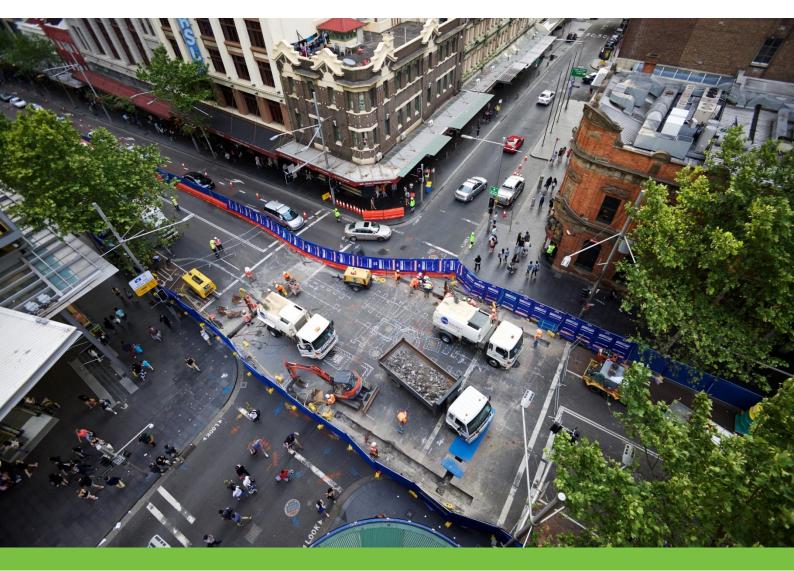
Response to the CSELR Planning Modification Report (SSI–6042)

City of Sydney Town Hall House 456 Kent Street Sydney NSW 2000

December 2014



(Image courtesy of TfNSW)





city of Villages

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Executive Summary

Summary of the City's response to the changes proposed in the Modifications Report (Modification No1)

The City recommends the following in response to the proposed modifications to the CSELR:

RECOMMENDATION 1:

• That close collaboration with the City of Sydney is required to be undertaken to address the outstanding issues raised previously by the City.

RECOMMENDATION 2:

• That the proponent address detailed operational and functional issues arising from the extended length of the LRV's, including, but not limited to, minimising stop infrastructure, pedestrian movement at and around light rail stops, and traffic considerations due to travel time through intersections.

RECOMMENDATION 3:

- Delete proposed left hand turn from George St to Grosvenor St;
- Revert to previously approved side platform arrangement for Grosvenor St stop;
- Widen eastern and western footpaths on George St adjacent to Grosvenor St stop as previously approved;
- Comply with minimum paving widths as per Clause 1.6.9 of Schedule 7 Technical Requirements of the Development Agreement.

RECOMMENDATION 4:

• Widen pavements as shown between Bathurst and Goulburn Sts, in addition to the proposed widening along both sides of George St between Wilmot and Bathurst Sts.

RECOMMENDATION 5:

• The proposed location for the discharge of seepage water from the new underground infrastructure must be decided in consultation with the City of Sydney, and must consider flood studies and long term impacts to adjacent areas.

RECOMMENDATION 6:

• The design of the public domain and resolution of the issues arising from the longer LRVs must be undertaken collaboratively with the City through regular design consultation not solely through the Reference Group.

RECOMMENDATION 7:

- Clarify if Anzac Pde will be widened on the western side, north of Dacey Avenue (currently a grassed road reserve);
- Redesign the shared section of the bus and light rail corridor south of Robertson Road and around to Alison Road to have no or less impact on the trees, investigating the option to relocate the pedestrian/cycleway path to the western side of Martin Road;
- Clarify whether the signalised pedestrian crossing Anzac Parade is being retained;
- Clarify whether the marked pedestrian/cycle crossing over the existing bus roadway will need to be signalised or whether it will be left as an uncontrolled crossing;
- Clarify whether there is still a bus right turn from Anzac Parade to the Bus Roadway.

RECOMMENDATION 8:

• If impacts to the upstream drainage systems that discharges into Centennial Park Ponds are identified, the City of Sydney is to be briefed about the findings and their implications.

RECOMMENDATION 9:

- The vertical alignment of the light rail corridor needs to be clarified for the length of the route in the Sydney LGA;
- Any modification to the cross section of the road as a result of the introduction of the third rail wire free power supply must comply with consent condition B65.

RECOMMENDATION 10:

- An assessment of the number of trees to be removed under the option to have five lanes on Anzac Parade during construction should be undertaken;
- A request should be made to RMS to approve five lanes and a tidal flow traffic option during construction of the Moore Park tunnel.

RECOMMENDATION 11:

• That the Moore Park East Substation be located near the southern side of the intersection of Lang Road and Anzac Parade as presented in Figure 6.2d of the Submissions Report Volume 1.

RECOMMENDATION 12:

- Signalise Valentine St to allow a right hand turn to travel south along George Street by relocating the existing pedestrian signals in George Street near Valentine Street to the intersection of Valentine Street;
- Undertake footpath widening at the George Street/Valentine Street intersection.

RECOMMENDATION 13:

 Amend graphics in the Modifications Report to show closure of Adelaide Street as existing.

RECOMMENDATION 14:

- That the intensification of the use is assessed in the forthcoming Operational Noise & Vibration Review (ON&VR), along with the impact on noise affected receivers;
- That at the ON&VR stage, effective mitigation measures a will need to be correctly identified and implemented to control noise impact below trigger levels, and if this cannot be achieved, a solution is implemented in consultation with the noise and vibration affected parties.

RECOMMENDATION 15:

• That redesign of the footpath, trees and lighting in lieu of World Square platform and around the Grosvenor Street platform be undertaken in consultation with the City.

RECOMMENDATION 16:

• The retention of a taxi rank to the south of the Four Seasons Hotel is to be undertaken without loss of footpath width.

RECOMMENDATION 17:

• That the proposed amendments to the project boundary in the Sydney LGA not be approved.

RECOMMENDATION 18:

• Consult with the City of Sydney in relation to any changes that impact on Martin Road.

Introduction

Background

The NSW Government will soon begin work on a \$1.6 billion 12-kilometre light rail line, from Circular Quay, running along George Street, and on to Randwick and Kingsford.

The City of Sydney has contributed \$220m to the public domain elements of the project and is working closely with the NSW Government to create inviting public spaces where people want to shop, visit and do business.

The City and TfNSW have signed a Development Agreement that describes the scope and standard of design and construction of aspects of the project, including paving, trees, lighting and urban domain layout.

The City has provided input into the previously exhibited CBD South East Light Rail (CSELR) planning documents, namely:

- City of Sydney CSELR Environmental Impact Statement (EIS) Submission, 20 Dec 2013
- City of Sydney Response to the Submissions Report (SSI 6042) for the CSELR, 2 April 2014, and
- City of Sydney comments on the Draft Conditions of Consent, 28 May 2014.

The City welcomes the opportunity to comment on the proposed design modifications arising from the recent construction tender process.

Summary of previous responses to planning proposal

The key outstanding and unresolved issues for the City arising from the CSELR Infrastructure Approval (June 2014) that have not been addressed in the Modifications Report remain as:

- The level of consultation that the PPP is required to undertake with the City has not been formalised, particularly in regard to Stop Access and Design;
- Management of coach access to the Marriott Hotel in Pitt St has not yet been resolved;
- Detailed requirements of the design of the Chalmers St interchange, particularly the provision of a separated cycleway, has not been resolved;
- Details regarding the impacts of vertical alignment on the stop design have not been clarified;
- The alignment of the light rail corridor through the CBD has not been confirmed;
- The City's preference for a central alignment through Olivia gardens has not been confirmed;
- The City's concerns regarding drainage design, including addressing known inefficiencies, has not been addressed;
- The City's concern that a review of the proposed loss of Morton Bay figs from Moore Park be undertaken (in fact, further trees are proposed for removal in the Modifications Report);
- That late evening uses of the City's and other buildings are considered and that of those buildings, required amelioration for the transformer noise impact considers the older façade construction methodologies and acceptable internal noise amenities based on use;

• The City's requirements for tree protection in Belmore Park and Martin Place compounds has not been formalised in the planning approval.

RECOMMENDATION 1:

That close collaboration with the City of Sydney is required to be undertaken to address the outstanding issues raised previously by the City.

Response to the proposed Modifications

Overall Response

The primary proposed modification that affects the City is that the CSELR will now comprise 67 metre long vehicles (LRVs) which will change sections of the alignment, platform length and design, frequency of vehicles, headways, etc and an increase the number of noise exceedences predicted for Devonshire St.

While improving functionality of the system, the visual and functional impacts of the longer vehicles in the constrained urban environment should not be underestimated.

In general, the City considers that impacts such as the potential overflow of passengers from stops onto the City's footpaths, and the impacts of longer vehicles on pedestrian wait times have not been adequately explored.

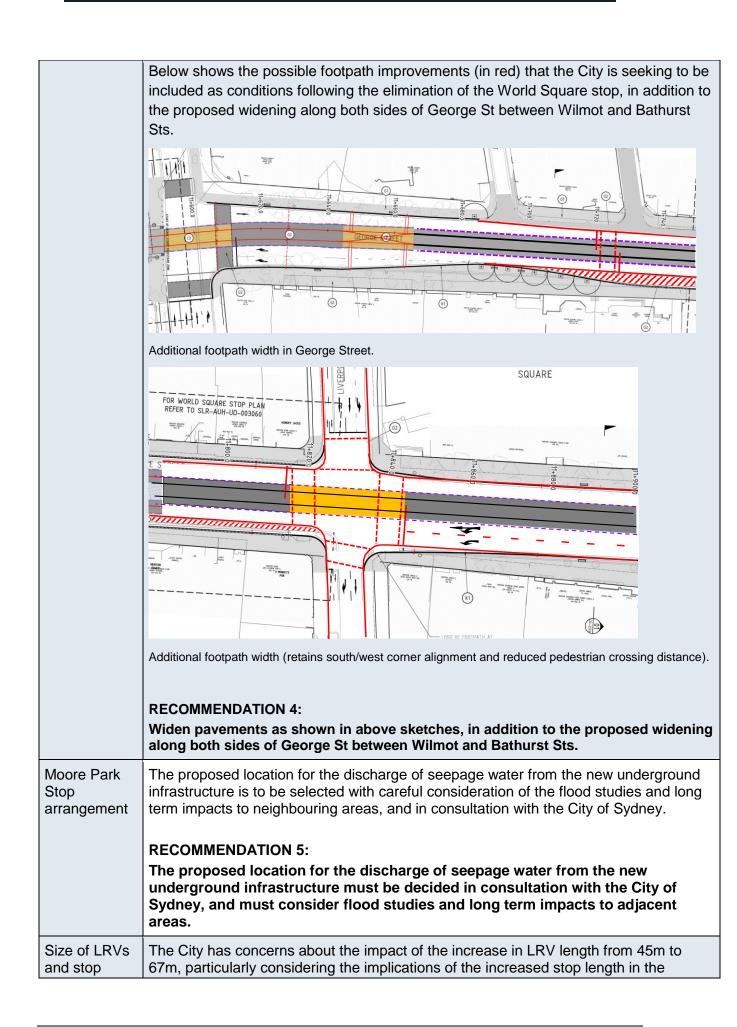
RECOMMENDATION 2:

That the proponent address detailed operational and functional issues arising from the extended length of the LRV's, including, but not limited to, minimising stop infrastructure, pedestrian movement at and around light rail stops, and traffic considerations due to travel time through intersections.

Specific Responses to the Modifications Report (Modification No 1)

Proposed Modification	City's Response
Grosvenor St Stop arrangement	The proposed platform arrangement for the Grosvenor St stop has changed from a central track running and two side platforms to an off-set north and south central platform. The proposal also provides for a new left hand turn lane off George St into Grosvenor St, which precludes wider eastern and western footpaths as in the approved proposal.
	Traffic access on George Street to travel north in this block will only be right from Bond Street or left turn from Margaret Street. This was the arrangement in the original proposal with only one north bound lane to cater for traffic flow.
	There has been no change since the Infrastructure Approval that would generate additional northbound traffic and the City considers that a single northbound lane only is necessary.
	In addition, a single northbound lane in George Street will better provide for pedestrians as the crossing will be shorter and the eastern and western footpaths can be widened.

	Boorge Street Grownor Street stop Left hand turn lane retained as at of the modified design		
	Note: Indicative only. Subject to detailed design. Figure 3.3 Proposed modification to the Grosvenor Street stop		
	The new arrangement does not provide the following:		
	 Reduced functionality of the stop, as there will be no direct passenger access to the platform from the eastern footpath, which will be subject to the highest passenger load (in the PM peak); No additional footpath width for eastern and western footpaths; 		
	The City's preference is to maintain a side platform arrangement wherever possible for overall network consistency and wayfinding legibility and to reinforce the view corridor that already exists along George Street. The City is also concerned that the island platform does not allow for future proofing of a larger pedestrian environment.		
	In addition, footpath widths must not be reduced below the widths specified in Clause 1.6.9 of Schedule 7 - Technical Requirements of the Development Agreement that TfNSW has entered into with the City of Sydney.		
	RECOMMENDATION 3:		
	Delete proposed left hand turn from George St to Grosvenor St;		
	Revert to previously approved side platform arrangement;		
	Widen eastern and western footpaths on George St as previously approved;		
	Comply with minimum paving widths as per Clause 1.6.9 of Schedule 7 - Technical Requirements of the Development Agreement.		
Removal of World Square Stop	The City supports removal of the World Square platform provided footpaths on the eastern and western sides of George Street from Liverpool Street to Bathurst Street are widened.		
	The change also eliminates the need to trim the south west corner of the George Street and Liverpool Street intersection to provide a dual lane left turn (north to west) for the Liverpool Street cycleway.		

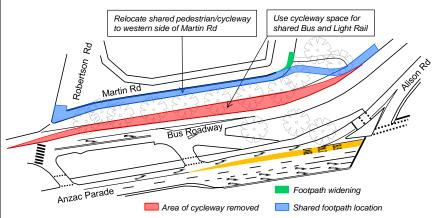


platforms	pedestrian area of George Street.
	The City is concerned that longer stops will result in:
	 more infrastructure (canopies, lighting, etc.) in the street, dominating the appearance of the public domain;
	 exacerbation of level differences between the footpath and platform levels, resulting in a poor outcome for the public realm immediately behind each stop;
	 loss of space in the public realm, and the resulting impact on the city and property owners' ability to activate the street;
	• an impact on the economic vitality of the street given the reduction in available pedestrian and circulation space.
	The loss of space available in the public domain can be quantified as follows:
	 At the Circular Quay Stop, the increased stop length and track work uses an additional 440sqm of public domain and creates a barrier directly in front of Circular Quay Station entrance;
	• The additional area required for the Wynyard Stop extension is approx.142 sqm and the public space affected directly behind the extension equates to approx. 205 sqm;
	• The QVB Stop extension will require 142 sqm and public space behind the stops equals 275 sqm;
	The Town Hall Stop extension requires an additional 142 sqm of public domain space;
	• The Rawson Place extension uses an additional 71 sqm of public space and the area affected adjacent to the extension requires an additional 115 sqm of public domain space.
	RECOMMENDATION 6:
	The design of the public domain and resolution of the issues arising from the longer LRVs must be undertaken collaboratively with the City through regular design consultation, not solely through the Reference Group.
Realignment along Alison Rd	The City in principle supports the proposed modified Light Rail design to continue south on Anzac Parade past Dacey Avenue and Alison Road as this will improve the traffic signal operations at the intersection.
	Although not shown, the change does appear to require Anzac Parade to be widened on the western side, north of Dacey Avenue (grassed road reserve).
	The proposed modification also includes widening the bus roadway south of Robertson Road, which will remove a significant number of trees. The green area between Martin Road and the cycleway is part of Martin Road's road reserve. This reserve is under the authority of the City of Sydney, hence detailed discussion needs to take pace with the City about the proposed changes before they can be agreed to.
	There is a significant impact for the residents of Martin Road and Robertson Road with the proposed additional removal of trees. The area is separated from the cycleway, the busway and Anzac Parade by this wall of trees. Assessing the modification as an "overall improvement" due to the retention of some of the trees previously impacted in

Tay Reserve is not realistic given the highly negative impact caused by the removal of trees near Martin Rd and Robertson Rd.

The City considers that the design from the shared section of the bus and light rail corridor south of Robertson Road and around to Alison Road must be reconsidered to have no or less impact on the trees.

If the design cannot accommodate bus roadway, light rail and shared pedestrian/cycleway path without impact on the trees, then an option would be to relocate the pedestrian/cycleway path to the western side of Martin Rd. This will allow the use of the additional pedestrian/cycleway space as part of the shared section of bus and light rail.



There would be a loss of parking which can be recovered by introducing some angle parking in the wider sections of Robertson and Martin Roads.



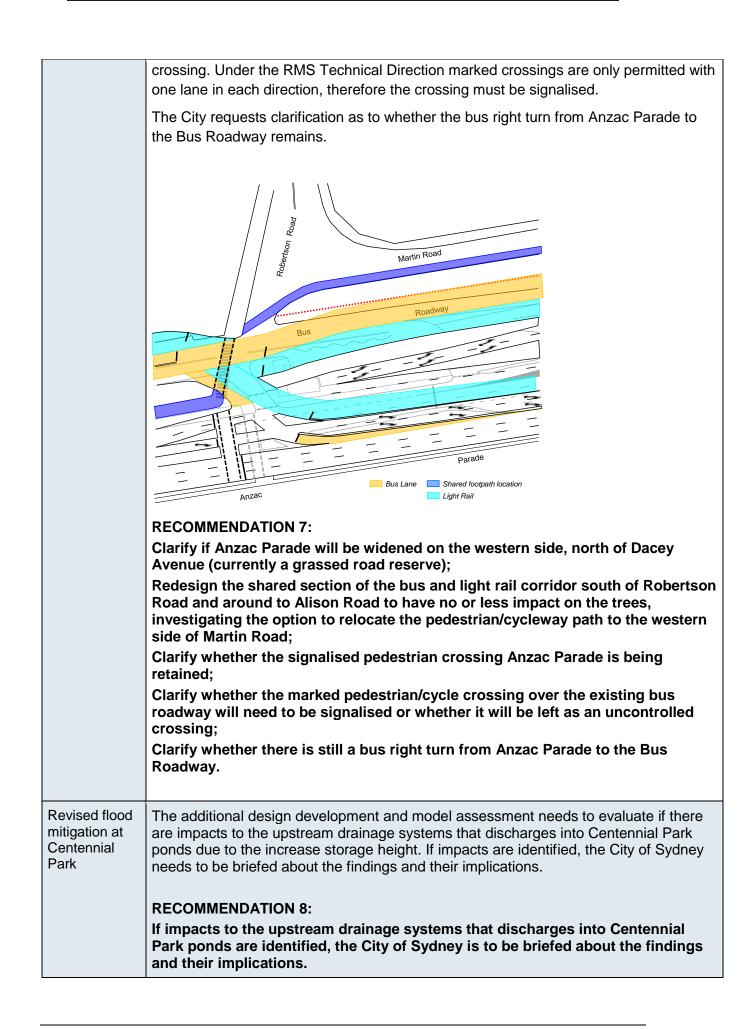
View south along Bus Roadway



View south along shared path and Martin Rd path

The new arrangement for Anzac Parade and Robertson Road did not indicate the traffic signal changes for the light rail access to and from the rail corridor. However the City assumes the signalised pedestrian crossing Anzac Parade is being retained, and notes that the road widening will increase the pedestrian crossing width and time.

In addition, there is a marked pedestrian/cycle crossing over the existing bus roadway and there is no indication if this will need to be signalised or left as an uncontrolled



Third rail wire- free	The option of a third rail to provide wire free sections of light rail is supported, as is the proposed extension of the wire-free section from Hunter Street to Alfred Street.
infrastructure within CBD	It is understood that the system would likely require power supply boxes under the road and under the third rail itself, however there could be issues with the depth of road required to fit the necessary equipment. In many section of the CBD the road depth is very shallow before hitting services and/or tunnels - for example outside of Town Hall the slab covering the station is only about 250 mm below the road surface.
	Should this additional power supply equipment require the road level to be raised, the implications to the flooding conditions are to be considered carefully as the capacity of the road to carry water will be significantly reduced. Any loss in road capacity needs to be compensated with underground capacity, requiring the stormwater drainage system to be upgraded to accommodate the new situation.
	The project's conditions of consent B65 are fundamental and need to be maintained, including that the maximum increase of flood levels in a 100 year average recurrence interval flood event is 10mm. This needs to be a guiding principle when assessing the impact on the flooding due to modification of the cross sections of the road.
	RECOMMENDATION 9:
	The vertical alignment of the light rail corridor needs to be clarified for the length of the route in the Sydney LGA;
	Any modification to the cross section of the road as a result of the introduction of the third rail wire free power supply must comply with consent condition B65.
Revised construction	The City has serious concerns with the number of additional trees to be removed next to Anzac Parade and south of Gregory Avenue.
methodology for the tunnel	The construction arrangement needs to be reviewed to try and avoid tree removal.
under Anzac Parade	To provide more width, the eastern shared footpath could be moved next to the bus roadway and the western footpath moved into the park. This will provide additional space for the 6 traffic lanes.
	An alternative would be to have a tidal flow system, 3 lane inbound and 2 lanes outbound for AM peak and reverse for PM Peak.
	There is approximately 36 metres between the eastern and western footpath (Inclusive of footpaths).
	RECOMMENDATION 10:
	An assessment of the number of trees to be removed under the option to have five lanes on Anzac Parade during construction should be undertaken; A request should be made to RMS to approve five lanes and a tidal flow traffic option during construction of the Moore Park tunnel.
Revised substation sites	The City supports the proposed relocation of the Surry Hills substation from the new Wimbo Park to be underground within the western portal of the Moore Park tunnel.
	However no clarification has been given about the final location of the Moore Park East substation. The project's Environmental Impact Statement identified the location of a substation on Moore Park East on the north eastern corner of Lang Road and Anzac

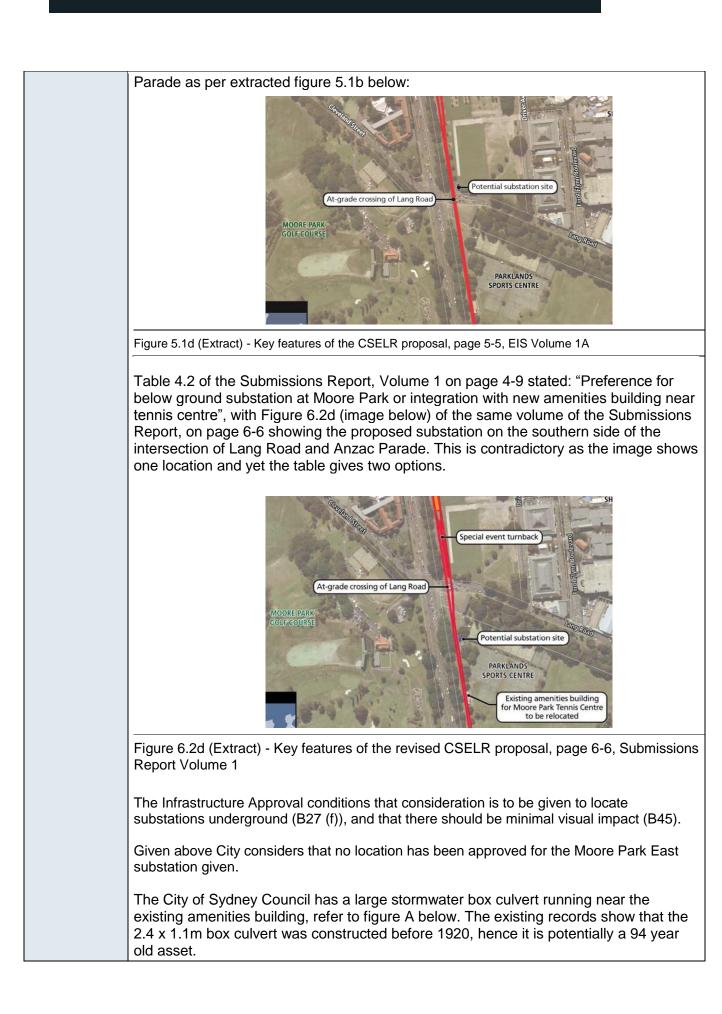
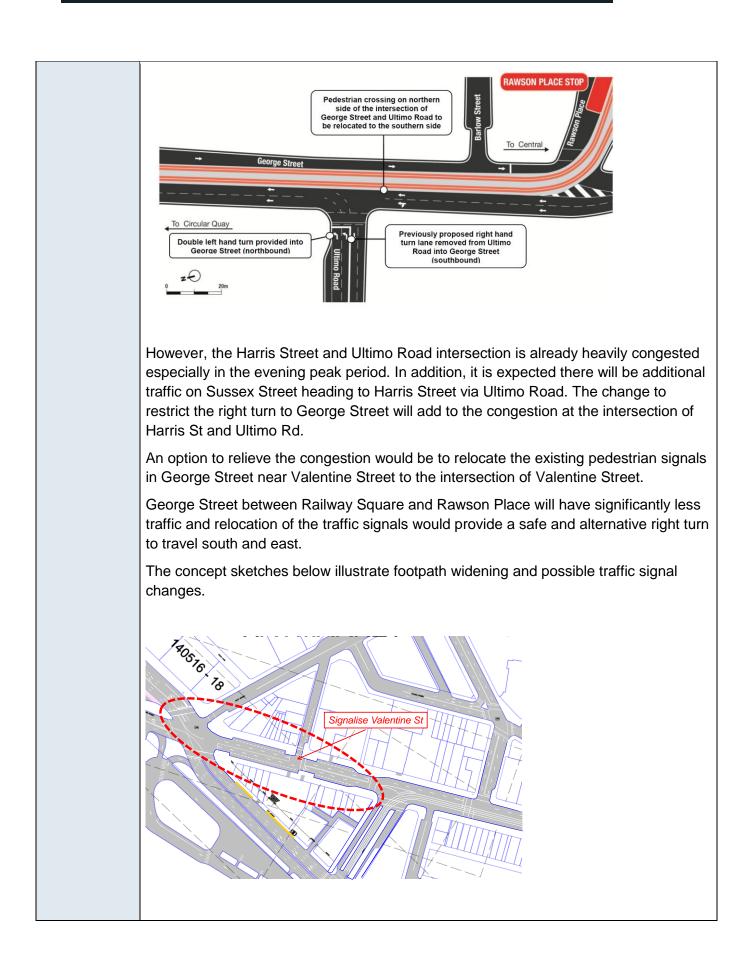
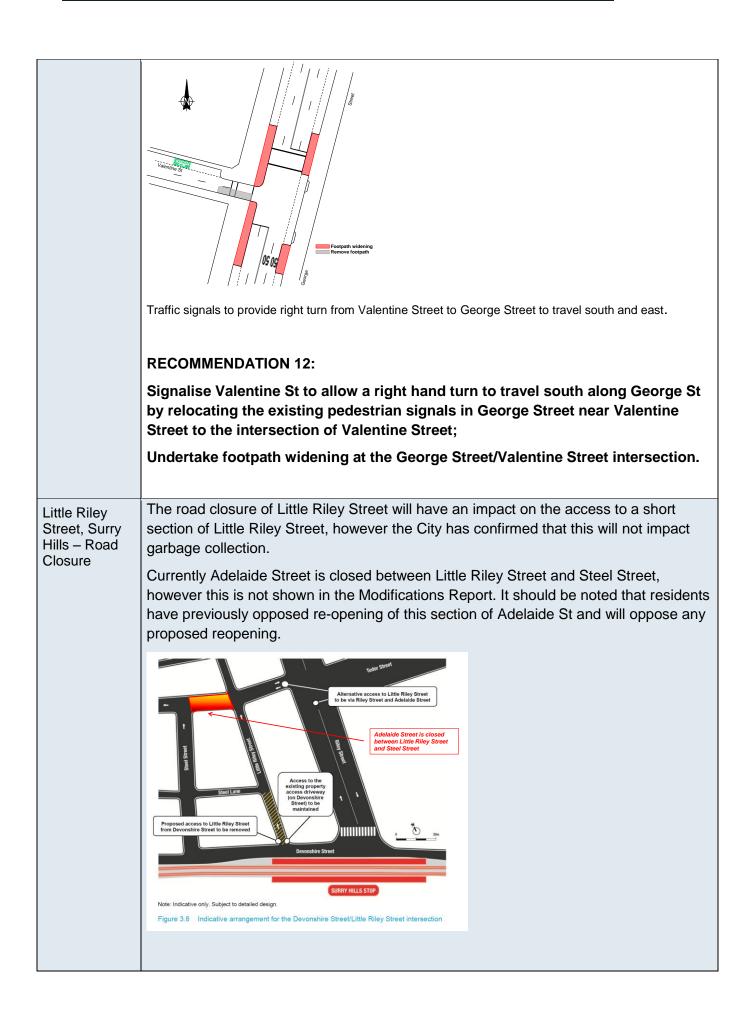


	Figure A - City of Sydney's Stormwater Drainage System at Moore Park between Lang Road and Roberston Road – grey shows area potentially impacted by any above-ground substation If the proposed substation is constructed next to the new amenities building, it would be located over this stormwater drainage box culvert. The box culvert could be reaching its life expectancy and it was not design to accommodate the load that the substation would transfer to it. This could have serious consequences for its structural integrity, affecting the new substation, making future maintenance and repair operations difficult and significantly more expensive for the City. The City of Sydney opposes the construction of the substation near the amenities building and recommends the construction of the underground substation near the southern side of the intersection of Lang Road and Anzac Parade as presented in Figure 6.2d of the Submissions Report Volume 1 (above). RECOMMENDATION 11: That the Moore Park East Substation be located near the southern side of the intersection of Lang Road and Anzac Parade as presented in Figure 6.2d of the Substation be located near the southern side of the intersection of Lang Road and Anzac Parade as presented in Figure 6.2d of the Submissions Report Volume 1 (above).
	Additional issues the City wishes to raise
George St/Ultimo Rd intersection	The proposed relocation of the pedestrian crossing in George Street from the northern side of Ultimo Road to south of Ultimo Road will maintain pedestrian access. The modified design bans the right turn from Ultimo Road to George Street (East to south) which will restrict local access and divert traffic to Harris Street via Ultimo Road. The City has no objection to this.





	RECOMMENDATION 13:
	Amend graphics in the Modifications Report to show closure of Adelaide St as existing.
Reduced stop length – Chalmers St	The reduced length of the Chalmers St stop to accommodate a 67m LRV (ie a 75m platform) instead of a 90m LRV is supported. This may also assist in facilitating the design of the required separated cycleway in Chalmers St between Prince Alfred Park and Eddy Ave.
Increased noise exceedences – Devonshire St	 The extended length of the LRVs will result in increased sound exposure levels, along with the frequency of exposure to noise. There is potential for exceeded trigger levels to occur at 101 location groups with the proposed modification, as opposed to the 15 that were predicted to occur under the original approval. However, it does not quantify by what magnitude trigger levels are predicted to be exceeded at the new locations. It will be important to reduce this footprint through considered engineering design, construction and operation mitigation measures to the lowest reasonable and feasible impact. The City notes the requirement to study and review noise and vibration mitigation measures associated with control of operational impact, given the increased footprint of the operations associated with the longer LRVs. RECOMMENDATION 14: That the intensification of the use is assessed in the forthcoming Operational Noise & Vibration Review (ON&VR), along with the impact on noise affected receivers; That at the ON&VR stage, effective mitigation measures a will need to be correctly identified and implemented to control noise impact below
	trigger levels, and if this cannot be achieved, a solution is implemented in consultation with the noise and vibration affected parties.
Tree removal	It is appreciated that TfNSW wish to find a balance and not increase the overall number of trees being removed as a result of the project, however tree removal on George St (and subsequent replacement) is part of the City's Concept Design to create an iconic street, as per the Development Agreement. Therefore the proposed modification to retain trees around the Grosvenor Street platform and as a result of removal of the World Square stop is not supported.
	RECOMMENDATION 15:
	That redesign of the footpath, trees and lighting in lieu of World Square platform and around the Grosvenor St platform be undertaken in consultation with the City.

Omissions from the Modifications Report

Omission	Discussion
Impact of the longer vehicles on the	The City considers that the impacts of the longer LRVs on access to Ward Park, pedestrian wait times, and traffic flow due to LRV extending across intersections while waiting have not been adequately considered

functionality of Devonshire Street	in the Planning Modifications Report.
Sileei	RECOMMENDATION: (same as Recommendation 6)
	The design of the public domain in Devonshire Street and resolution of the issues resulting from the longer LRVs in Surry Hills must be undertaken collaboratively with the City through regular design consultation, not solely through the Reference Group.

Design refinements & clarifications

Refinements & Clarifications	
Retention of existing taxi rank on George St	The City supports the retention of the existing taxi rank at the Four Seasons Hotel providing that there is no loss of footpath. RECOMMENDATION 16: That the retention of a taxi rank to the south of the Four Seasons Hotel be undertaken without loss of footpath
	width.
Minor amendments to project boundary	No substantiation or program has been provided for the proposed extensions to the project boundaries. The City is concerned at the potential impact of these on businesses (eg on Crown St, Surry Hills). The City rejects the extensions proposed in the Modifications Report and considers that any extensions to the project boundary should be considered on merit. The City's Development Agreement with TfNSW provides a mechanism to allow such extensions if required. RECOMMENDATION 17: That the proposed amendments to the project boundary in the Sydney LGA not be approved.
Stakeholder Consultation	The extent of the City of Sydney's local government area includes Martin Road in Centennial Park. As such, the arrangement of the Moore Park stop, changes to alignment on Anzac Parade and other issues in the area are of interest to the City as a stakeholder. RECOMMENDATION 18: Consult with the City of Sydney in relation to any changes that impact on Martin Road.

20 CSELR – Response to Planning Modification (Modification 1)