Ms Paula Tomkins  
Precinct Manager – Greater Parramatta  
Infrastructure, Housing and Employment  
Department of Planning and Environment  
GPO Box 39  
SYDNEY NSW 2001

Dear Ms Tomkins


Reference is made to the Sydney Olympic Park Master Plan 2030, 2016 Review (SOPMP 2030) and the Traffic and Transport Strategy (2016 Review) TTS 2016. Please accept this correspondence as the combined response of Transport for NSW, Roads and Maritime Services (Roads and Maritime) and Sydney Trains collectively TfNSW.

The Greater Sydney Commission’s (GSC) recently released draft West Central District Plan and draft Greater Parramatta and Olympic Peninsula (GPOP) vision supports many of the proposed changes in the SOPMP. In particular the Plan envisages that Sydney Olympic Park “will be transformed into a healthy lifestyle education and innovation centre based on its sports heritage with vital education, commercial and residential hubs”.

Transport infrastructure and servicing needs are an important element for the changes envisaged for the area to be fully realised. TfNSW will continue to work with the GSC, Department of Planning & Environment (DP&E), and other stakeholders such as the Sydney Olympic Park Authority (SOPA) to understand the transport infrastructure and servicing needs for the area. In this regard, it is suggested than an appropriate forum to discuss emerging issues would be the GPOP Coordination Group, chaired by the GSC Chief Commissioner.

The SOPMP proposed changes would increase regional transport demands that need to be investigated as part of a broader regional plan. TfNSW is currently working with the GSC, DP&E, and other stakeholders on such a plan for the Greater Parramatta to Olympic Peninsula Priority Growth Area. It is intended that a regional infrastructure strategy and associated contributions plan (SIC) will be finalised as part of the Plan. TfNSW suggests that the SOPMP be reviewed as part of that investigation. Note that TfNSW will lead the transport investigations.

TfNSW suggests that formal amendments to the SOPMP 2030 be held over until the aforementioned investigations are sufficiently well enough advanced to provide a higher degree of certainty to understand the transport implications.
To assist SOPA, TfNSW has reviewed SOPMP 2030 and TTS 2016 and a detailed analysis is provided in the attachment. In summary the key issues are as follows:

- The development yield for all land uses has increased by 460,000 m$^2$ since SOP Master Plan 2010. The retail yield in particular has increased from 33,000 m$^2$ to 100,000m$^2$ i.e. an increase of 67,000m$^2$. Transport cluster will continue to work with SOPA to determine the optimum balance of land uses relative to the level of transport mitigation required, while achieving the desired future as outlined in the draft West District Plan.

- The requirements for transport infrastructure able to cater for retail trips, residential, entertainment and other trips at the same time will be significant.

- TTS2016 could have addressed broader longer term cumulative impacts of the proposed uplift in land development in the subregion. It is likely that more significant impacts than those nominated in SOPMP 2030 and TTS 2016 will be required to mitigate the impacts. Detailed investigation and transport analysis needs to be undertaken to understand the infrastructure requirements along with the development of a SIC and enhanced Local Contributions Framework.

- The discussion of funding provided by SOPA in publicly available documentation was reviewed. TfNSW does not support the approach of 'satisfactory arrangements' under the SEPP (State Significant Precincts) 2005 for transport infrastructure funding. The preferred approach is that the Special Infrastructure Contribution is finalised including identification and costing of transport infrastructure (including land and capital) before the SOPMP 2030 is finalised.

- There is an opportunity to reflect the recent (post publication) announcement of planning for a future Sydney Metro West Project by allocating land for a future Metro Station and bus interchange/layover as part of SOPMP 2030 and acknowledging a new rail corridor and potential for integrated over-station development.

- There is an opportunity to reconsider the proposed SOPMP land use changes, including development scale and use, with the increased transit amenity provided with a Sydney Metro West station.

- There is a need for land for road widening purposes along the eastern side of Hill Road from John Ian Wing Parade intersection north to Pondage Link Road. This road is the key to unlocking much of the development potential of the SOPA precinct and this fact is referenced multiple times in the TTS 2016. The corridor needs to be identified and protected in the master plan. In the absence of a Special Infrastructure Contributions (SIC) this particular issue could in the short term be incorporated into a regional contributions framework and included in the SOPA Masterplan and planning agreement for the site.

- There are a number of important issues to consider if the Parramatta Light Rail is to be successfully integrated into the existing SOP street network.
A more detailed examination of the above and other issues is provided at Annexure A.

This response should be considered alongside the previous TfNSW correspondence on this issue dated signed by the Deputy Secretary, Freight Strategy and Planning on 20 May 2016. A copy is provided at Annexure B for easy referencing.

Annexure C contains matters noted by specialist transport officers that should be considered for incorporation in future updates of SOPMP 2030 and the associated Traffic and Transport Study.

Should you have any questions regarding this matter, please contact Mark Ozinga, Principal Manager, Land Use Planning and Development on 8202 2198 or Mark.Ozinga@transport.nsw.gov.au.

Yours sincerely

Clare Gardiner-Barnes
Deputy Secretary
Freight Strategy and Planning

Objective Ref: CD16/17630
Annexure A

Land Use and Transport Integration

Table 2.1 of the Traffic and Transport Strategy (TTS) details the increase in land uses by 460,000 m². The key issue from a transport perspective is that a number of these land uses, for example residential, commercial, retail and entertainment, could generate their peak transport demands at a similar, peak times of the day.

One example is the proposed level of retail development which has increased to 100,000m² in 2016 representing a significant increase on the 33,000m² proposed in the SOP 2010 Master Plan 2030. One of the key transport generation periods for retail is Thursday night and weekend lunch time and at the end of trading periods. This could mean that peak transport generation from this large retail precinct would be generated at the same peak times as for the entertainment, residential, commercial and (minor to major) events.

The strategy does not adequately analyse the cumulative impacts of the very large retail development coupled with the uplift in other land uses and peak event traffic.

Further work is required to ensure that the level of increase in land use envisaged by SOPMP 2030 can be adequately serviced by new transport infrastructure and that this new transport infrastructure can be funded by developer contributions. Also, the new transit amenity offered by a Sydney Metro West station may provide additional land use outcomes and opportunities, which should be explored.

The statement at 4.4 of the Master Plan that the Town Centre will maintain a capacity to host 250,000 event patrons needs to be considered against the ability of the rail/bus/road network to cope with the ingress and egress of this level of patrons to the Sydney Olympic Park site alongside uplift in other land uses such as commercial and residential uses. Prior experience suggests crowds of 140,000 onsite can prove challenging for the existing transport network. It is likely that significant enhancement of the current transport network would be required to host up to 250,000 event patrons in addition to an expanded resident, worker and shopper population.

Recommendation

Transport cluster will continue to work with SOPA to determine the optimum balance of land uses relative to the level of transport mitigation required in the context of the desired future outlined in draft West Central District Plan and draft GPOP vision.
Cumulative impacts of Development Uplift in the sub-region

The Sydney Olympic Park Masterplan 2030 (2016 Review) Traffic and Transport Strategy does not address broader and longer term cumulative impacts of the proposed development on the regional transport network. It is likely that more significant upgrades than those nominated within the (Strategy) will be required. This is acknowledged within Section 5.5.2 subsection ‘Conclusions’ of the TTS which state:

“As noted in section 5.2, to assess the impacts of all of the future development of SOP, surrounding developments, and through traffic, wider area integrated transport model outputs are required”.

Greater clarity and TfNSW endorsement of specific recommendations made within the TTS would be possible after the area-wide investigations of the sub-region are carried out, allowing consideration of cumulative effects of all future land use, public transport and road network changes, and the resultant additional road upgrades that might be required or impacts of specific proposals.

TfNSW is aware of preliminary investigations by the Royal Agricultural Society to expand the intensity of uses on land within SOP currently leased from the NSW Government as part of a strategy to renew aging assets. This development is immediately adjacent to the SOP town centre and will need to be considered as part of the above mentioned investigations.

Recommendation

The Transport cluster will work with the GSC, DP&E, SOPA and other stakeholders to understand the transport needs and funding requirements for the Greater Parramatta to Olympic Peninsula Priority Growth Area.

Funding Arrangements

TfNSW notes the approach to funding proposed in publicly available documents including the above mentioned Sydney Olympic Park Planning Report as well as SOPMP 2030 Traffic and Transport Strategy and the Department of Planning and Environment (DP&E) Review of Master Plan 2030 and State Significant Precinct.

TfNSW does not support the approach of ‘satisfactory arrangements’ clauses in planning instruments in the absence of understanding what could be reasonably be expected to be contributed by proponents of individual development applications. TfNSW preference is that the infrastructure and associated funding arrangements for the GPOP area be finalised prior to the adopting the changes envisaged in the SOPMP.

Section 7.4 of the TTS broadly outlines the current works under the Sydney Olympic Park Infrastructure Contributions Framework (ICF). Roads and Maritime in particular would appreciate the opportunity to review the individual road works and costings proposed in this schedule to ensure that the indexed amount remains sufficient for the works proposed.
The continued use of the Producer Price Index – Roads and Bridges PPI (3101) as the index for works is supported.

Recommendation

SOPA works with GSC, DP&E, and TfNSW to contribute to the development of a GPOP corridor SIC.

Sydney West Metro

The NSW Government has announced accelerated planning for the Sydney Metro West Project between Parramatta and Sydney CBDs via Sydney Olympic Park and Bays Precinct.

The Master Plan should respond to this commitment and consider planning for the allocation of land to respond to the rail corridor and land requirements for Sydney Metro West, including the station construction site and integrated overstation and/or other development associated with the station following the Government’s commitment to accelerated planning for this project in November 2016. In addition to this, an associated bus interchange and layover areas. TfNSW will assist in the identification of an appropriate area of land.

Implementing Road Improvements

Tables 7 and 8 of the Sydney Olympic Park Planning Report nominate:

- Six intersection improvements as being required on the surrounding road network in the short-term.
- Ten intersection improvements as being required on the Sydney Olympic Park local road network.
- Five significant long term road network upgrades as also being required.

As noted above, funding arrangements have been proposed to allow development within SOP to co-fund the cost of these improvements.

The design, timing and inter-operability of these works should be refined as part of the district level transport investigations.

Recommendation

SOPA enters discussion with RMS and TfNSW to discuss the best means of identifying, timing and implementing appropriate local and regional transport improvements as part of the broader district investigations mentioned above.

Recommendation

Commence planning for the integration of Sydney Metro West including allocation of station land and a major interchange and layover area for bus services.
Hill Road Land Dedication

The M4 Hill Road Link is acknowledged as a key to unlocking much of the development potential of the SOPA precinct. This is acknowledged throughout TTS 2016 (for example pg x, xii, 2, 39, 47, 87).

It therefore follows that the road corridor needs to be protected and identified in the master plan. Accordingly, a key issue for Roads and Maritime is the need for SOPA to dedicate land 'at no cost' for road widening along the eastern side of Hill Road from John Ian Wing Parade intersection north to Pondage Link Road. Current plans (below) show the land being developed as residential usage.

Recommendation:

Roads and Maritime would be pleased to commence more detailed discussion on the above issue in the interim SOPA should provide amended plans showing the Hill Road Link in place of the residential development currently shown.
Parramatta Light Rail Integration

Light Rail is identified throughout the Traffic and Transport Plan as one future transport option for public transport within the SOPA area.

Section 4.2.3 specifically discusses Light Rail. It is stated that "a light rail service between Parramatta and Strathfield has been confirmed as a project". TfNSW advise that a final business case is currently being prepared for the Parramatta Light Rail Project.

A description of the most direct route through the SOP area is provided. Figure 4.1.4 provides an indicative light rail alignment and detailed potential stop locations. TfNSW advises that the alignment is subject to further planning, and that alternative alignments through the SOP area are also under consideration.

The likely impacts of this integrating the Parramatta Light Rail into the SOPA road network may include:

- Changes to traffic signal phasing at intersections to prioritise light rail operations.
- Loss of on street parking to make space for light rail within the existing streetscape / road corridor.
- Realignment of roads, footpaths and additional building set-backs at proposed light rail stop locations.
- Control of driveway access to left-in and left-out only.

Recommendation

Light rail route options under consideration (Australia Avenue, Dawn Fraser Avenue, Uhrig Road) should include provisions for appropriate setbacks and access controls to not preclude a future light rail through the SOP area.
Travel Demand Management

The Travel Demand Management (TDM) discussion (7.1) could be improved by discussion around Governance for TDM measures and the role and responsibilities of SOPA.

TfNSW agrees the 5% rate of self-containment in the Baseline Transport Strategy traffic assessment appears to be conservative, especially as the SOPA precinct expands in the future to offer a wider array of services. The self-containment rates presented in the paper of between 3 and 14 percent (p 9, Yigitcanlar et al, 2005) are noted.

However, it should be noted that while higher self-containment is generally desirable in terms of wider network benefits, it is important to ensure that the internal network is capable of supporting that level of demand. TfNSW does not believe it has been adequately demonstrated the SOPA precinct can support the increased level of land use proposed.

An alternative to individual Travel Plans (funded and delivered internally within organisations) and a Transport Management Association (organisations in a precinct provide funding to an independent organisation to delivery on their behalf). This is a Travel Plan Alliance (TPA). Travel Plan Alliance organisations work together to consolidate funding and effort where required. The key difference between Travel Plans and TMAs are that organisations have to fund external positions. An Alliance approach allows collaboration without the additional costs.

Travel Plans can ensure that occupiers realise the targets. Typically TDM programs like Travel Plan on existing population can change mode split by an average of 10%.

Recommendation

TfNSW would like to engage with SOPA to discuss the overall governance for the variety for the Travel Demand Management (TDM) initiatives proposed including:

- Defining the land uses that would require Travel Plans
- Linking the travel plans to SOPA objectives; and
- Defining the budget sources for any TDM measures identified

The final version of the TTS should contain a sensitivity analysis of self-containment levels between 0 and 20% to gain a clearer understanding of how the change in this assumption will impact the internal and external networks (e.g. intersection performance and/or mid-block demands).
Bus Services

While the strategy recommends various supportive mechanisms to bus operations, such as implementing bus priority at intersections, it needs to provide greater inducement for customers travelling in/out of the precinct to utilise bus services. TfNSW recommend the following measures be reviewed to support bus operations:

- Core bus roads within the precinct should be identified which would connect SOP with surrounding centres and suburbs. The core bus roads and bus/rail interchange should be designed in a way which does not allow it to be impacted in any way by special event road closures, special event buses and subsequent regular bus route diversions.

- Potential clearways being activated during peak periods with dedicated bus transit lane during peak periods

- Ensuring layover options for buses are protected and potentially extended within the precinct considering the potential need for increased services in the future. TfNSW would like to discuss these needs in the context of a future Sydney West Metro Station.

- Consideration should be made to providing a coach parking facility which coaches could use to pick up and drop off hotel patrons rather than parking on-street.

- It is requested that SOPA engage with TfNSW throughout the design process of any new streets that are intended to be traversed by buses to ensure that bus services can be accommodated. Reference should be made to the Austroads Road Design Standards for roads accommodating bus movements.

It should also be noted the potential future Rapid Bus Route (RBR) between Parramatta and Strathfield via SOP (p.72) is different to the strategic direction in Sydney’s Bus Future (2013). Sydney’s Bus Future acknowledges that SOP is a specialised centre and indicates a suburban route from Parramatta via Ryde to Olympic Park/Burwood.

Recommendation

The final iteration of the TTS and the final iteration of the SOPMP 2030 should be updated to reflect the above principles.

Proposed Wave Park at old P5 Car Park

TfNSW is aware of the recently announced Wave Park for the old P5 car park. Concerns are raised that this proposal has the potential to affect the operation of the Holker Busway.

Recommendation:

If this proposal is to proceed, then TfNSW / Roads and Maritime need to become actively involved in the planning of this development to ensure that the operation of the Holker Busway isn't negatively affected.
**Freight**

As indicated in TfNSW prior correspondence of May 2016 a planned retail floor space of 100,000 m² will involve a significant freight task and dedicated traffic mitigation measures will need to be developed.

Goods deliveries should be planned so that they occur in community loading docks in building basements throughout the precinct to ensure the servicing of retail development does not rely on on-street kerb space which could be changed from loading zones to another use at any time in the future. Such facilities also reduce the need for service vehicles to circulate through the precinct until they find a space to park, in turn minimising congestion.

**Recommendation**

Further analysis is required on the present and future use of heavy vehicles in the SOP Precinct including during major events and how these heavy vehicles will interact with other transport modes.

**Existing Rail Corridor**

Sydney Trains will require detailed consultation and agreement to any proposal relating to the existing rail corridor.

**Recommendation**

Reference should be made to the following documents in the final suite of SOPMP documentation:

1. Department of Planning, Development Near Rail Corridors and Busy Roads – Interim Guidelines.
2. T HR Cl 12080 ST – External Developments (ASA standard regarding adjoining development)
3. T HR Cl 12051 ST – Development Near Rail Tunnels (ASA standard regarding new tunnel guidelines).
Event Management

It is noted that there is a desire to cater for hosting events with 250,000 patrons. Past experience suggests the current transport network can be put under strain with the ingress and egress of 140,000 patrons. Dealing with the additional movements could be challenging.

One way of helping to manage increased event demand would be to extend the use of integrated ticketing. TfNSW would be interested in progressing discussions around the possibility of expanding the use of integrated ticketing for key events in the precinct.

Recommendation

An Integrated ticketing requirement should be included in all major venue hire agreements, which would provide a seamless transport experience to the event patrons while continuing to grow attendance at events.
Annexure C - Matters of detail noted by Subject Matter Experts

Traffic and Transport Strategy (2016 Review)

The following matters of detail have been noted by subject matter experts within transport cluster in the course of this review and should be incorporated in the next iteration of the Traffic and Transport Study.

Table 3.3

It is recommended that Table 3.3 be modified to also include a "Olympic Peninsula place of residence" (ie SOP, Wentworth Point, Newington) as this would facilitate a better understanding of the current self-containment rate in the precinct and the likelihood of achieving higher active transport mode share for SOP in the future.

The latest information provided in this table indicates that a total of 58 per cent of the SOP workforce reside in the ‘north (35 per cent)’ and ‘northwest (23 per cent)’ areas of Sydney. The report should elaborate on this trend and provide details on how infrastructure/access and transport services to/from SOP can best target this geographical area.

Section 3.2.9 Parramatta Road Urban Renewal Strategy

The Policy Framework for the Parramatta Road Corridor Urban Transformation Strategy has announced that there will be 27,000 homes and 50,000 jobs in the above corridor. This will include the following yields within each precinct:

Granville Precinct
5,400 new dwellings; 7,200 new jobs

Auburn Precinct
1,000 new dwellings; 12,800 new jobs

Homebush Precinct
9,500 new dwellings; 12,900 new jobs

Burwood-Concord Precinct
5,500 new dwellings; 3,800 new jobs

The dwelling and employment numbers within the TTS are now outdated and need to be updated to reflect the abovementioned yields.

Table 4.2

‘Existing bus services to and from SOP’ (page 54) needs to have the route 450 removed from the analysis into the existing conditions and modelling updated accordingly.

Section 4.2.4

The potential internal shuttle service connecting the various centres and car parks throughout SOP which would be independently funded and operated without prior express agreement by TfNSW. Consideration would need to be given to the Passenger Transport Act 2014 (in relation to the collection of fares) and ensure that any services do not hinder the operations of the existing services. It should be noted that the existing bus operations
to SOP precinct offer greater connections than a potential shuttle service could

The private shuttle bus service is operated by the Commonwealth Bank of Australia (CBA). The TIA should note that as CBA are relocating from SOP to The Australian Technology Park in Redfern the private shuttle may be discontinued.

Section also outlines a continuation between SOP and Hurstville via route 450, which has been discontinued to SOP. This statement needs revision considering the current bus operations of the precinct.

Figure 4.3

‘Existing bus network overview – Route 450’ (page 52) provides outdated information (bus route map) regarding the route 450. It no longer operates to Sydney Olympic Park (SOP), as of the 4th June 2016, it operates between Hurstville to Burwood. The updated route information is to be found at http://www.punchbowlbus.com.au/pdf/timetables/route450timetable.pdf. It is noted that within this strategy report the source from this figure is 2015.

Figure 4.9

Amend to include the Sydney Metro West and a new ferry wharf at Rhodes.

Table 4.9

Report suggests that increases to ferry routes and frequencies to and from Sydney Olympic Park Wharf will be considered. Under Sydney’s Ferry Future (2013) it indicates no alteration to the F3 Parramatta River route (which envisages Sydney Olympic Park Wharf).

It should be noted that TfNSW continually monitor customer patronage levels on all ferry services and will implement appropriate service changes in line with funding allocation when appropriate.

Figure 4.16 – Proposed future bus network (Alternate options utilising event infrastructure)

The proposed use of Wilson Park busway in the future road network for buses will generate increased demand and cause significant impact for the Newington Road/Holker Street intersection. This intersection could potentially require an upgrade to ensure bus journey times are not compromised and traffic movements along Holker Street are not detrimentally impacted.

Table 5.11 – Future short –term road network upgrades

To facilitate the future development uplift and recent development applications, Roads and Maritime request that the intersection of Sarah Durack Avenue/Olympic Boulevard should be upgraded and included within the list of future short term road network upgrades. The upgrade would require separate right turn bays and diamond phasing on the north and south approaches of Olympic Boulevard.

This upgrade should be included within an update of the Sydney Olympic Park
Infrastructure Contributions Framework (ICF).

**Table 5.13 – Short Term intersection upgrades**

Silverwater Road/Holker Street. Before Roads and Maritime can provide adequate feedback, SOPA will be required to satisfactorily demonstrate the reasoning behind restricting the northbound right-turn from Silverwater Road onto Holker Street. Further information should also be provided that indicates what the benefits and the impacts are associated with the redistributed traffic, and how do the industrial premises continue to be serviced.

Parramatta Road/Hill Road. It is understood that the proposal to include a slip lane from Parramatta Road west approach turning left into Hill Road has also been included in the Parramatta Road Retail Precinct improvements. SOPA and Council need to co-ordinate their proposals to ensure that the works that are likely to occur in short term can be assigned and included appropriately to ensure timely delivery of network improvements.

Parramatta Road/Birnie Avenue. Restricting right turns from Parramatta Road (eastbound) into Birnie Avenue (south) would force local traffic to use uncontrolled intersections, such as BacheII Avenue. This would compromise safety and could potentially force Roads and Maritime into accepting an extra set of signals on Parramatta Road.

Hill Road/Carter Street. It is understood that the proposed M4 Motorway / Hill Road west bound off ramp would prevent the Hill Road / Carter Street intersection from being signalized thereby restricted this intersection to left-in/left-out movements only.

Hill Road/Holker Street. It appears that SOPA is considering opening the Holker Street bus way to general traffic during non-event periods. Opening this link has not been supported in the past as it would provide a parallel link to Parramatta Road allowing traffic from Silverwater Road to get onto Homebush Bay Drive. Before Roads and Maritime can provide adequate feedback, SOPA will be required to take into consideration the impacts/traffic flow distribution associated with these changes. This implies specifically to the intersections of Silverwater Road/Holker Street and Homebush Bay Drive/Australia Avenue.

Australia Avenue/Murray Rose Avenue. Roads and Maritime recently raised concerns with SOPA about the signalisation of the Australia Avenue/Murray Rose Avenue intersection due to the traffic analysis and the impacts associated with installing an extra set of signals within 120 metres of existing traffic signals at Herb Elliott Avenue. Further information must be provided indicating how these concerns would be satisfactorily addressed.

Australia Avenue/Homebush Bay Drive. Before Roads and Maritime can provide adequate feedback, SOPA will be required to satisfactorily demonstrate, via detailed designs and traffic modelling, that any signalised option can be safely and adequately operated. Network improvements will need to be undertaken to accommodate the extra delays that can occur at this intersection as a result of signalisation. Roads and Maritime also need to ensure that any signalised option can be safely implemented. The impacts of see-through effect, all red times, inability to achieve appropriate sight lines due to the central columns (for the Homebush Bay Drive structure etc) need to be considered before traffic signals...
can be supported.

Signalising the intersection of Bennelong Parkway/Murray Rose Avenue will likely cause significant impacts on journey times along Bennelong Parkway. Bennelong Parkway is one of only two key access points for Wentworth Point residents. As development and population grow in Wentworth Point, this will likely increase the traffic demands along Bennelong Parkway.

Before Roads and Maritime can provide adequate feedback, SOPA will be required to satisfactorily demonstrate, via detailed traffic modelling, that signalising the Bennelong Parkway/Murray Rose Avenue intersection would not cause detrimental impacts to journey times and queues along Bennelong Parkway.

Section 5.6.4 — Future SOP precinct road network

This section highlights the provision of a new east-west access street north of Figtree Drive with the proposal to signalise this street at its eastern end with Australia Avenue.

Before Roads and Maritime can provide adequate feedback, SOPA will be required to satisfactorily demonstrate, via detailed designs and traffic modelling, that any signalised option can be safely and adequately operated and accommodated.

Section 6.3 — Short term demand for public car parking

To better understand the future parking demands/requirements for the SOP Precinct, it is recommended that SOPA provide extra information on 'typical average and peak' public car park occupancy during both weekday/weekend 'medium' and 'major' events.

Section 6.4 — Long term demand for public car parking and Section 6.5 — Key parking considerations

Information provided clearly indicates that the (2016 Review) Master Plan would create a significant increase in parking demand in SOP when compared to the Baseline Master Plan. SOPA should also provide further details indicating if the total public parking spaces are adequate enough to accommodate the following scenarios and anticipated public/active transport environment:

- (Weekday) Average/Peak Medium Event + Excess Commercial Office Parking Demand + Retail Parking Demand
- (Weekday) Average/Peak Major Event + Excess Commercial Office Parking Demand + Retail Parking Demand
- (Weekend) Average/Peak Medium Event + Retail Parking Demand
- (Weekend) Average/Peak Major Event + Retail Parking Demand.
Due to the need for an area-wide transport model of the subregion, the TTS would need to be further updated (i.e. to identify if the scope of the original improvements need enhancement and whether there would be additional intersections needed to be upgraded). The updated TTS would subsequently cause updates to be made to the ICF 2030 which will require the Transport Cluster to review these reports again.

Figure 3.9 Vehicular Access Plan

Figure 3.9 identifies a number of intersections outside the care control and management of SOPA. This supports the transport cluster preference to finalise a Special Infrastructure Contribution for the entire Greater Parramatta to Olympic Park Corridor rather than relying on a 'satisfactory arrangements' clause under the State Significant Precincts SEPP (2005) as an interim approach.
As the intersection of Hill Road / John Ian Wing Parade will become a significant signalised future access into both the SOP and Carter Street Precincts, it is recommended that the reference to on-street parking within the access road (opposite John Ian Wing Parade) be removed as this would have the potential to impact upon the future efficiency of this intersection.
Figure 3.14 Proposed New Infrastructure

As the scope / location of a number of these intersection upgrades are subject to change due to the need to develop an agreed area-wide transport model it is suggested that the wording be amended to state: "Potential New Intersection Upgrades".

Figure 3.15 Indicative Implementation of Phased Development

The Haslams Precinct including the Hill Road intersection site has been identified as 'long term development'. This site needs to be developed in the short term as a catalyst to facilitate further road infrastructure upgrades and street connections into the SOP and Carter Street Precincts. This would improve vehicle accessibility to / from both precincts and subsequently spread the traffic load. Therefore phasing of development of this Precinct needs to be identified as 'short term'.
3.9.2 Major Event Operations Capability

This section discusses problems that are likely to occur (i.e. acknowledging traffic impacts from development and the events affecting the capacity of the local and regional road networks). However, it lacks detail in commenting on how these issues will be properly managed / addressed. This should be corrected.

TfNSW would be interested in progressing discussions around the possibility of expanding the use of integrated ticketing for key events in the precinct. An Integrated ticketing requirement could be included in all major venue hire agreements, which would provide a seamless transport experience to the event patrons while continuing to grow attendance at events.

4.4 – Event Access and Closures

The statement is made that the Town Centre will maintain a capacity to host 250,000 event patrons. Concerns are raised that the rail/bus/road network would not be able to cope with the ingress and egress movements of this level of patrons to the Sydney Olympic Park site. Past experience suggests the current transport network can be put under strain with the ingress and egress of 140,000 patrons on-site;

Maintaining the exclusive road network for the Major Event bus movements during major events is essential for the continued operations of the Major Event Bus Network;

The documents states that the Holker Busway will continue to be closed to public access, this is essential for Major Event Bus operation.

4.5.1 – Land Use Controls

Table 4.2 (Allowable Land Uses) identifies that Child Care Centres are permitted within Residential Zones. Given that residential zonings are proposed adjacent to Hill Road it is requested that an amendment is made to ensure that Child Care Centres are not permitted fronting Hill Road.
5.9 Haslams Precinct
Figure 5.66 Haslams Precinct Building Zone and Setbacks Plan

Figures 5.61 to 5.66 need to be amended as (illustrated below) to include the Hill Road widening and the requirements at the John Ian Wing Parade and Access Road intersection to the adjoining Carter Street Precinct.

5.0 Precinct Controls and Guidelines