



Charles Street Square

Parramatta

PREPARED FOR
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Charles Street Square

Revision Schedule

Date	Revision	Issue	Prepared By	Approved By		
29/05/2020	1	Preliminary Construction Phase Traffic and Pedestrian Management Plan	NG	JW		
07/09/2020	2	Construction Phase Traffic and Pedestrian Management Plan	NG	MP		

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1. Introduction

1.1 Background

Northrop Consulting Engineers (NCE) has been engaged by Spackman Mossop and Michaels (SMM) to prepare a Construction Traffic and Pedestrian Management Plan (CTPMP). The CTPMP is for the City of Parramatta Council. The CTPMP is for the purpose of the upgrading of Charles Street Square in Parramatta.

This CTPMP is to address the criterion of the Request for Quotation for the Charles Street Square Stage 1 Renewal Design Consultancy Services. The criterion is as per the following:

The consultant will inform the preparation of draft Traffic and Pedestrian Management Plan for the project's construction period prior to tendering for a Traffic Committee approval.

In order to meet the above, this CTPMP is to cover the following:

- Existing conditions of the site;
- Overview of construction activities; and
- · Construction traffic management.

1.2 Limitations

This report has been prepared upon conditions at the time of issue prior to the nomination of a contractor and is a concept only. Once the contractor has been nominated for the works, the contractor will be required to provide a detailed Construction Traffic and Pedestrian Management Plan in line with their construction methodology and staging for the works for the approval of the City of Parramatta Council Traffic Committee. This report is a guide only for the purpose of the Review of Environmental Factors (REF) submission to the City of Parramatta Council.

1.3 References

In preparing this report, the following has been referred to:

- Development plans as provided by SMM;
- Roads and Maritime Services Traffic control at work sites Technical Manual (27 July, 2018);
- AS1742.3:2019 Manual of uniform traffic control devices Traffic control for works on roads;
- Observations by NCE conducted on 25 26 November, 2019 and 29 December, 2019; and
- Other documents as referenced in this report.



2. Existing Conditions

2.1 Subject Site

Charles Street Square is located on the corner of Charles Street and Phillip Street in Parramatta.

The site is a connection from the road level down to the river level. This connection links Parramatta Wharf to the commercial area of Parramatta as well as the transport network noting there is a bus stop at road level. The site also links the riverfront walk (footpath along Parramatta River) to the commercial area of Parramatta.

Figure 1 illustrates the site and its surrounds.

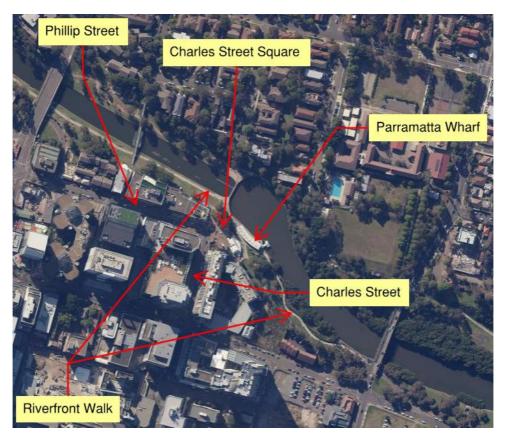


Figure 1 Subject Site and the Surrounds

2.2 Road Network

2.2.1 Charles Street

Charles Street is a road that is generally aligned in the North/South direction and connects Charles Street Square with George Street and therefore the remainder of the road network. Charles Street generally is a two way, two lane road until approximately 30m from the intersection with George Street. At this point, Charles Street has a two way, four lane arrangement with 2 lanes running in both the North and the South directions.

Charles Street between Charles Street Square and George Street has parking along both sides.

Figure 2 illustrates the view of Charles Street looking South from Charles Street Square.



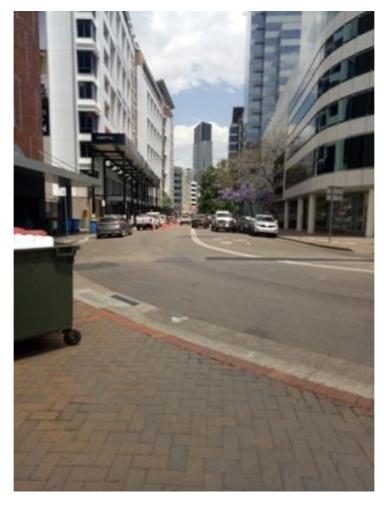


Figure 2 Charles Street looking South from Charles Street Square

2.2.2 Phillip Street

Phillip Street is a road that is generally aligned in the East/West direction and connects Charles Street Square with Smith Street and Wilde Avenue and therefore the remainder of the road network. Phillip Street generally is a two way, two lane road until approximately 45m from the intersection with Smith Street and Wilde Avenue. At this point, Phillip Street has a two way, four lane arrangement with 2 lanes running in both the North and the South directions (however on street parking may occur in this location restricting the use of both lanes).

Phillip Street between Charles Street Square and the intersection between Smith Street and Wilde Avenue has parking along both sides.

Figure 3 illustrates the view of Phillip Street looking West from Charles Street Square.





Figure 3 Phillip Street Looking West from Charles Street Square

2.3 Public Transport

There are alternate public transport modes within the vicinity of Charles Street Square. The public transport modes are able to provide transport for workers at the site that do not require to have a vehicle to work from. These public transport modes include:

- Taxi and ride share;
- Ferries;
- · Bus; and
- Train.

2.3.1 Taxi and Ride Share

Taxis and ride share vehicles provide connectivity to the greater area from Charles Street Square. At the time of the inspection, there was a taxi rank located at the corner of Wilde Avenue and Phillip Street. In other areas, drivers would need to park in available parking areas to let the public enter and exit the vehicle.

2.3.2 Ferries

Charles Street Square is located adjacent Parramatta Wharf as per Figure 4 (note the wharf has been upgraded since the photo).



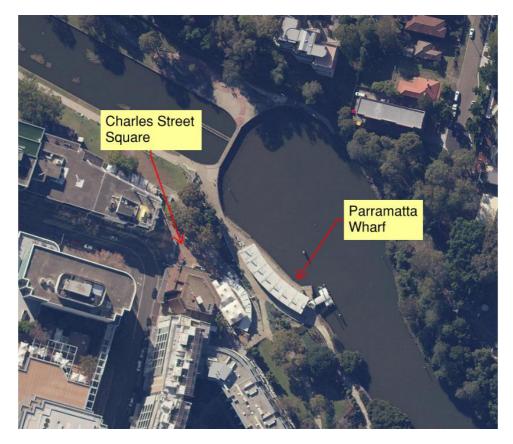


Figure 4 Charles Street in relation to Parramatta Wharf

Ferries which service Parramatta Wharf are operated by Transport for New South Wales.

The ferries connect Parramatta to Circular Quay via the F3 route which then connects to the remainder of the ferry and public transport network.

A short distance from the ferry wharf at Circular Quay, there is connectivity to the Sydney Lightrail, train network and bus network.

The F3 route may not always run from Parramatta Wharf because of tides and the timetable should be checked regularly.

2.3.3 Bus

The closest bus stop to Charles Street Square is located along Phillip Street adjacent to 90 – 96 Phillip Street. Buses using this stop include Route 900 (which is a free Parramatta loop service) and a special service linking Parramatta Wharf with the next available ferry wharf during tide affected occasions or construction works along Parramatta River cancelling the ferry service.

Charles Street Square is also located within approximately 1.0km walking distance of Parramatta Interchange which has a range of bus services which connect the surrounding suburbs to Parramatta and therefore the greater network.

Bus routes which service Parramatta Interchange include:

- 802 Liverpool to Parramatta;
- 804 Liverpool to Parramatta;
- 806 Liverpool to Parramatta;
- 810 Merrylands to Parramatta;
- 810X Merrylands to Parramatta;



- 811 Pemulwuy to Parramatta;
- 811X Pemulwuy to Parramatta;
- 906 Fairfield to Parramatta;
- 907 Bankstown to Parramatta:
- 909 Bankstown to Parramatta;
- M91 Hurstville to Parramatta:
- M92 Sutherland to Parramatta; and
- T80 Liverpool to Parramatta.

2.3.4 Train

The closest train station to Charles Street Square is Parramatta Station.

Parramatta Station services the following lines:

- T1 North Shore and Western line travelling through the City;
- T2 Inner West and Leppington line travelling through the City; and
- T5 Cumberland line travelling from Leppington to Richmond via Parramatta.

The train stations provide connectivity to the greater Sydney area as well as regional areas serviced by intercity trains.

2.4 Pedestrian and Cycling Infrastructure

There are many pedestrian footpaths which link key public transport infrastructure to Charles Street Square. Links have also been provided between car parking infrastructure and Charles Street Square.

Intersections between key transport links and car parking infrastructure have generally been signalised and include pedestrian phases to allow for safe crossing periods.

The City of Parramatta website (accessed 19/05/2020) indicates there is bicycle parking located at Erby Place Car Park and Horwood Place Car Park. These bicycle parking spaces are within 800m of the site.

There are existing bicycle lockers at Charles Street Square. The City of Parramatta Council has indicated that the lockers will be removed at the commencement of construction and will not be available to the public noting the new design has new bike facilities including bike lockers.

It was observed during site observations that cyclists ride to both the Port Bar as well as the Riverside Deli Bar Café. The City of Parramatta Council has indicated they will liaise with key stakeholders in regards to the expectation of bicycle parking near the construction site for the duration of the construction works.



3. Overview of Construction Activities

3.1 Description of Construction Activities

The construction works at Charles Street Square will result in an aesthetically pleasing, accessible area to be enjoyed by the general public.

Charles Street Square at the time of the observation's provided a link for pedestrians and cyclists (when they are walking their bicycle) from the corner of Charles Street and Phillip Street to Parramatta Wharf, Port Bar Restaurant and the Riverfront Walk as well as bridges which connect the Northern Side of Parramatta River. Construction activities are anticipated to temporarily remove this link for the safety of non-construction workers. Upon completion of the works, the link will be restored.

The works will need to be staged to allow for maximum active pedestrian and cyclist activity in the area. The contractor may be able to leave portions of Charles Street Square open to allow pedestrian and cyclist flow through the area. The contractor of the works will need to supply a program showing the staging of the works and confirming safe pedestrian and cyclist movements around the site.

The works also extend to the entry to 90-96 Phillip Street. The major works impacting the driveway will be the replacement of the pavement in the verge between Charles Street and the start of the driveway. Construction work at the driveway will need to be coordinated with the users of the building.

A range of construction vehicles will require access to the site throughout the construction works. Trucks requiring access to the site will range in size and weight inclusive of but not limited to heavy rigid vehicles, mobile cranes and concrete trucks.

3.2 Work Hours

Construction work is to be complete during the approved hours from the City of Parramatta Council. Current proposed hours are:

- Monday to Friday 7:00am to 5:00pm;
- Saturday 8:00am to 4:00pm; and
- Sunday and Public Holidays No work.

Some night work and work outside the above listed may need to be complete as part of these works inclusive of delivery of plant to the site. These works are to be managed by the contractor and must be approved by the relevant authorities prior to commencement. If approved, the contractor must follow the conditions set out by the relevant authorities.

3.3 Construction Worker Induction

All workers and subcontractors for the site will be required to undergo an induction for the site organised and carried out by the head contractor.

This induction should include relevant information on traffic and pedestrian management such as:

- The site entrance and exit for construction vehicles;
- Emergency procedures;
- Vehicle access paths on site;
- Routes for construction vehicles to and from the site;
- Driver protocols; and
- Parking of personal vehicles and bicycles on the site.



It is assumed the induction would also include relevant information on standard environment protocols, work health and safety, emergency procedures and any other site-specific relevant information.

3.4 Construction Worker Parking

With the constraints of the site, there may be no car parking available on site.

Workers, including management for the head contractor, will be advised to use active travel, public transport or an existing car park within the Parramatta area.

The head contractor will need to arrange for an appropriate "drop off zone" which workers and subcontractors can use prior to parking their car to prevent them from carrying tools, equipment and materials to site.

The "drop off zone" could be in the form of an on-street works zone which will be further discussed in section 3.6 of this report.

3.5 Construction Site Access

The construction site access will be dependent on the contractor's staging of the works and the other construction works occurring in the surrounding area. For the purpose of this report, we have proposed two site access and exit locations and works to be complete from Parramatta River.

There will be a proposed construction entry location at the corner of Charles Street and Phillip Street as well as to the West along the Riverfront Walk.as per Figure 5 (see Appendix A for full drawing).

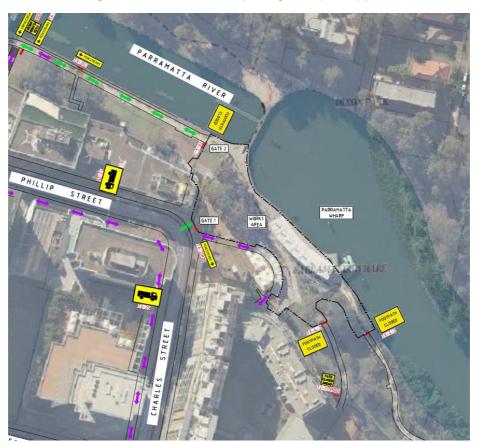


Figure 5 Construction Entry/Exit Locations

The proposed entry/exit location to the North of the site would need to be accessed from the gate located at George Khattar Lane (located approximately 250m West of Charles Street Square) as



negotiated with the City of Parramatta Council Open Spaces team. The use of this entry location may not allow for all vehicles to access the site as required with the City of Parramatta Council Open Spaces team to inform the contractor of the permitted vehicles. This entry and exit location would be pending approval from City of Parramatta Council and require all appropriate pedestrian management along the Riverfront Walk.

The entry/exit location at the corner of Charles Street and Phillip Street will need to be reviewed by the head contractor prior to possession of site. Due to site dimensions, it is unlikely vehicles will be able to drive both in and out in a forward direction. The contractor is to liaise with relevant authorities in regards to vehicles access to the site.

184 – 188 George Street is a block with no permanent buildings located on it. The block provides access from George Street to the Riverfront Walk. During observations undertaken by NCE on 23 May, 2020, it was noted that 184 – 188 George Street was occupied by Meriton and hence has not been proposed as a possible entry and exit location.

The contractor may need to propose an alternate construction entry/exit location for approval by the relevant authorities pending their methodology for the works. The City of Parramatta Council have advised they are currently in discussion with Parramatta Light Rail to investigate if access is possible from near the Gasworks Bridge – the proposed contractor is to negotiate this further with the City of Parramatta Council.

The contractor may review the possibility of engaging a suitably qualified and experienced subcontractor to barge in and out construction materials and waste and working from a pontoon on Parramatta River. The contractor would be required to get any marine approvals should they use Parramatta River as a transport route.

The contractor will need to ensure that the Port Bar and the Riverside Deli Bar Café can remain operational through the works with both pedestrian and delivery access to them. Liaison between the contractor and the relevant parties will need to occur to ensure all parties are under agreement and no party is disadvantaged during the works.

Due to the small road frontage and limited space on the site, it is unlikely that most construction vehicles will be able to enter and exit the construction site in a forward direction. It is noted that this would be similar to the conditions sighted by NCE on the 25 – 26 November, 2019 and 29 December, 2019. During the time sighted, it was noted passenger vehicles up to heavy rigid vehicles were reversing in or out of the site with no traffic control. The contractor will need to obtain approval to reverse vehicles out of the site and have appropriate controls in place to minimise the likelihood of any incidents through the development of a site specific temporary traffic and pedestrian management plan. Given the higher number of vehicle movements likely to be generated by the construction activities, it is anticipated that traffic controls will be required.

3.6 On-Street Works Zone

With the tight on-site constraints, it is advised the contractor applies for "on-street works zone" parking. This parking could be along either Phillip Street of Charles Street in close proximity to the work site. The contractor would be required to liaise with relevant authorities in regards to the possible locality of this parking due to the nature of the works and the established surrounding work sites.

The "on-street works zone" would allow the contractor and subcontractors to park their vehicle to transport tools, materials and equipment to site.

As per the observations undertaken by NCE on 23 May, 2020, there was existing on-street works zone parking along Charles Street and George Street in close vicinity to the site. These work zones were being used by Meriton during the time of the observations. The contractor will need to liaise with



the City of Parramatta Council to whether additional on-street works zone is required or whether the current work zones parking can be utilised for these works.

3.7 Construction Traffic Volumes

The proposed construction works will increase the number of vehicles using Phillip Street, Charles Street and surrounding roads with the construction vehicles entering and exiting the site from other areas of Sydney and New South Wales.

The actual number of vehicles accessing the site will be determined by the City of Parramatta's construction time period and the contractor's program. The number of vehicles will vary pending the works being carried out on any particular day.

Due to the size of the site, it could be assessed that approximately 15 vehicles will access the site to deliver materials and equipment or remove waste and equipment from the site. This would result in a total of 30 additional vehicle movements per day generated from the site.

30 additional vehicle movements would provide a negligible increase in the total number of vehicles for both Charles Street and Phillip Street.

3.8 Construction Vehicle Routes

Construction vehicle routes will need to be specified by the contractor. These routes will need to consider vehicle heights and vehicle masses in relation the vehicle routes capacity.

The contractor may advise for the site as a whole that all drivers are to use state routes where possible which are shown in Figure 6 by the yellow and black lines.



Figure 6 New South Wales State Roads Near Charles Street Square

The contractor may identify particular roads for subcontractors and construction vehicles to use when off the state roads. The City of Parramatta is to identify whether a dilapidation of the roads on the particular routes chosen will be required to retain evidence of the preconstruction conditions of the road.



4. Construction Traffic Management

4.1 Traffic Guidance Scheme

A preliminary traffic guidance scheme will be prepared for this submission in line with AS1742.3 and the Traffic control at work sites Technical Manual. This will show the principles to which the temporary traffic management plans will need to cover. The final temporary traffic management plans will need to be approved by the City of Parramatta Council prior to the commencement of construction.

Detailed information for the site is contained within the Traffic control at work sites Technical Manual. The control of traffic at this site must be undertaken in accordance with Work Cover requirements, the contractor's construction management plan and the contractor's work health and safety plan.

4.2 Pedestrian and Cyclist Management

Pending the contractor's methodology, the entirety of Charles Street Square may be used for the construction site. During the construction at Charles Street Square, Pedestrian and Cyclist alternate routes will need to be identified to allow access to the Riverfront Walk and Parramatta Wharf.

At some time during the construction period, the verge at the corner of Charles Street and Phillip Street will be worked on. Pedestrians will need to be diverted to the other side of the roads during this construction stage.

The Riverfront Walk will also require works to be completed. During this time, pedestrians and cyclists will need to be diverted up to the roads and around Charles Street Square prior to heading back to the Riverfront Walk. The contractor is required to undertake detailed planning of this phase which will include liaison with Transport for New South Wales and adjacent landholders.

The contractor is to detail how pedestrians and cyclists will access the Port Bar. It has been advised by the City of Parramatta Council that the public toilets will not be operational for the duration of the works and therefore not need to be accessible to the public.

The contractor will need to detail these detours on a temporary traffic management plan for the city of Parramatta Council Traffic Committee approval.

4.3 Nearby Construction Sites

There is construction proceeding in the surrounding area of Parramatta at the time of this report. Construction sites include however are not limited to:

- Escarpment Boardwalk;
- · Phillip Street upgrade works;
- Parramatta Light Rail;
- 180 George Street; and
- 32 Smith Street.

The proposed methodology from the construction contractor will determine if the traffic from the construction works proposed to occur at Charles Street Square will impact the nearby construction works.

Should there be any conflicts, the contractor is to resolve them with the relevant stakeholders and authorities.



4.4 Public Transport

Taxis and ride share vehicles will be impacted by the construction activities. It is advised they do not pick up and drop of passengers at the corner of Charles Street and Phillip Street during work hours. They will need to find an alternate location during these hours.

Ferries will be impacted during the construction activities as the pavement along the riverfront walk is improved and the existing ferry shelter is to be replaced. Ferries will not be able to access Parramatta Wharf during these activities. These activities will only be for a portion of the construction program and the ferry will remain open out of the timing for these activities. Alternate transport methods will need to occur such as the bus route similar to current conditions when the tide is too low for ferries to use Parramatta Wharf. Consultation with Transport for New South Wales will need to occur for the periods where Parramatta Wharf is shut down by construction activities and an alternate transportation service is required.

If the contractor elects to use barges and work from the river for particular construction activities, the contractor will need to liaise with Transport for New South Wales and gain all necessary approvals and ensure alternate travel methods are in place to allow commuters to travel along the F3 (see section 2.3.2) route.

There will be minimal disruption to bus services. Construction vehicles may lead to minor delays to bus services. Appropriately qualified traffic controllers will need to monitor all vehicle movements to ensure sufficient flow of traffic throughout the construction works.

Trains are not anticipated to be impacted by construction activities as the train line and Parramatta Station are located at least 500m away.

4.5 Emergency Vehicle Access

The proposed construction activities are going to affect emergency vehicle access and emergency personnel access to the Port Bar and Parramatta Wharf.

The contractor will need to liaise with emergency services and other required stakeholders (such as City of Parramatta Council) to ensure adequate access is provided to all operating areas throughout the construction works.

4.6 Traffic Movements in Adjoining Council Areas

There are no adverse impacts expected from the movements of heavy vehicles through adjacent councils.

The contractor is to apply for any permits should they be required for trucks manoeuvring through adjacent councils and abide by their legislation.

4.7 Site Inspections and Record Keeping

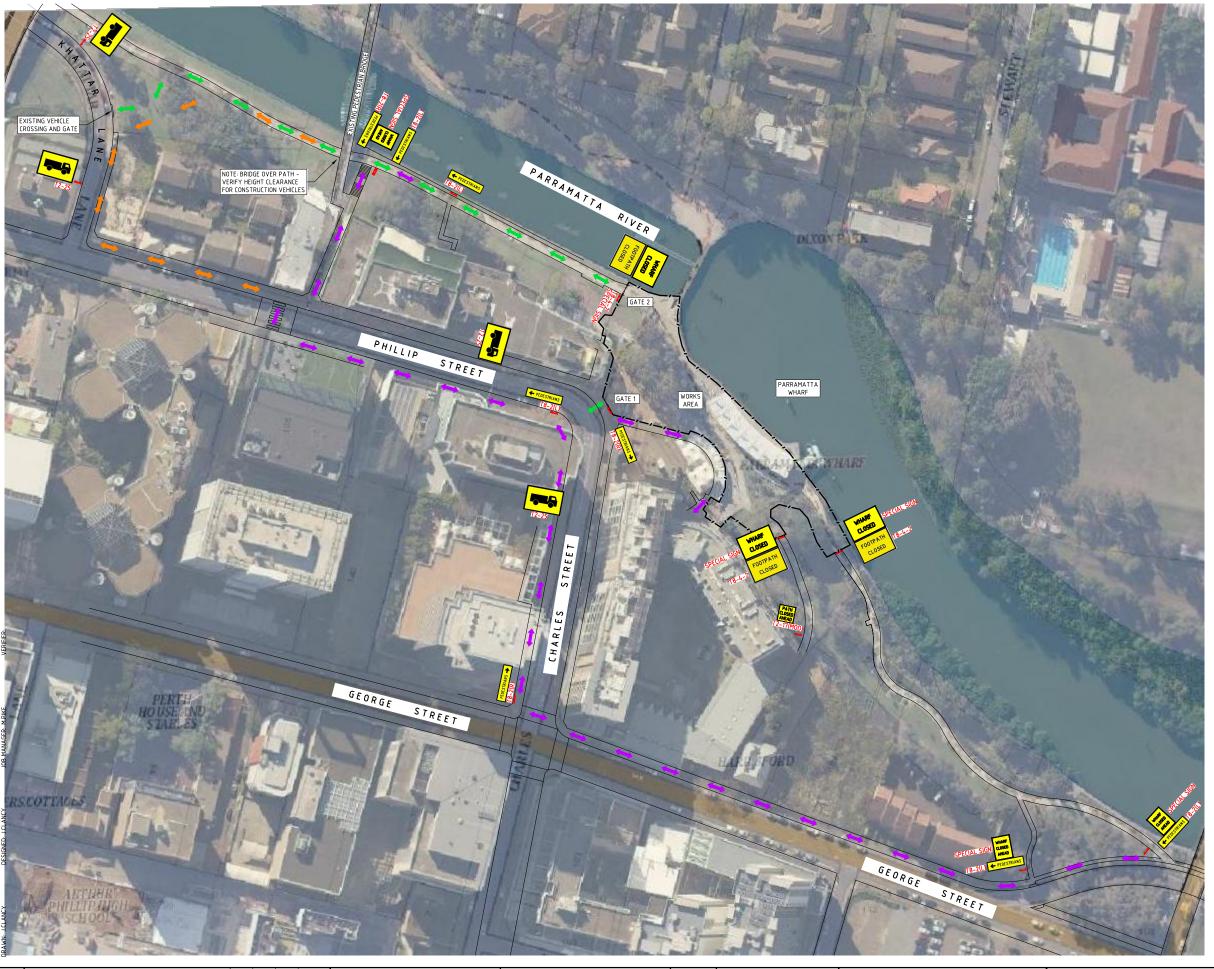
The construction work will need to be monitored to ensure compliance to the final CTPMP for the Charles Street Square works.

The contractor is to ensure that inspections are complete on the temporary traffic management signs and on the construction access locations in lines with the Roads and Maritime Services Traffic control at work sites Technical Manual (27 July, 2018). Records must be kept to show the inspections are taking place with any non-conformances or opportunities for improvement investigated with appropriate actions implemented.



4.8 Notification of Works

The contractor will need to liaise with the client and other relevant authorities in regards to the commencement of the construction works as well as the commencement of any construction stage or works which may affect an authority.



LEGEND CONSTRUCTION FENCE

SITE ACCESS GATE

ERECT TEMPORARY TRAFFIC MANAGEMENT SIGNS

SECONDARY PEDESTRIAN DETOUR

PRIMARY PEDESTRIAN DETOUR

CONSTRUCTION VEHICLE ACCESS

GENERAL TRAFFIC MANAGEMENT NOTES:

- GENERAL TRAFFIC MANAGEMENT NOTES:

 a. SIGNS & DELINEATORS TO BE POSITIONED IN ACCORDANCE WITH ASTTA-2,3-2009.
 b. ENSURE SAFE PEDESTRIAN ACCESS IS AVAILABLE AT ALL TIMES.
 c. WORKERS TO WEAR HIGH VISIBILITY VESTS.
 d. PROHIBIT CONSTRUCTION WORKERS FROM PARKING ON SURROUNDING, ADJACENT AND OPPOSITE SHOULDERS DURING CONSTRUCTION.
 e. ALL CONSTRUCTION VEHICLES TO PARK ON SITE AWAY FROM PEDESTRIAN TRAFFIC FLOW
 f. IF TRAFFIC CONTROLLERS ARE TO BE USED, WARNING SIGNS ARE TO BE ERECTED IN ACCORDANCE WITH ASTTA-2009.
 g. SIGNS & TRAFFIC MANAGEMENT DEVICES ARE TO BE MADE FROM REFLECTIVE MATERIALS.
 h. NON-REFLECTIVE SIGNS TO HAVE DIAMOND GRADE REFLECTORS ATTACHED.
 i. NOTIFICATION MUST BE GIVEN TO RESIDENCES AND BUSINESSES WHICH REQUIRE ACCESS WITHIN TITM WORKS AREA OF WORKING TIMES AND ACTIVITIES.
 j. CONTRACTOR TO LIAISE WITH LOCAL COUNCIL/AUTHORITIES AND OBTAIN TIM APPROVALS PRIOR TO UNDERTAKING ANY WORKS.

NOT FOR CONSTRUCTION

SY182116

DRAWING SHEET SIZE = A1

DRAWING NUMBER C012

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