, and the daily function of this mid-block crossing is removed.

A potential mitigation that will be discussed further with stakeholders is to signalize the southern trust carpark. This provides a pedestrian crossing facilities that aligns better to pedestrian desire lines. Additionally, it also provides improved functionality and safety of the southern trust vehicle access.

A concept design for discussion regarding potential upgrades have been developed to discuss with stakeholders. The intersection or other infrastructure upgrades will be finalised in consultation with relevant stakeholders.

The outcomes of the TIA have identified infrastructure interventions that are believed to be beneficial to the operation of the proposed WSS. As such, these have been incorporated into the updated Stage 2 Masterplan. Section 6.3 of the updated Traffic Impact Assessment discusses the opportunities associated with this infrastructure.

As discussed in the TIA and previously, other methods, other than infrastructure intervention included effects management and strategies or demand management. The validity of these other methods will be explored as part of the development of the final Event Management Plan.

6. Comment Location: Transport Assessment for Opening Year, Page 4

Comment: TfNSW advises that the Traffic Report needs to be revised for the period 2019-2023 as modes such as bus, heavy rail and active transport will be the primary source of public transport to the site

Response: The Stage 1 DA had an approved opening year of the stadium at 2019. Therefore, this is the agreed assessment year for the development. It is appreciated that Light Rail will not exist in 2019, which was discussed Section 4.2.4.1. In addition a sensitivity test was undertaken Section 5.1.4 on the potential effects on the road network. It is deemed that this assessment is satisfactory, and aligns with the approved Stage 1 DA Traffic Report.

The TIA identified that the proposed stadium is not anticipated to alter the demand on the public transport network during day-to-day non-event activities.

The applicant will however work with City of Parramatta, Transport for NSW and Roads and Maritime Services to deliver the final Event Management Plan, including if necessary finalise any necessary infrastructure upgrades,

7. Comment Location: Coaches and Taxis Parking and Pick up/Drop off areas, Page 4

Comment: It is requested that the applicant assess the demand for coaches and taxis including ride share for the stadium and to design required pick up/ drop off areas on site to meet estimated demand. This assessment needs to be undertaken for day to day activities and for the events.

Response: Section 4.1.2 and Section 4.3.2 identifies an assumed demand for bus passengers in Zone 1 (Stadium Prescient). The Stage 2 DA masterplan identifies designated pick up and drop off zones. Specific drop locations and available coach parking locations are documented in Section 2.2 of the updated Traffic Impact Assessment.

8. Comment Location: Construction, Pedestrian and Traffic Management, Page 4

Comment: It is requested that the applicant be conditioned to prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with Roads and Maritime Services, City of Parramatta and TfNSW.

Response: A Construction Management Plan was delivered as part of the Stage 1 DA.

9. **Comment Location:** Parramatta Light Rail, Page 5

Comment: It is recommended that the Parramatta Light Rail project office is consulted during each stage of the Western Sydney Stadium Project.

Response: It is anticipated that Transport for NSW will be involved in further consultation as part of the development of the final Event Management Plan.

10. **Public Transport Network**

Comment Location: Public Transport Network, Page 5

Comment: TfNSW requests the following be updated:

- Figure 4.6 of the Traffic Report
 - ◆ No public bus route operates via Ross Street, namely Transit Stop Number (TSN) 215012;
 - ◆ Church Street (TSN 2150147 and 2150143) is serviced by routes 545, 804, 806, 829, T60, T61, T62, T63, T64, T65, T66;
 - ◆ Market Street (TSN 215018) is serviced by routes 804, 806, 829, T60, T61, T62, T63, T64, T65, T66; and
 - ◆ Marist Place (TSN 2150250 and 215071) is serviced by routes 546, 829, M91, T60, T61, T62, T63, T64, T65, T66.
- Figure 4.7 of the Traffic Report
 - ◆ The bus network provided for 'Sydney Transit' is outdated. It should be noted that Parramatta is serviced by Sydney Buses, Hillsbus, Transdev, and Transit Systems; and
 - ◆ Council does not operate the 'Parramatta Shuttle Bus Network' – it is route 900 operated by Transdev for TfNSW.
- Routes discussed on Page 29 will need to be updated accordingly as they are operating in 'Zone 3'

Response: It is appreciated that outdated Bus network information was reported in the TIA. This information has been updated within specific sections of updated Traffic Impact Assessment.

11. **Comment Location:** Pedestrian Movements between Parramatta Interchange and the Stadium, Page 6

Comment: TfNSW requests that the applicant evaluate the need for shuttle buses between Parramatta Station and the new stadium, and identify requirements for efficient dropping off/picking for within the stadium precinct.

Response: The TIA did not identify the need for a shuttle bus to manage effects identified.

General accessibility travel behaviour associated with day to day activities identifies that people are unlikely to walk more than 800m to access a public transport modes.

An event is a special situation and people are generally more willing to accept a longer walking distance to access public transport modes, in our experience.

The use of a shuttle bus is a potential mitigation to address identified pedestrian issues discussed in the TIA and could be a consideration in the final Event Management Plan.

12. Comment Location: Proposed Vehicle/Team Bus Parking Arrangement, Page 6

Comment: TfNSW requests that the application provides the following:

- Maximum size of vehicle that would access the service vehicle/team bus parking area;
- Estimated number of service vehicle/team bus movements (hourly and daily); and
- Swept path analysis for vehicles accessing the service vehicle/team bus parking area.

Response: Vehicle sizes, tracking and parking locations were assessed as part of development of the Stage 2 masterplan.

13. Comment Location: Pedestrian and Cyclists, Page 6

Comment: It is requested that the applicant:

- Provide a detailed pedestrian route assessment to be undertaken to assess key routes to the new stadium prescient and identify measures that could increase capacity and/or distribute movements across various safe route options, in particular potential options for pedestrian movements across O'Connell Street. The assessment should assess the capacity of paths and intersections. The assessment should be undertaken to the satisfaction of City of Parramatta, TfNSW and Roads and Maritime Services;
- Provide and maintains the connectivity safety and accessibility for pedestrian and bicycle riders to existing pedestrian and bicycle networks, and public transport during construction and operations;
- Develop way finding strategies and travel access guides to assist access during and post demolition and construction to increase mode share of walking and cycling; and
- Explore opportunities to improve cycling facilities along both sides of O'Connell Street which would include a dedicated separated on road cycle facility so that pedestrian are separated from bicycles using the route.

Response:

- Section 5.3 did a high level assessment of pedestrian network and identified issues, namely the conflict interaction between vehicles and pedestrians. These issues occur over a small duration during the infrequent operation of half and full scale events. On a day-to-day function, there is not anticipated to be increased pedestrian demand on the network as a result of the proposed stadium.

As part of the development of the final Event Management Plan, pedestrian modelling of the road network and stadium in Zone 1 and 2 is being undertaken. This will aim to quantify the impact of peak pedestrian demand on the network. From there strategies can be developed to manage these effects.

In Section 6.1 of the TIA, general mitigation strategies were discussed. These include managing the effect, managing the demand or infrastructure interventions. Infrastructure interventions would be considered only feasible if other options are unachievable.

The Stage 2 Masterplan identifies the pedestrian and cycling facilities within the stadium precinct, including their linkages to the wider community facilities. The TIA is cognisant of this and in general accordance, details of which are provided in Section 2.2 of the updated Traffic Impact Assessment.

City of Parramatta

14. Comment Location: Pedestrian Access to/from the Site, Page 6

Comment: That the proposal adequately develops strategies that cater to the safe egress of mass crowds using Victoria Road and O'Connell Street and associated mitigation works.

Response: Pedestrian modelling of the stadium and surrounding road network is being undertaken. The outcomes of this will help inform the final Event Management Plan. This will include measures to mitigate identified issues. This work will also assist in identifying safety issues and associated mitigations.

Final details will and plans will be developed in consultation with relevant stakeholders.

15. Comment Location: Pedestrian Circulation throughout the Site, Page 7

Comment:

- That the design be revisited to be consistent with the Guidelines, namely the 'continuous 15m wide curtilage' that seamlessly connects to the public domain at all sides of the stadium';
- That the design considers the location of the top of stairs to the turnstiles and provides significantly more space for gathering, queuing and possibly emergency assembly point; and
- That a plan be submitted demonstrating how all pedestrians (and cycle) routes proposed sit within the broader regional connections through the parkland and along the river foreshore in Parramatta LGA.

Response: Pedestrian modelling of the stadium and surrounding road network is being undertaken. The outcomes of this will help inform the final Event Management Plan. This will include measures to mitigate identified issues.

16. Comment Location: Vehicular Access, Page 8

Comment:

- O'Connell Street and Victoria Road are to be converted into a T-Intersection with the stadium access relocated to the north east corner as a left in / left out driveway;
- Signalise southern car park access'
- Upgrade traffic signals at Victoria Road and Marist Place to provide wider southern pedestrian crossing;
- Provide a study of existing parking opportunities beyond the site up to and no less than a 15 minute walk of the stadium. Provide a pedestrian movement study to determine crowd numbers and behaviors and propose options to better access and utilize these parking options and where new opportunities could occur; and
- Demonstrate continues access to Old Kings oval.

Response:

- The signalization of the O'Connell Street/Victoria Street and O'Connell/Southern Trust Carpark were identified in Section 6.2 as a potential mitigation to identified issues. Namely around provide a more aligned pedestrian crossing facility and improving the vehicular safety and efficiency of the intersection during events.

The Stage 2 Masterplan has been updated to incorporate this updated infrastructure. A new Section 6.3 has been added to the updated Traffic Impact Assessment which documents the opportunities provided from the identified infrastructure.

The final Event Management Plan, will identify any other potential infrastructure interventions, including any temporary measures. This plan will be developed and finalized in consultation with relevant stakeholders, including City of Parramatta, Roads and Maritime Services and Transport for NSW.

- Pedestrian modelling of the road network is being undertaken as part of the final Event Management Plan. A parking study associated with the extent discussed is considered outside the scope of the stadium development. Encouragement of use of various transport mode is something that could be, if appropriate incorporated into the final Event Management Plan.

17. Comment Location: Road Network Impacts, Page 8

Comment: Council recommends that DPE contact Transport Strategy Division of Transport for NSW in relations to potential impacts relating to O'Connell Street due to both light rail, PNUT and future road network improvements in the Parramatta CBD.

Response: Consultation with City of Parramatta Council, Roads and Maritime Services, and TfNSW has occurred, and will continue to occur as part of the development of the final Event Management Plan, and the finalisation of strategies and/or infrastructure interventions.

18. Comment Location: Impacts on surrounding medical and care facilities, Page 9.

Comment: The proposal, through the Traffic Impact Assessment, needs to quantify and respond to the impacts of increased traffic on medical facilities and residential care in North Parramatta area.

Response: Development within the surrounding area has been incorporated into the assessment as part of the assumed 2% annual growth. This growth was applied to all vehicle movements at intersection, and as such likely to be representing an upper level of demand.

The development application associated with the medical facility would need to have accommodated the existing stadium as a permitted baseline as part of its applications. The applicant is not aware of any development application existing or being available at the time of development of the TIA. The effects of the proposed and current stadium in the context of the concern raised will be similar.

Therefore, it is suggested that an appropriate way forward is to develop strategies as part of the final Event Management Plan to manage any effects associated with adjacent landuses.

Department of Planning and Environment

19. Comment Location: Access and Parking

Comment: The EIS and Traffic Impact Assessment (TIA) does not adequately assess the need for pedestrian and bicycle enhancements or recommendations for potential upgrades/new infrastructure to improve connectivity between the stadium and wider surrounding precinct and transport nodes in accordance with the requirements of Schedule 2 consent condition B7 of the approved Concept Proposal. The response to submission report must clearly demonstrate how this has been addressed, including details of considered consultation with Transport for NSW, Roads and Maritime Services and the City of Parramatta.

Response: The TIA identified issues associated with the operation of events. Namely the interaction between vehicles and pedestrians on O'Connell Street. Section 6.1 identified strategies that could be implemented. These included managing the effect, managing the demand as to minimise the effect or to provide an infrastructure intervention to address the issue. As part of the TIA, a number of infrastructure interventions were identified as being beneficial to the operation of the proposed WSS. Reflecting this, the Stage 2 DA has been updated to incorporate these infrastructure provisions. A new section 6.3 has been added to the updated Traffic Impact Assessment, which discusses the opportunities associated with the identified infrastructure.

Identified infrastructure, as discussed in Section 6.3 of the TIA includes:

- Removal of stadium access at Victoria/O'Connell Intersection
 - Removes interaction between vehicles at main pedestrian and vehicle egress point, providing improved safety and amenity.
 - New access for vehicles allows better circulation within the stadium.
 - Provides a more efficient intersection configuration for vehicles, and provides more crossing time for pedestrian, providing improved safety and efficiency.
 - Less vehicle and pedestrian conflict points, improving safety.

- Signalisation of Southern Trust/O'Connell Intersection
 - Enables a pedestrian crossing across O'Connell Street that aligns better to new pedestrian desire lines.
 - Allows for removal of anticipated redundant mid-block crossing, which function is to serve the Parramatta Swimming Pool; which is being demolished.
 - Provides pedestrian and vehicle opportunity and ability to manage hierarchies at the intersection, proving a more efficient and safe intersection

Finalisation of infrastructure interventions will be developed in consultation with relevant stakeholders. The Stage 2 Masterplan identifies the pedestrian and cycling facilities within the stadium precinct, including their linkages to the wider community facilities. The TIA is cognisant of this and in general accordance, details of which are provided in Section 2.2 of the updated Traffic Impact Assessment.

To assist in establishing what level of intervention is required, pedestrian modelling is being undertaken to inform a final Event Management Plan. This, along with possible infrastructure intervention will be developed and finalised in consultation with stakeholders, including but not limited to City of Parramatta Council, Roads and Maritime Services, and Transport for NSW.

Yours sincerely



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on behalf of

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