Sydney Harbour Casino Properties Pty Ltd

Project Star - Transport for Multi-use Entertainment Facility

Addendum to Transport Report

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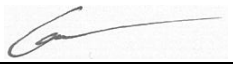
		Signature			
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1 Introduction

Alteration and additions to the Star City Casino complex and hotel development on the switching station site were approved by the Minister for Planning in January 2009 (MP08-0098). Arup provided the following reports as part of that approvals process:

- Transport Impact of Star City Redevelopment (4/9/2008)
- Supporting Information to Preferred Project Report (4/12/2008)

In the initial redevelopment plans, the existing Star Theatre was lost due to space constraints, so now plans have been drawn[1] to upgrade the existing ballroom into a Multi-Use Entertainment Facility (MUEF) that could serve the dual roles of ballroom and theatre in the one space.

This addendum report will assess the additional activity and traffic generated by this facility as an addendum to Arup's 2008 Transport Report for the approved Project Application MP08-0098 and determine whether the additional traffic will affect the recommendations of the previous report.

[1] Architects Drawings xx August 2010 Series ……

2 Background

2.1 Previous reports

Arup was appointed by Sydney Harbour Casino Properties Pty Ltd to perform a transport and parking assessment for the proposed redevelopment of Star City Casino and the new hotel on the corner of Edward and Union Streets, Pyrmont. The study also investigated the traffic impact of the proposed redevelopment, through the addition of new entertainment and retail areas of the existing casino site.

- Patron use of Car Parking and Public Transport report (30/11/2000)
- Transport Impact of Star City Redevelopment (4/9/2008)
- Supporting Information to Preferred Project Report (4/12/2008)
- Parking Fee Management Plan (13/01/2010)

2.2 Original DGRS

The original DGRS were issued 30 June 2008 as follows for MP 08_0098: Project The Project Application will seek approval for the following: Construction of a multi-storey hotel with ancillary lower level retail, gaming and conference facilities, and additional car parking, on the vacant 'Switching Station' site; and Alterations and additions to the existing Star City Casino building. Location 24-28 Union Street, Pyrmont & 20-70 Pyrmont Street, Pyrmont. Proponent Sydney Harbour Casino Properties Pty Ltd.

"#6: Transport and Accessibility (Construction and Operational)

- *The Department does not favour additional parking in areas well-served by public transport and, if provided, this would need careful justification given that the site is well located for public transport use.*
- *Provide a Traffic and Transport Impact Study, prepared in accordance with the RTA's Guide to Traffic Generating Developments, which assesses the traffic and transport impacts of the project. The study should consider:*
- *Traffic generation including daily and various peak traffic movements and the increase in the level and type of traffic associated with the proposal;*
- *Cumulative impacts on the local and sub regional area;*
- *Impacts and measures to mitigate impacts on local and arterial roads and adjacent road intersections;*
- *Provide details / modelling for key intersections being:*
    - *Pyrmont Bridge Rd/Pyrmont St;*
    - *Pyrmont St/Union St;*
    - *Union St/Edward St;*
    - *Pirrama Rd/Edward St;*
    - *Pyrmont Bridge Rd/Union St; and*
    - *Pyrmont Bridge Rd/Murray St.*

- *Details of public transport accessibility and strategies to encourage public transport patronage in particular the light rail given its proximity to the site, for both employees and visitors;*
- *Proposed number of car parking spaces, and compliance with relevant Council and RTA traffic and car parking codes;*
- *Detail the existing pedestrian and cycle movements within the vicinity of the subject site and determine the adequacy of the proposal to meet the likely future demand for increased pedestrian and cycle access;*
- *Provide details of coach, taxi, shuttle bus, service, delivery and emergency vehicle movements, and adequate provision for such vehicles; and*
- *Consideration of Council's program of footpath widening on Union Street at Pyrmont Bridge Road and 2-way traffic scheme on Pyrmont Street south of Pyrmont Bridge Road;"*

2.3 Conclusions of Previous Reports

The conclusions of the previous reports were:

2.3.1 Transport Impact of Star City Redevelopment

"The approximate 500 car parking bays proposed will be integrated into the existing car park, with no additional vehicular car park access points. These additional bays will maintain the present balance of on and off site parking in the Darling Harbour area. The access controls will be adequate to manage the traffic with no additional queuing back onto the public road network.

The proposed new driveway and porte cohere to Pirrama Road is designed to give priority to pedestrian flow, and will attract a portion of existing vehicular drop off movements, mainly taxis drop-off, and also special event drop-off. Taxi pick-up and ranking arrangements, car parking, valet parking and coach arrangements will remain effectively as existing via the Pyrmont Street porte cochere, which will also serve as the porte cohere to the new hotel.

The analysis of external traffic impacts has demonstrated acceptable impacts in the adjacent road intersections, including modelling of the six key intersections nominated by the Director General's requirements. The majority of road traffic generated by the casino is contained in the Darling Harbour precinct, and not in the residential areas of Pyrmont.

Measures to mitigate the impacts as a result of the upgrade include:

- *Improved lighting of the Pirrama Road/Jones Bay Roundabout to maximise pedestrian safety (a zebra crossing is not suitable here)*
- *Continuous footpath treatment along Pirrama Road with driveway style crossovers encouraging porte cohere traffic to give way to pedestrians*
- *Commissionaire staff to manage the operation of the porte cohere at all busy times*
- *Support for Council footpath upgrading program of Union Street*
- *Placing double lines on Pirrama Road to discourage right turn movements in and out of the porte cochere*

- *Reviewing and monitoring the performance of the Murray Street/Pyrmont Bridge Road intersection following the completion of the project*

The existing public transport, coach and light rail system will be retained and enhanced by:

- *The coach and light rail area has been improved by more direct and safer pedestrian links. Overall lighting, signage, and attractiveness of this area will be improved.*
- *The new Casino entry treatment to Pirrama Road will attract activity and focus to this eastern side of the site. Trams and buses will be right next to and under the "front door" of Star City.*
- *A Green Transport Plan to encourage sustainable transport behaviours and choices from Star City staff and visitors*
- *Pedestrian paths to and through the site are improved*
- *Bike parking will be increased and improved, integrated with regional bike route improvements around the Pyrmont and CBD area*
- *The bus, light rail and possibly proposed Metro[2] station at Pyrmont integrated into the design circulation*
- *Improved and activated access to Pirrama Road will encourage use of ferry services*

The car park circulation is in accordance with Australian Standards, Council and RTA codes, and will be a logical extension of the existing car park levels and circulation paths.

Existing services and delivery arrangements are enhanced, with full off-street dock for the new hotel and improved dock for the Lyric Theatre. Ease of emergency vehicle access will be maintained at existing high levels."

2.3.2 Supporting Information to Preferred Project Report

The Supporting Information report subsequently addressed issues raised on specific issues requested by the Authorities comprising, the following.

"2 Traffic Movements

2.1 City of Sydney

2.2 RTA

2.3 Sydney Buses

3 Community Amenity and Safety

3.1 City of Sydney

3.2 Sydney Buses

4 Site Access

4.1 City of Sydney

4.2 RTA

4.3 Sydney Buses

[2] Not going ahead

5 Other Submissions

Turning Paths

PARAMICS modelling "

2.3.3 Parking Fee Management Plan

"The objective of the parking fee management plan and the public transport strategy is to make getting to Star City as easy and patron friendly as possible whilst minimising transport pressures, and recognising the site's significance to the local Pyrmont area and proximity to the Darling Harbour area. Star City aspires to be a good neighbour and to make a positive contribution to the Pyrmont area.

Use of the Star City car park continues to be managed in line with encouraging the use of public transport options and to discourage the use of on-street parking options. Changes to the parking options and fees in the Darling Harbour and Pyrmont precinct mean that there is a need to review the Star City parking fees. The parking fees for Star City have been constant since August 2006. There is cause to amend the parking fee to a level which will encourage patrons to make an informed choice about the current transport options available to them.

Star City is seeking City of Sydney approval for a $3 increase (per 6 hour period) in the public parking rates, with the structure, timing and valet parking options remaining unchanged. This is consistent with the overall intent of the Star City parking fee management plan. Star City parking station utilisation rates have been shown to be unlikely to be impacted by the proposed increase in the parking fee, resulting in no discernable change in the current transport and accessibility options and patterns of use by patrons."

2.4 This Addendum

Following the submission of the above and other information, the Star City proposals were approved by the Minister for Planning in January 2009 (MP08-0098).

This current Addendum addresses the proposal to add the MUEF to that approved scheme. It also addresses the Director General's Requirements (DGR's) for the the Star City Casino and Switching Station site modification: Expansion of ballroom , creation of pre-function area and alterations and additions, (MP 08_098 MOD 7), dated 30 September 2010.

Key additions to the original DGR's of June 2008 included :

- Details of service vehicle movements …
- Provision of a Traffic Management Plan for all demolition/construction activities
- Details of the potential impacts to access and manoeuvring in the bus interchange resulting from modifying the loading areas.

3 Existing Use

3.1 Existing use – venues

The site is currently in the process of construction activities. However the following information is provided by Star City [3]

"In the last financial year, 157,241 people attended functions in the current Ballroom. On average, daytime events began from 8am - 9am, and concluded between 4pm - 5pm. Night-time events began, on average, from 6pm - 7pm, and finished between 11pm - midnight. Daytime events were, in general, corporate conferences, including residential conferences (guests staying in Star City's hotel or apartments). Night-time events were, in general, social events eg balls, dinners, and awards nights. The vast majority of events booked in the current Ballroom took place Monday - Saturday.

In the same period, 665,456 people attended 262 performances in the Lyric Theatre. On average, evening performances began between 7pm - 8pm, and concluded between 10pm - 11pm. Matinee performances, generally held on Wednesdays and Saturdays, began between 12pm - 1pm and concluded between 2.30pm - 3.30pm. Matinee performances were particularly popular with senior citizens, many of whom attended as part of an organised coach trip. On average, longer running Lyric shows (eg Chicago, Mamma Mia) include Sunday performances. These fall between regular matinee and evening performance times, finishing between 5pm - 6pm on average. In general, the majority of long running shows schedule performances Tuesday - Sunday.

On average, both venues operate at peak capacity on Friday and Saturday evenings."

3.2 Existing Use – Car Parking

The Star city car park is currently operating at its current capacity, which somewhat reduced due to the current works being undertaken. Over the last year, the car park capacity has been reduced from over 2500 to less than 2000. Figure 1 displays the most recent car park use data from June 2010 when the car park capacity is 1930 vehicles. Maximum capacity is reached twice in one night on Saturday the 19th of June 2010.

[3] Email from Star City /APP dated 9/8/2010

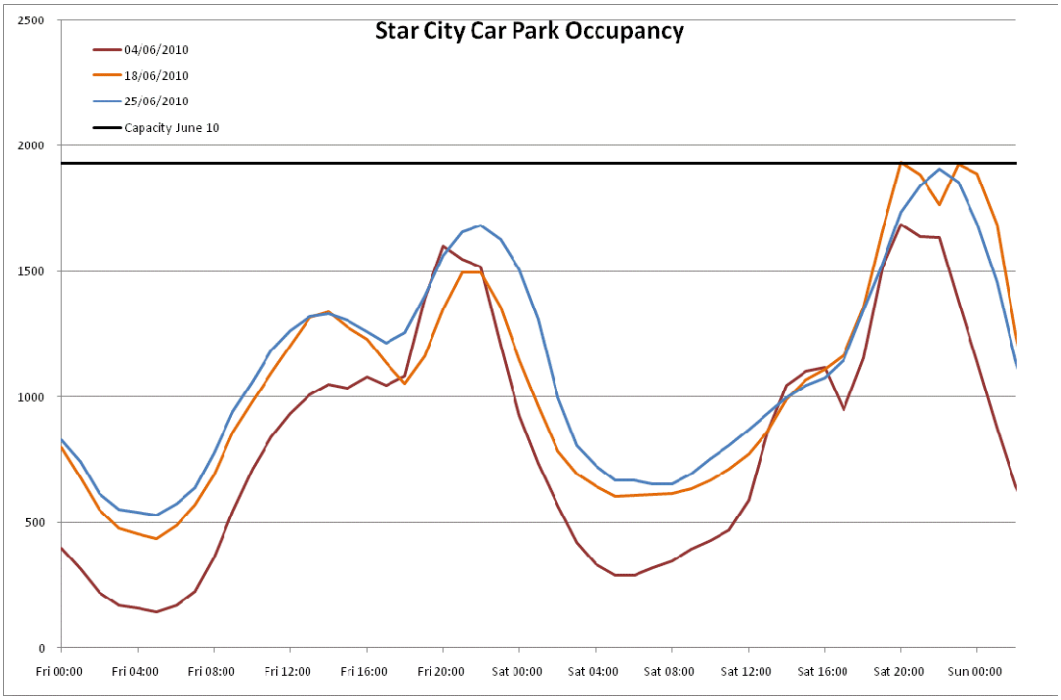

Figure 1 Car Park use June 2010

3.3 Existing Transport

There are several modes of transport to and from Star City. They have been described in Arup's previous reports.

"The existing transport situation at Star City has been regularly surveyed and analysed by Arup for over a decade as part of the casino's regular reporting requirement to the authorities on the availability and cost of car parking at the site and the surrounding streets. These reports have consistently reported that the cost and supply of parking at Star City has been managed by the owner to deter non-Star car parking by CBD commuters and to relieve pressure on on-street car parking in Pyrmont so as not to disadvantage local residents, business and visitors use of on-street car parking.

Since opening, Star City has settled into the transport system for the wider area of Pyrmont, complementing the bus, light rail, and taxi services for surrounding businesses and residents. The original critical mass of the casino activity to support a vibrant 24 hour transport system has been supplemented in recent years by extensive residential development such as Jackson's Landing and the wharf residences, businesses such as Foxtel, Seven Network, and Fairfax media, and local activity such as the foreshore pathway and activities."

From the report on Patron use of Car Parking and Public Transport from November 2000,

"Overall,... the use of public transport and the number of people walking to Star City is considerably higher than was predicted in 1994. Taxi travel is consistent with 1994 predictions but coach travel is down. Car access to the casino is less than predicted in 1994 and this is borne out in the lower levels of overflow parking that occurs when compared to what was predicted."

4 Additional Proposed Development

4.1 Proposed Development

The proposed modifications include:

- Expansion of the approved ballroom capacity of 1,200 seats (1,500 standing) into a 3,000 seat multi-purpose venue (4,000 standing).
- Creation of a new 'pre-function' space surrounding the existing glass cone of the approved external entertainment deck on level 03.
- The provision of associated services such as loading dock, lift and stair accesses, new substation and switch room, storage, plant room facilities and other related services.
- Additional patron access and amenity facilities to meet BCA and DDA requirements.
- Provision of service corridor between back of house areas and new plant and storage enclosure on Level 03.
- Conversion of the existing Level 17 'Astral' Bar and Dining Room into Private Gaming Areas.
- Deletion of the previously proposed glazed cladding to the existing tower buildings.
- Addition of a pergola structure over the roof terrace to the Pirrama Road infill building.
- Replacement of the existing external lift, lift overrun enclosure and roof signage to the existing hotel tower.

The additional proposal (S75W) plans to use the space of the existing ballroom and the demolished Star Theatre to construct the larger facility of the MUEF.

This facility will generate 4000 patrons at its maximum, with the room's various configurations generating varying levels of traffic. This is summarised below.

Table 1 Patrons at Star City Venues existing and future (data from Star City/APP[4])

Venue	Original capacity	Capacity post Part 3A approval	Proposed capacity S75W	Additional Capacity (with proposed)
Star Theatre	1200 seated	0*	0	
Ballroom	900 seat 1200 standing	1200 seated 1500 standing	3000 seated 4000 standing	
Combined Theatre and Ballroom	2100 seat 2400 standing	1200 seated 1500 standing	3000 seated 4000 standing	+900 seated +1600 standing

* No venue remains, there are 225 fixed seats which are used as an extension to the casino seating.

[4] Email from Star City/APP dated 09/08/2010

4.2 Parking

4.2.1 On-site

No additional car parking or coach parking or bike parking is proposed on site as part of the MUEF.

4.2.2 On-Street

No additional car parking or coach parking or bike parking is proposed on-street as part of the MUEF.

4.2.3 Off-site

Previous and existing off-site parking strategies will be re-invigorated to accommodate the extra demand for car parking generated by the MUEF in the peak periods, calculated to be Friday and Saturday night peaks.

5 Proposed Use

5.1 Casino Visitation and Patronage

On opening of the original Casino, visitation figures[5] were around 35,000 per day and the current average in 2010 is around 25,000 per day.

Tabcorp note that Star City and the surrounds have clearly had the ability to accommodate far greater numbers in the past than would be expected with the provision of the Multi Use Entertainment Facility. As a result of this drop in visitation, there is an inherent capacity on roads and other infrastructure, and that impacts should be no worse than in 1997.

5.2 Programme of Use

The new facilities will not be used to capacity every day of the year or every hour of the day. It is standard practice in transport assessments to address the peak times of activity in the venue and on the transport network. On that basis, this analysis will concentrate on the peak activity period in the Casino and surrounding transport network:

- Friday- Saturday- Sunday morning Star City activity peak
- AM and PM weekday peak hours on-road traffic and public transport including buses, taxis and light rail

[5] TabCorp email

6 Analysis

6.1 Parking demand model

Arup has maintained a model of traffic and car parking at Star City from the earliest days of planning of the original development, over two decades. This model was originally populated by forecast activity based on other casinos and hotels around the world, and has been periodically updated since opening of Star City. The demand model must be calibrated against actual traffic and parking data.

6.2 Additional patronage modelling

The core of the model is an Excel spreadsheet model of arrival and departure activity by half hourly periods based on arrival and departure of various groups on the site: staff, patrons, hotel, casino, back of house, etc. These arrivals and departures are the mode split to the various modes of travel to the site such as walk, car driver, car passenger, bus, bike, light rail etc.

Additional patrons to the new theatre complex **operating at maximum MUEF capacity** were added to the parking demand model and the results are presented in **Figure 2**. From the graph, the parking demand peaks higher than under the previous proposal.

During the peak hour of parking demand, the additional maximum MUEF capacity demand is approximately 440 spaces. This demand model is largely dependent on the percentage of patrons who will drive there (currently modelled at two thirds of patrons)

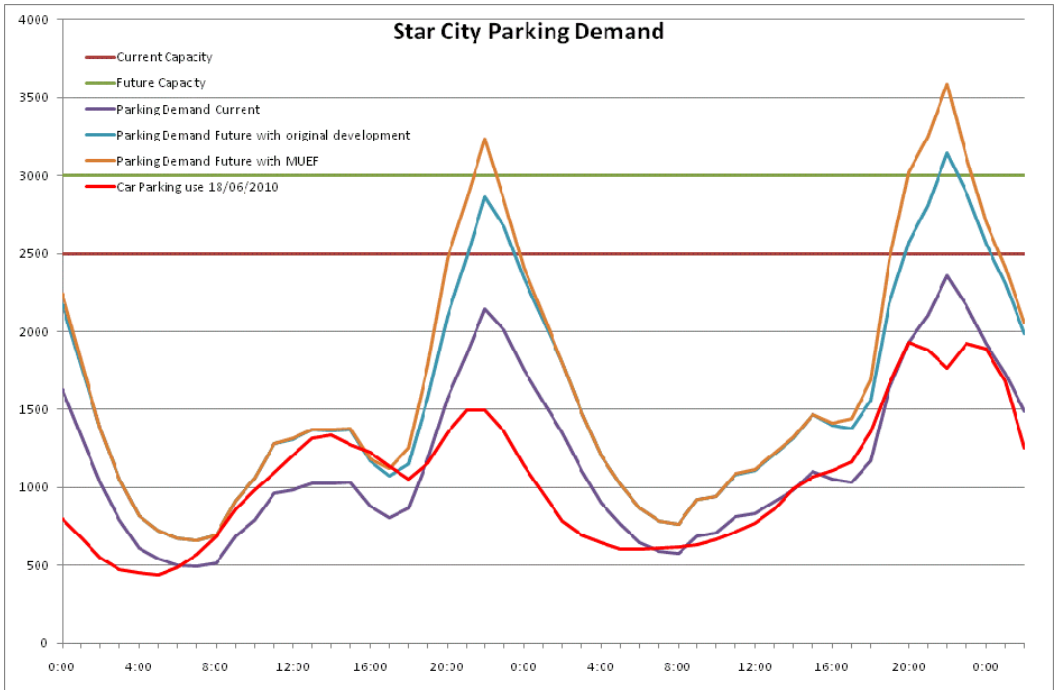

Figure 2 Parking demand with additional traffic for initial proposal and current proposal

6.3 Calibration of Modelled Parking Demand to actual car parking usage.

When calibrated to current parking use, the additional parking demand is higher than the available parking space, however the extra demand is acceptable as the actual use of the car park will be similar to the current situation shown in **Figure 1**

That is at the parking peak:

a) Current Maximum Car park occupancy:	1930 bays
b) Modelled additional parking demand at maximum MUEF capacity	440 bays
a+b) Total additional parking demand at maximum MUEF capacity	2370 bays
c) Total on-site parking supply after MUEF complete	3000 bays
c-(a+b)) Vacant car parking at parking peak	630 bays

Obviously this analysis refers to recent observations of park car parking. Actual patronage and car parking demand for Star City and the MUEF will vary depending on a range of factors including the popularity of individual theatre shows, events, and other activities at the casino and hotels. On most days the attendance will be considerably less than the peak day presented above, and on a very few days per year attendance may be slightly more than the peak day presented above.

The following traffic analysis assumes the worst case scenario, where the car park becomes nearly full, and arriving traffic begins to be diverted to other car parks in Pyrmont, a parking management scenario that currently occurs occasionally.

6.4 Traffic Analysis

6.4.1 Traffic Generation

Traffic generation in the previous report used the following methodology:

"The forecast future traffic in the vicinity of Star City Casino is to be modelled based on the increase in on-site car parking availability. In the order of 500 spaces are proposed to form a lateral extension of the 2,500 spaces that are presently available in the underground car park, representing an increase of 20% in the total parking availability. The future traffic generation for the key intersections surrounding the site shall be modelled based on this increased figure.

It should be noted that this is a conservative forecast and represents a worst case scenario for traffic generation. It is likely that during the AM and PM peak hours the relative increase in traffic associated with the proposed redevelopment will be less than the above stated figure."

The additional parking demand would be added to this generation.

6.4.2 Traffic Distribution and Assignment

The additional parking demand traffic was added to the network at the car park entrances on Edward St with the traffic demand split in a ratio of 3:2 (based upon measured volumes from previous transport report) between the Pirrama Road and Union St entries respectively. The distribution of additional traffic is shown below. Please note that as there was negligible additional traffic in the AM Peak and was therefore not modelled.

Figure 3 Map of the distribution of traffic in the PM Peak hour and Late Peak hour (vehicles per hour)

In the late peak, it was assumed that when the car park approaches capacity, the Car park status signs on Pyrmont Bridge Road and Darling Drive will show the car park as full, diverting traffic to other nearby car parks such as the Harbourside Car Park.

6.4.3 SIDRA Intersection Analysis Results

6.4.3.1 Introduction

In urban areas, the performance of a road network is generally a function of the performance of key intersections. Performance is quantified in terms of Level of Service (LOS), which is an index of the operational performance of traffic at an intersection and is based on the average delay per vehicle. LOS ranges from A – very good to F – highly congested conditions, as shown in Table 2 below.

Table 2 Level of Service Definitions

Level of Service (RTA Definition)	Average Delay per Vehicle (seconds)
A	< 14.5
B	14.5 ≤ 28.5
C	28.5 ≤ 42.5
D	42.5 ≤ 56.5
E	56.5 ≤ 70.5
F	≥ 70.5

Another common measure of intersection performance is the degree of saturation (DS), which provides an overall measure of the capability of the intersection to accommodate the traffic levels. A DS of 1 indicates that the intersection is operating at capacity; however the desirable (and practical) degree of saturation is less than 1 as shown in Table 3.

Table 3 Practical Degree of Saturation

Intersection Type	Practical Degree of Saturation
Signals	0.90
Roundabout	0.85
Priority	0.80

6.4.3.2 Intersection Performance

There are three times, of the day that are relevant to considering the impact of the proposed redevelopment. In terms of the busiest times of day on the road system, these are the morning and afternoon commuter peak hours. A third busy period is relevant when the casino generates its peak traffic flows at 10.30-11.30pm. This is when patrons departing the various casino facilities will coincide with patrons arriving at the casino after other early evening activities.

From the traffic counts undertaken, as described in Section 4 of the Transport Report, and the forecast predicted increase in traffic to the proposed development, the future traffic impact on key intersections surrounding the site could be analysed. SIDRA analysis was undertaken for six key intersections surrounding the casino complex for the AM, PM and late event peaks. Since the AM peak does not in any way correspond with the additional patrons arriving to the casino, the predicted increase in traffic as a result of the development was not applied during this time period.

These key intersections, as nominated in the Director General's requirements for the project application, are:

- Pyrmont Bridge Road/Pyrmont Street
- Pyrmont Street/Union Street
- Union Street/Edward Street
- Pyrmont Bridge Road/Union Street
- Pyrmont Bridge Road/Murray Street
- Pirrama Road/Edward Street [6]

6.4.3.3 Results of the traffic modelling on these key intersections

The additional parking demand at the peak times was added to the intersection models used in the last report to assess the impact of the increased traffic.

Table 4 SIDRA Intersection Analysis Results without and with MUEF

Intersection	PM/Late	Sidra Results without MUEF			Sidra Results with MUEF		
		DS	Av Del	LOS	DS	Av Del	LOS
Pyrmont Bridge Road/ Pyrmont Street	AM	0.758	17	B	0.758	17	B
	PM	0.808	41	C	0.855	43	D
	Late	0.507	34	C	1.000	62	E
Pyrmont Street/ Union Street	AM	0.159	9	A	0.159	9	A
	PM	0.277	13	A	0.282	14	A
	Late	0.269	15	B	0.276	15	B
Union Street/ Edward Street	AM	0.127	15	B	0.127	15	B
	PM	0.195	16	B	0.235	16	B
	Late	0.193	14	B	0.203	16	B
Pyrmont Bridge Road/ Union Street	AM	0.144	5	N/A	0.144	5	N/A
	PM	0.361	4	N/A	0.360	4	N/A
	Late	0.170	2	N/A	0.172	2	N/A
Pyrmont Bridge Road/ Murray Street	AM	1.000	40	C	1.000	40	C
	PM	1.000	40	C	1.000	41	C

[6] Traffic counts from a previous Arup survey on a Saturday evening in July 2007 were used.

	Late	0.926	49	D	1.038	63	E
Pirrama Road/ Edward Street	AM	N/A	N/A	N/A	N/A	N/A	N/A
	PM	0.672	11	A	0.749	12	A
	Late	0.468	12	A	0.468	12	A

DS – Degree of Saturation, Av Del – Average vehicle delay in seconds, LOS – overall intersection level of service

6.4.3.4 Analysis of Sidra Results

Sidra analysis on the road network demonstrate that five of the six key intersections are below saturation level after accounting for the increase in casino traffic following the proposed development. Three of these intersections have significant spare capacity.

The Pyrmont Bridge Road/Murray Street intersection is predicted to be at capacity in all three critical time periods following the casino upgrade. A Sidra analysis was conducted for the present situation, which also showed the intersection is currently operating at capacity.

Operation at Level of Service E in the late night period is related to diverting traffic to the other off-site car parks further south in Pyrmont. This is considered acceptable, as it will not disadvantage the wider road network or commuter peak travel times.

Additionally, following consultations with the RTA, it is expected that there will be a net loss of parking bays in the Darling Harbour area over the coming years. This would lead to a reduced rate of traffic generation on the road network. Further, the rate of car bays per employee or resident would decline, as new floor space with lower rates of car parking is developed in the future.

Although the Pyrmont Bridge Road/Murray Street intersection is currently operating at a high degree of saturation, observations indicate that all vehicles typically proceed through the intersection in a single signal cycle. With the increased vehicular traffic in future years not expected to be significant during peak hours, this intersection will likely continue to operate at largely existing levels following the casino upgrade.

6.4.3.5 Loading Docks

A review of previous reports on loading docks suggests that the MUEF will operate satisfactorily with Dock Management scheduling to ensure that peak demands do not coincide for deliveries and bump-in/bump-out at the beginning and end of new shows. There is understood to be considerable “quiet time” when the docks are underutilised to ensure good management and scheduling that the demand are spread over quieter times and days and that peak capacity of the loading dock is not exceeded. There will not therefore be any increase in queuing or delays to local residents and businesses.

6.4.3.6 Pedestrian Flows

Pedestrian safety and the potential mass departure of patrons from the venues all at once will be managed, similar to a multi-screen cinema centre, to stagger arrival

and departure times. People will filter through the casino/nightclub etc and the departures are not anticipated to be a single 'peak'.

Pedestrian paths and routes around Star City are adequately wide to carry substantial flows and are signalised at key intersection crossings.

7 Recommended Works and Measures

7.1 Existing Commitments

Recommendations made in the 2008 Arup Transport Report still remain:

- Mainly to monitor the parking situation both on site at Star City and surrounding parking areas
- Controlling parking usage with modifications to pricing if required

Star City currently encourages sustainable transport measures mentioned in the Transport Reports such as:

- Proposed Light Rail Extension services
- Pedestrian facilities
- Managing the operation of shuttle bus services to the city and the suburbs
- Staff travel on the LRT is fully subsidised by Star City
- STA regular bus services is provided in the Public Transport Interchange at Star City

Measures currently in place during the current construction works will still be applicable and will be modified as required. This includes requirements for a Traffic Management Plan (TMP), details of pedestrian alignments, and impacts on the bus interchange during construction works.

7.2 Parking strategy

- Investigate Subsidies for offsite parking
- Investigate Free or subsidised Shuttle buses to off-site car parks
- Advertise the Light Rail connection from Convention Centre Car park
- Investigate “early bird” of preshow dinner parking schemes to encourage early arrival and off-site car parking
- Maintain remote coach parking and layover, as existing
- Review parking charges, with a view to reducing average parking duration of stay in peak periods for non-essential parkers.

7.3 Green Travel Incentives

- Investigate additional bike parking for staff and customers
- Investigate subsidies for public transport use for staff and customers
- Implement encouragement programs for “healthy lifestyle” programs such as Walk to Work Day, Walking buses for staff
- Investigate Car Pooling Incentives and Programs, particularly for staff
- Maintain excellent, clean, safe, well-lit Pedestrian Facilities
- Investigate Free Star City coaches from suburban regions

7.4 Other Works and Measures

- In addition to the preliminary checks already completed, undertake an audit and report of the final scheme drawings to determine compliance with the requirements of the relevant Australian Standards (ie parking codes, small car bays, bike parking, turn paths, sign distance requirements, aisle widths, swept paths of service vehicles for the largest proposed vehicles that will service the site including all on-street car parking spaces being fully occupied, etc.)
- Provide a Traffic Management Plan (TMP) for all demolition/construction activities
- Investigate and report details of changes to pedestrian alignments and access points for the developement site and associated impacts during construction and operation
- Investigate and report details of the potential impacts to access and manoeuvring in the bus interchange resulting from modifying the loading areas.

8 Conclusions

The Proposed MUEF will increase traffic and parking generation, but within the capacity of the existing and proposed traffic and parking facilities. The recommended works and measures will improve the overall performance of the multi-modal transport system.