

Reference: 18.367r01v06

traffic & transport planners

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24 January 2019

Yuhu Sydney One Pty Ltd Level 15, 201 Miller Street NORTH SYDNEY NSW 2060

Attention: Mr. Tianyao Ma, Construction Manager

Re: One Circular Quay, Sydney – D/2016/1529 Traffic Impact Statement for a Section 4.55 Application

Dear Tianyao,

We refer to the subject development at 1 Alfred Street, Sydney and confirm that TRAFFIX has been commissioned by Yuhu Sydney One Pty Ltd to prepare a Traffic Statement in support of a Section 4.55 (S4.55) Application.

The information in this statement is supplementary to and should be read in conjunction with ARUP Traffic and Transport Assessment regarding the proposed mixed use development (dated: 13 February 2017, Reference: 247747 Revision B) and Development Application Notice of Determination (Development Consent No. D/2016/1529).

TRAFFIX has reviewed the architectural drawings prepared by Crone Architects and Kerry Hill Architecture and now advises as follows.

O Approved Development

The approved development consists of two mixed-use towers that accommodate the following:

Tower A

- 190 residential apartments, consisting of:
 - 3 x studio apartments;
 - 26 x one bedroom apartments;
 - 74 x two bedroom apartments;
- 87 x three bedroom apartments; and,
- Retail premises on the Ground Floor with a combined Gross Floor Area (GFA) of 421m².

Tower B

- A hotel tower with 182 hotel rooms;
- Retail premises on the Ground Floor with a combined GFA of 336m²; and,
- 6 basement levels containing a loading dock with 5 loading bays and five levels of basement car parking with 195 car parking spaces. In addition, bicycle and motorcycle parking is also provided within the basement.



O Proposed Development under S4.55 Application

In summary, approval is now sought to construct two mixed-use towers that accommodate the following:

Tower A

- 165 residential apartments (change of -25 apartments from the approved), consisting of:
 - 0 x studio apartments (-3);
 - 7 x one bedroom apartments (-19);
 - 32 x two bedroom apartments (-42);
 - 126 x three bedroom apartments (+39); and,
- Retail premises on the Lower Ground and Ground Floors with a combined GFA of 193m² (-228m²).

Tower B

- A hotel tower with 220 hotel rooms (+38);
- Retail premises on the Ground Floor with a combined GFA of 397m² (+61m²); and,
- 6 basement levels containing a loading dock with 4 loading bays (-1) and five levels of basement car parking with 182 car parking spaces (-13). In addition, bicycle and motorcycle parking is also provided within the basement.

The parking requirements and traffic impact arising from this development are discussed below. Reference should also be made to the architectural drawings submitted separately to Council, for which plans for ground and basement levels have been presented at reduced scale in **Attachment 1**.

O Parking Requirements

Car Parking

The maximum car parking requirements for the development has been assessed under the Sydney Local Environment Plan (LEP) 2012. In addition, the car share minimum requirement specified in Section 3.11.2 of the Sydney Development Control Plan 2012 has also been assessed. **Table 1** shows the rates, requirements and proposed parking provision.



586m²

Use	Rate	Proposed Yield	Maximum Requirement*	Provision
Residential				
Studios	0.1 spaces per dwelling	0	0	
1 bedroom	0.3 spaces per dwelling	7	3	450
2 bedrooms	0.7 spaces per dwelling	32	23	152
3+ bedrooms	1 space per dwelling	126	126	
		Sub-total	152	152
Car share	1 per 50 car spaces	152	minimum 3	3
Hotel and Retail				
Up to 100 rooms	1 space per 4 rooms	100	25	
Above 100 rooms	1 space per 5rooms	120	24	26
Retail (Tower A and B)	M=(G×A)÷(50×T)	590m ²	1	
		Sub-total	50	26
Car share	1 per 30 car spaces	26	minimum 1	1
	Total (excluding car share)	-	202	178
	Total (including car share)	-	-	182
Note: M (Maximum number of s	paces) T (Total	GFA of building	s on site) = 55,600	Dm ²

Table 1: DCP Maximum Car Parking Rates and Provision

A (Site Area) = $4,040m^2$ G (Gross Floor Area of retail) =

* Maximum parking requirements rounded up to nearest whole number

It can be seen from **Table 1** that the proposed development is required to provide a maximum of 152 car parking spaces for the residential component and a maximum of 50 spaces for the hotel and retail components of the development. In response, the development proposes 152 car parking spaces for the residential component and 26 car parking spaces for the hotel and retail components. Therefore, the development which meets Councils maximum requirements.

In addition to the above, the development also requires a minimum of four (4) car share spaces. In response, the development proposes 4 car share spaces which are provided in Basement 2.

It should be noted that the revised development proposes to increase the number of hotel rooms by 38 to a total of 220 rooms. The parking provision for hotel use has decreased by 18 to 25 car parking spaces. It has been advised by the client that the target market of the hotel will mean majority of guests will likely be dropped off on arrival by taxi or chauffer service and not require parking, thereby reducing the required parking provision. The parking will be valet only which the hotel would be able the manage parking demand at the time of booking by requesting guests to book a valet car space along with their room. Therefore, the hotel car parking provision is considered to be an acceptable arrangement.

In summary, the development complies with the Sydney LEP and Council's DCP car parking requirements.

Residential Accessible Parking

Council's DCP specifies that each adaptable apartment is to be provided with an accessible car parking space. The development proposes 25 adaptable apartments which requires a minimum of 25 accessible car parking spaces. In response, 25 accessible spaces are provided for the



adaptable apartments which meets Council's requirements. The DCP also requires an accessible car parking space for every 20 visitor parking spaces. It is noted that no visitor parking is provided therefore no accessible visitor paring is required. The development complies with the requirement for accessible residential parking.

Hotel and Retail Accessible Parking

Council's DCP does not require accessible parking for the hotel as all parking will be provided by a valet service. As the retail parking is for staff only, no accessible parking spaces are required as it is not available to the public. In response, the development proposes three (3) accessible parking spaces for hotel / retail which is superior to the Council's requirement.

Bicycle Parking

Section 3.11.3 of the DCP requires bicycle parking to be provided at rates specified in Table 2.

Туре	No / GFA	Minimum Parking Rate	Minimum Spaces Required ¹	Spaces Provided	
Residential Accomm	Residential Accommodation				
Residents	165	1 space per dwelling	165	165	
Visitors	COL	1 space per 10 dwellings	17	17	
Hotel and Retail Stat	ff				
Hotel Staff	200	1 space per 4 staff	50		
Retail Staff	590m ²	1 space per 250m ² GFA*	3	66	
Hotel Guests	220	1 space per 20 rooms	11		
Retail Visitors					
Retail Visitors	586m ²	2 plus 1 per 100m ² over 100m ² GFA	7	7	
	•	Total	253	255	

Table 2: DCP Bicycle Parking Rates and Provision

¹ Parking spaces to be rounded up to the nearest whole number in accordance with the DCP.

The development requires a total of 253 bicycle parking spaces of which 165 are for residents, 17 spaces for residential visitors, 64 spaces for staff (hotel and retail) and hotel guests, and 7 spaces for retail visitors. In response, the development proposes a provision of 255 bicycle parking spaces of which 165 are for residents, 17 are spaces for residential visitors, 66 spaces for all staff and hotel guests, and 7 spaces for retail visitors. Therefore, the development complies with the requirements of Council's DCP.

In addition to the above, Council's DCP also requires end of trip facilities for non-residential uses, such as staff. The DCP requires a locker for each staff bicycle parking space and two showers for the first 20 bicycle parking spaces and two (2) additional showers for each additional 20 bicycle parking spaces or part thereof. Therefore, the development is required to provide 52 bicycle lockers and six (6) shower and change facilities. In response, the development provides 52 bicycle lockers and six (6) shower and change facilities thereby meeting the requirements of Council's DCP.



Motorcycle Parking

Schedule 7.8.4 of the Sydney DCP requires motorcycle parking space to be provided at a minimum rate of one space for every 12 car parking spaces provided. Therefore, with 182 car parking spaces, the development is required to provide 15 motorcycle parking spaces. In response, the development provides 20 motorcycle parking spaces within the basement which complies with the requirement of the DCP.

<u>Servicing</u>

The approved development provided five (5) loading bays for the development of which four (4) bays accommodated an 8.8m long medium rigid vehicle (MRV) and one bay accommodated Council's 9.25m long Waste Collection Vehicle (WCV). The revised scheme now proposes four loading bays in the following configuration:

- Two (2) loading bays which accommodate a 6.4m long small rigid vehicle (SRV);
- One (1) exclusive hotel loading bay which accommodates an 8.8m long MRV; and
- One (1) loading bay which accommodates Council's WCV.

The above scheme is to be managed by Dock Manager and a Loading Dock Management Plan (LDMP) is to be prepared at a later stage, which the Dock Manager is to implement and by which all users are to abide. The LDMP will set out the schedule of regular deliveries, the process for occupants of the site to organise occasional deliveries / servicing and the process for drivers to enter and exit the site. This will ensure that the loading dock will operate efficiently with the reduced number of loading bays. Therefore, the above servicing provision is considered acceptable.

O Traffic Impacts

The previous traffic generation rates from the approved Stage 2 development application are considered appropriate for this S4.55 application.

Residential Traffic Generation

The traffic generation rate for the residential component was based on 0.10 vehicle trips per apartment. The development now proposes a reduction of 25 apartments which results in a traffic generation change of:

- -3 vehicle trips per hour during the AM peak (-1 in and -2 out); and,
- -3 vehicle trips per hour during the AM peak (-2 in and -1 out).

Hotel Traffic Generation

The traffic generation rate for the hotel component was based on two (2) vehicle trips per hour for every 10 hotel rooms. Therefore, the traffic generation for the additional 38 hotel rooms is as follows:

• 8 vehicle trips per hour during the AM and PM peak periods (4 in, 4 out).

Retail Traffic Generation

The proposed retail component of the development has reduced in GFA from the approved. As a conservative assessment, no reduction in traffic generation has been considered.

Service Traffic Generation



The proposed changes to the loading dock reduce the number of available loading bays. Therefore, the traffic generation of the loading dock is expected to be less than the approved development. However, the approved servicing traffic generation is assumed to be the same for the proposed development as a conservative assumption. *Combined Traffic Generation Change*

Having regard to the trip generation rates for the above uses, the change in traffic generation for the proposed modifications to the approved development are as follows:

- 5 vehicle trips per hour during the AM peak period (3 in and 2 out); and
- 5 vehicle trips per hour during the PM peak period (2 in and 3 out).

The anticipated net increase in traffic generation equates to one vehicle trip per every 12 minutes, on average, during these periods. Accordingly, the increases in traffic volumes at the intersections in the vicinity of the site are expected to be marginal, and in any case, well within typical fluctuations in background traffic volumes. As a result, no external road improvements are considered to be required to support the proposed development from a capacity or an amenity perspective. Therefore, the traffic impacts are supportable on traffic planning grounds.

O Vehicular Access and Internal Design

Vehicular Access

The development proposes to reduce the total number of parking and servicing spaces from 200 for the approved development to 185 for the proposed development. Therefore, the approved vehicular access does not require any further analysis and is considered adequate for the proposed development.

The only modification proposed for the vehicular access is the provision of a boom gate and intercom at the entry to restrict vehicular access. The development now provides 3.3m wide aisles on either side of a 600mm wide median with 300mm wide kerbs along the walls. The minimum requirement under AS2890.2 2002 is a minimum width of 3.5m for single lane aisles. However, the reduced width is considered appropriate as large vehicles, such as the MRV or WCV will be only occasional and outside of peak periods. Swept path analysis of the proposed access arrangement is provided in **Attachment 2**.

Parking Modules

- All residential parking spaces meet the requirements for a Class 1A user under AS2890.1. In this regard the design includes the provision of a minimum space length of 5.4m a minimum width of 2.4m and a minimum aisle width of 5.8m.
- All hotel and car share parking spaces meet the requirements for a Class 2 user under AS2890.1. In this regard the design includes the provision of a minimum space length of 5.4m a minimum width of 2.5m and a minimum aisle width of 5.8m.
- All spaces located adjacent to obstructions of greater than 150mm in height are provided with an additional width of 300mm.
- The dead-end aisle on Basement 2 is provided with a turning bay and 1.0m aisle extension in accordance with Figure 2.3 of AS2890.1.
- All accessible parking spaces are designed in accordance with AS2890.6. Spaces are provided with a clear width of 2.4m and located adjacent to a minimum shared area of 2.4m.



<u>Ramps</u>

• All ramps accessing the basement car park have a maximum gradient of 23% (1 in 4.7) with transitions of 12.5% (1 in 8). These provisions satisfy the requirements of AS 2890.1 (2004) for the car park;

Clear Head Heights

- A minimum clear head height of 2.2m is provided for all areas within the basement car park as required by AS2890.1.
- A clear head height of 2.5m is provided above all disabled spaces as required by AS2890.6.

Service Area Design

- The internal design assessment of the service area has been undertaken in accordance with the requirements of AS28090.2 for the maximum length vehicle permissible in each loading bay. A swept path analysis has been undertaken as permissible under AS2890.2 and confirms the internal design. The swept path assessment is included in **Attachment 2**.
- A minimum clear head height of 3.8m is provided within the service area.
- No change to the grades for the vehicular ramp from ground floor to basement 1 (which services the loading dock). Therefore, considered acceptable.
- A minimum bay width of 3.5m is provided for all service bays.

Other Considerations

- All columns are located outside of the parking space design envelope shown in Figure 5.2 of AS 2890.1 (2004).
- Appropriate visual splays are provided in accordance with the requirements of Figure 3.3 of AS2890.1 the vehicular access.
- The internal design complies provides a maximum grade of 1:20 (5%) at the vehicle control point (boom gate).
- A swept path analysis of all critical movements has been undertaken to confirm geometry and compliance with the relevant standards. The swept path assessment is included in **Attachment 2**.

In summary, the internal configuration of the basement car park and loading areas have been designed in accordance with the both AS2890.1, AS2890.2 and AS2890.6. It is however envisaged that a condition of consent would be imposed requiring compliance with these standards and as such any minor amendments considered necessary (if any) can be dealt with prior to the release of a Construction Certificate.

Summary

In summary, the proposed car parking changes meet the requirements of Council's LEP and DCP while traffic increases due to the changes to the development are minimal. The development application is therefore supported on traffic planning grounds.



We trust the above is of assistance and please contact the undersigned should you have any queries or require any further information.

Yours faithfully,

Traffix

Vince Doan Executive Engineer

Encl: Attachment 1 – Architectural Plans (Reduced Scale) Attachment 2 – Swept Path Analysis



Attachment 1

Architectural Plans

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KEY SECTION:

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ONE CIRCULAR QUAY, TOWER B

1 Alfred Street Sydney NSW 2000



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E	14.11.2018	ISSUED FOR INFORMATION AND COORDINATION ONLY	Sł
D	18.10.2018	ISSUED FOR INFORMATION AND COORDINATION ONLY	Sł
С	25.09.2018	ISSUED FOR INFORMATION AND COORDINATION ONLY	Sł
в	10.03.2017	REVISED FOR STAGE 2 DEVELOPMENT APPLICATION	Sł
A	28.10.2016	ISSUED FOR STAGE 2 DEVELOPMENT APPLICATION	Sł
7	20.10.2016	DRAFT FOR DA SUBMISSION	Sł
6	12.10.2016	ISSUED FOR INFORMATION	Sł
5	05.10.2016	ISSUED FOR INFORMATION AND COORDINATION ONLY	Sł
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ONE CIRCULAR QUAY, TOWER B

1 Alfred Street Sydney NSW 2000



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D	25.09.2018	ISSUED FOR INFORMATION AND COORDINATION ONLY	SI
С	15.12.2017	SECTION 96 APPLICATION	SI
в	10.03.2017	REVISED FOR STAGE 2 DEVELOPMENT APPLICATION	SI
A	28.10.2016	ISSUED FOR STAGE 2 DEVELOPMENT APPLICATION	SI
7	20.10.2016	DRAFT FOR DA SUBMISSION	SI
6	12.10.2016	ISSUED FOR INFORMATION	SI
5	05.10.2016	ISSUED FOR INFORMATION AND COORDINATION ONLY	SI
4	30.09.2016	ISSUED FOR INFORMATION AND COORDINATION ONLY	SI
3	20.09.2016	ISSUED FOR INFORMATION AND COORDINATION ONLY	SI
2	12.09.2016	ISSUED FOR INFORMATION AND COORDINATION ONLY	SI
1	06.09.2016	ISSUED FOR INFORMATION AND COORDINATION ONLY	SI
ISSUE	DATE	REVISION	B

DRAWING TITLE:

BASEMENT 2 - HOTEL BOH & RESIDENTIAL DROP OFF

DATE:	SCALE:	DRAWING No:	REV:	
18.01.2019	1:200 @A1			Ú III
DRAWN BY:	PROJECT NO:	1004	н	AD F
SS. SMS. VS. XM	CA3645			2



NORTH







Crone Partners Pty Ltd, Level 18, 680 George Street, Sydney, NSW 2000, Australia Pth. +61 2 6295 5300 Fax:+61 2 8295 5301 ABN: 80 095 989 272 Nominated Architect:Greg Crone - NSW Reg. No. 3929

CLIENT:











PROJECT MANAGER TURNER & TOWNSEND THINC LEVEL 19, 161 SUSSEX ST, SYDNEY, NSW 2000 02 8245 0000

TOWN PLANNER URBIS L23, DARLING PARK 201 SUSSEX ST, SYDNEY, NSW 2000 02 8233 9900

STRUCTURAL ENGINEER ROBERT BIRD GROUP 9-13 CASTLEREAGH ST, SYDNEY, NSW 2000 02 8246 3200

MECHANICAL / ELECTRICAL ENGINEER WOOD & GRIEVE ENGINEERS L6, BLOB & 207 PACIFIC HWY, ST LEONARDS, NSW 2065 02 8484 7000

SERVICES ENGINEER JHA LEVEL 23, 101 MILLER ST, NORTH SYDNEY, NSW 2060 02 9437 1000

Surface Design

FAÇADE ENGINEER SURFACE DESIGN SUITE 11.03, 68 YORK ST, SYDNEY, NSW 2000 02 9249 1400

BCA CONSULTANT CITY PLAN SERVICES 120 SUSSEX ST, SYDNEY, NSW 2000 02 8270 3500

LANDSCAPE MCGREGOR COXALL 21C WHISTLER ST, MANLY, NSW 2000 02 9188 7500

KEY PLAN: KEY SECTION: TOWER 0



PROJECT:

ONE CIRCULAR QUAY, TOWER B

1 Alfred Street Sydney NSW 2000



	н	18.01.2019	ISSUED FOR SECTION 4.55 APPLICATION	SI
	G	30.11.2018	ISSUED FOR INFORMATION AND COORDINATION ONLY	Sł
	F	14.11.2018	ISSUED FOR INFORMATION AND COORDINATION ONLY	Sł
	E	18.10.2018	ISSUED FOR INFORMATION AND COORDINATION ONLY	Sł
	D	25.09.2018	ISSUED FOR INFORMATION AND COORDINATION ONLY	Sł
	С	15.12.2017	SECTION 96 APPLICATION	Sł
	в	10.03.2017	REVISED FOR STAGE 2 DEVELOPMENT APPLICATION	Sł
	A	28.10.2016	ISSUED FOR STAGE 2 DEVELOPMENT APPLICATION	Sł
	7	20.10.2016	DRAFT FOR DA SUBMISSION	Sł
	6	12.10.2016	ISSUED FOR INFORMATION	Sł
	5	05.10.2016	ISSUED FOR INFORMATION AND COORDINATION ONLY	SI
	4	30.09.2016	ISSUED FOR INFORMATION AND COORDINATION ONLY	Sł
	3	20.09.2016	ISSUED FOR INFORMATION AND COORDINATION ONLY	Sł
	2	12.09.2016	ISSUED FOR INFORMATION AND COORDINATION ONLY	SI
	1	06.09.2016	ISSUED FOR INFORMATION AND COORDINATION ONLY	SI
	ISSUE	DATE	REVISION	B
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BASEMENT 1 - LOADING & BOH

DATE:	SCALE:	DRAWING No:	REV:	
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SS. SMS. VS. XM	CA3645			ĉ



NORTH



DO NOT SCALE

A1



A1



Attachment 2

Swept Path Analysis



/		Notes	
		This drawing is prepared for information purposes only. It is not to be used for construction.	
		TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.	
		Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 Parking facilities - Off-street car parking, and/or AS 2890.2-2002 Parking facilities Off-street commercial vehicle facilities). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.	
		no. revision note by. date A Swept Path Analysis HD 19-12-2018	
)		B Updated Plan HD 20-12-2018	
		Swept Path Legend:	
		Wheel Path Vehicle Body Envelope Clearance Envelope (300mm)	
I		architect Crone Archiects	
		client YuHU Group	
)		scale 1:200 @ A3 0m 2 4 6 8 1 1 1 1	
		project 1 Alfred Street, Sydney NSW 2000	
		drawing prepared by TRAFFIX traffic and transport planners Suite 2.08, 50 Holt Street Sury Hills NSW 2010 PO Box 1124 Strawberry Hills NSW 2012 t: +61 2 9380 4481 e: info@traffix.com.au traffix traffic & transport planners	
		drawing title Ground Floor Basement Entry and Exit 8.8m long Medium Rigid Vehicle drawn: HD checked: VD date: 19-12-201	
	/	18.367d10v01 TRAFFIX [181219 Plans] Initial Design Review_recover.dwg	
		18.367 - TX.01 B project no. drawing phase.	





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	Notes	
	This drawing is prepared for information to be used for construction.	n purposes only. It is not
	TRAFFIX is responsible for vehicle swe drawing mark-ups only. Base drawing pr	
	Vehicle swept path diagrams prep generated turning path software and a platforms. Vehicle data based upor Standards (AS/NZS 2890.1-2004 Park car parking, and/or AS 2890.2-200 Off-street commercial vehicle facilit embody a degree of tolerance, characteristics in these standards repr vehicle and do not account for al dimensions / specifications and/or driven	ssociated ČAD drawing on relevant Australian ing facilities - Off-street 12 Parking facilities - ies). These standards however the vehicle esent a suitable design I variations in vehicle
	no. revision note A Swept Path Analysis	by. date HD 19-12-2018
	B Updated Plan	HD 20-12-2018
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——(BC)		
BD	Swept Path Legend:	
	Wheel Path	
	Vehicle Body Envelope	
(RF)	Clearance Envelope (300mm)	
	architect Crone Archiects	
	client YuHU Group	
	scale	
	1:250 @ A3	
	0m 2 4 6 8 I I I I I	
	project	
BA	1 Alfred Street, Sydney NSW 2000	
	drawing prepared by	
\frown	TRAFFIX traffic and transport planners	
BB	Suite 2.08, 50 Holt Street Surry Hills NSW 2010	
\sim	PO Box 1124 Strawberry Hills NSW 2012	
	t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au traffic	traffix & transport planners
BC	drawing title	
	Basement 2 Ciculation	
BD	B99 and B85 Vehicles drawn: HD checked: VD	date: 19-12-2018
	18.367d10v01 TRAFFIX [181219 Plans] Initial Design Review_re	cover.dwg
PE	18.367 – project no. drawing phase.	TX.03 B



	Notes
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	to be used for construction.
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	Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing
	platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 Parking facilities - Off-street
	car parking, and/or AS 2890.2-2002 Parking facilities -
	Off-street commercial vehicle facilities). These standards embody a degree of tolerance, however the vehicle
	characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle
	dimensions / specifications and/or driver ability or behaviour.
	no. revision note by. date
	A Swept Path Analysis HD 19-12-2018
	B Updated Plan HD 20-12-2018
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	Swont Poth Logand:
	Swept Path Legend:
	Wheel Path
	Vehicle Body Envelope
	Clearance Envelope (300mm)
	architect
	Crone Archiects
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	1.200 @ 42
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(1	^{project} 1 Alfred Street,
$\setminus 30$	Sydney NSW 2000
	drawing prepared by
	traffic and transport planners
	Suite 2.08, 50 Holt Street Surry Hills NSW 2010
	PO Box 1124 Strawberry Hills NSW 2012
	t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au traffic & transport planners
	drawing title Basement 3 - 5
	Circulation
- APPRO	B99 Vehicle
STAGE	drawn: HD checked: VD date: 19-12-2018
ENVELO	18.367d10v01 TRAFFIX [181219 Plans] Initial Design Review_recover.dwg
— APPRO	18.367 - TX.04 B
STACE	project no. drawing phase. drawing no. rev



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	Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (<i>AS/NZS 2890.1-2004 Parking facilities - Off-street car parking, and/or AS 2890.2-2002 Parking facilities - Off-street commercial vehicle facilities)</i> . These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.			
	no. revision note by. date			
	A Swept Path Analysis HD 19-12-2018 B Updated Plan HD 20-12-2018			
	Swept Path Legend:			
	Wheel Path			
	Vehicle Body Envelope			
	Clearance Envelope (300mm)			
	architect Crone Archiects			
	client YuHU Group			
	scale			
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	0m 2 4 6 8 I I I I I I			
	^{project} 1 Alfred Street, Sydney NSW 2000			
	TRAFFIX traffic and transport planners Suite 2.08, 50 Holt Street			
	Suite 2.08, 50 Holt Street Surry Hills NSW 2010 PO Box 1124 Strawberry Hills NSW 2012			
	t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au traffic & transport planners			
	drawing title Basement 6			
Circulation B99 Vehicle				
2017	drawn: HD checked: VD date: 19-12-2018			
	18.367d10v01 TRAFFIX [181219 Plans] Initial Design Review_recover.dwg			
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APPROVED STAGE 1 DA ENVELOPE 201

APPROVED STAGE 2 DA





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	Notes
	This drawing is prepared for information purposes only. It is not to be used for construction.
	TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.
B2 100 4300	Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (<i>AS/NZS 2890.1-2004 Parking facilities - Off-street car parking</i> , and/or <i>AS 2890.2-2002 Parking facilities - Off-street commercial vehicle facilities</i>). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.
	no. revision note by. date A Swept Paths HD 07/11/2018
	B Updated Plan HD 20-12-2018
HOTEL RECYCLING WASTE ROOM	
	Swept Path Legend:
	Wheel Path
	Vehicle Body Envelope
	Clearance Envelope (300mm)
PPLY FAN VTILATION	architect Crone Archiects
$ \rangle \rangle$	
	client
	YuHU Group
	scale
	1:200 @ A3 0m 2 4 6 8
	project
	1 Alfred Street, Sydney NSW 2000
BOH LIFTS	drawing prepared by
	TRAFFIX
	traffic and transport planners Suite 2.08, 50 Holt Street
	Surry Hills NSW 2010 PO Box 1124 Strawberry Hills NSW 2012
	t: +61 2 8324 8700 f: +61 2 9380 4481 traffix
G	
	drawing title Basement 1 - Loading Dock
AC	6.4m long Small Rigid Vehicle General Service Bay 1
	drawn: HD checked: VD date: 19-12-2018
	18.367/10v01 TRAFFIX [181219 Plans] Initial Design Review_recover.dwg
	18.367 - TX.08 B project no. drawing phase. drawing no. rev



Notes This drawing is prepared for information purposes only. It is not to be used for construction. TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others. Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 Parking facilities - Off-street car parking, and/or AS 2890.2-2002 Parking facilities - Off-street commercial vehicle facilities). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour. **B2** 4400 430 no. revision note by. date Swept Path Analysis HD 19-12-2018 Updated Plan HD 20-12-2018 HOTEL RECYCLING WASTE ROOM Swept Path Legend: Wheel Path Vehicle Body Envelope Clearance Envelope (300mm) CAR PARK SUPPLY FAN VENTILATION architect Crone Archiects client YuHU Group scale 1:200 @ A3 4 project 1 Alfred Street, Sydney NSW 2000 drawing prepared by TRAFFIX Suite 2.08, 50 Holt Street Surry Hills NSW 2010 PO Box 1124 Strawberry Hills NSW 2012 t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com. traffix traffic & transport planners drawing title Basement 1 - Loading Dock 6.4m long Small Rigid Vehicle General Service Bay 2 drawn: HD checked: VD date: 19-12-2018 3.367d10v01 TRAFFIX [181219 Plans] Initial Design Re 18.367 |TX.09 | B drawing phase. drawing no. project no.