

Ref: 0505r02v02

22/04/2022

Conomos Legal William Bland Building Suite 8, Level 6 229-231 Macquarie Street Sydney NSW 2000

Attention: Vasili Conomos

RE: 85-87 ANZAC AVENUE, WEST RYDE (LDA 2021/ 0285)

GHAZI AL ALI ARCHITECT PTY LTD -V- CITY OF RYDE COUNCIL (NSW LEC CASE NO: 2021 / 00298687)

**PARKING DESIGN STATEMENT** 

Dear Vasili,

We refer to recent correspondence concerning the abovementioned NSW Land and Environment Court proceedings and the recently held Section 34 Conciliation Conference (Section 34 Conference) on 15/03/2022. Following the Section 34 Conference, further amendments to the drawings have been undertaken including modifications to the basement layout to address the contentions within the Statement of Facts and Contentions (SOFC) issued by City of Ryde Council (Council) filed 11/11/2021.

This Statement provides an updated parking assessment of the amended development with our findings discussed herein.

#### AMENDED DEVELOPMENT

The amended development now comprises of the following:

- 66 boarding rooms including one (1) manager's room.
- Two (2) levels of basement car parking providing:
  - 34 car spaces.
  - 14 motorcycle spaces.
  - 14 bicycle spaces.
  - One (1) service bay to accommodate a 6.4-metre-long private waste collection vehicle.
- A 5.5-metre-wide combined entry / exit driveway onto Anzac Avenue.

The parking implications arising from the amended development are discussed below. The relevant Ground Floor and Basement drawings are provided separately.



#### **PARKING ASSESSMENT**

#### Car Parking

Clause 29(2)(e) of the SEPP (Affordable Rental Housing (SEPP ARH 2009) outlines the following car parking rates for boarding house developments:

(2) A consent authority must not refuse consent to development to which this Division applies on any of the following grounds:

#### (e) parking

if:

(i) in the case of development carried out by or on behalf of a social housing provider in an accessible area—at least 0.2 parking spaces are provided for each boarding room, and

(ii) in the case of development carried out by or on behalf of a social housing provider not in an accessible area—at least 0.4 parking spaces are provided for each boarding room, and

(iia) in the case of development not carried out by or on behalf of a social housing provider—at least 0.5 parking spaces are provided for each boarding room, and

(iii) in the case of any development—not more than 1 parking space is provided for each person employed in connection with the development and who is resident on site.

The application is not being carried out by or on behalf of a social housing provider and accordingly, the parking rates under Clause 29(2)(e)(iia) and Clause 29(2)(e)(iii) of the SEPP ARH 2009 are required to be adopted for the development.

Additionally, the Ryde Development Control Plan 2014 (RDCP 2014) states that boarding house developments are to be assessed against the applicable car parking rates under the SEPP ARH 2009. **Table 1** below shows the car parking requirement for the development based on the applicable car parking rates under the SEPP ARH 2009 and the proposed provision in response.

Table 1: Car Parking Requirement & Provision

ТҮРЕ	NO.	SEPP PARKING RATE	SEPP REQUIREMENT	PARKING PROVISION	
Boarding Room <sup>1</sup>	66	0.5 spaces / room	33	24	
Manager	1	Max. 1.0 space / manager	0	34	
		TOTAL	33	34	

<sup>&</sup>lt;sup>1</sup>: Inclusive of the manager's room.

It is evident from **Table 1** that the amended development requires a minimum of 33 car parking spaces under the SEPP ARH 2009. Additionally, it is evident from **Table 1** and specifically, Clause 29 (2)(e)(iii) of the SEPP ARH 2009, that the development is permitted to allocate no more than (i.e. a maximum of) one (1) car parking space for an on-site manager.



In response, the amended development provides a total of 34 car spaces including 33 spaces for residents and one (1) space for the on-site manager. The parking provision and allocation satisfies the minimum requirements of the SEPP ARH 2009 and is therefore considered acceptable.

#### Accessible Car Parking

With reference to Table D3.5 of the Disability (Access to Premises – Buildings) Standards 2010 (Disability Standard 2010), the amended development is required to provide a minimum of three (3) accessible spaces. In response, the amended development provides three (3) accessible spaces and therefore satisfies the minimum requirements of the Disability Standard 2010.

#### **Motorcycle Parking**

The SEPP ARH 2009 stipulates minimum motorcycle parking rates that are required to be adopted for boarding house developments. **Table 2** below shows the minimum motorcycle parking requirement for the amended development and the proposed provision in response.

Table 2: Motorcycle Parking Requirement & Provision

TYPE	NO.	SEPP PARKING RATE	SEPP REQUIREMENT	PARKING PROVISION
Boarding Room	66	0.2 spaces / room	13	14

It is evident from **Table 2** that the amended development is required to provide a minimum of 13 motorcycle spaces under the SEPP ARH 2009. In response, the amended development provides a total of 14 motorcycle spaces, thereby satisfying the minimum requirements of the SEPP ARH 2009. The proposed motorcycle parking provision is therefore considered acceptable.

#### Bicycle Parking

The SEPP ARH 2009 stipulates minimum bicycle parking rates that are required to be adopted for boarding house developments. **Table 2** below shows the minimum bicycle parking requirement for the amended development and the proposed provision in response.

Table 3: Bicycle Parking Requirement & Provision

TYPE	NO.	SEPP PARKING RATE	SEPP PARKING RATE SEPP REQUIREMENT	
Boarding Room	66	0.2 spaces / room	13	14

It is evident from **Table 2** that the amended development is required to provide a minimum of 13 bicycle spaces under the SEPP ARH 2009. In response, the amended development provides a total of 14 bicycle spaces, thereby satisfying the minimum requirements of the SEPP ARH 2009. The proposed bicycle parking provision is therefore considered acceptable.



#### Service Vehicle Parking & Waste Collection

The amended development provides one (1) on-site service bay on Basement 01 to facilitate on-site waste collection and will accommodate a 6.4-metre-long private waste truck with a reduced head clearance of 2.2 metres. The typical specifications for a private waste truck are included as **Attachment 1** for reference.

Having regard for the above, waste collection of the development will be undertaken by a private waste contractor within Basement 01, thereby eliminating any parking impacts along Anzac Avenue. Waste trucks will enter the site in a forward direction and manoeuvre into the service bay. Waste will then be transferred and collected from the Basement 01 bin room. Once all bins have been emptied, the waste truck will be able to exit the site in a forward direction.

Swept path analysis has been undertaken showing the required circulation movements of the private waste truck. The results, included as **Attachment 2**, show satisfactory vehicle movements and more importantly, that the private waste truck will be able to enter and exit the site in a forward direction.

#### **DESIGN ASPECTS**

#### Vehicle Access Arrangements

- With 34 car parking spaces of User Class 1A, the proposed development requires a Category 1 Driveway under Table 3.1 of AS 2890.1, being a combined entry / exit driveway of width 3.0 metres to 5.5 metres. In response, the development proposes a combined entry / exit driveway of width 5.5 metres onto Anzac Avenue, and therefore satisfies the requirements of AS 2890.1.
- The proposed arrangements have also been assessed using swept path analysis which confirms compliance with AS 2890.1, and that the proposed access arrangements will operate safely and efficiently. The results of this analysis are included in **Attachment 2** for reference. The proposed design of the access is therefore considered acceptable and complies with the relevant requirements of AS 2890.1.
- A 2.5 metre by 2.0 metre visual splay is provided on the egress side of the driveway, at the property boundary, in accordance with Figure 3.3 of AS 2890.1.

#### Ramps

- To address flooding concerns, the driveway will incorporate a crest with the following arrangements:
  - An up-grade of 12.5% (1 in 8) for the first 3.52 metres into the site; then
  - A flat (0%) section for 2.0 metres; and
  - A down-grade of 12.5% (1 in 8) for 2.0 metres.

The above crest arrangements satisfy the requirements of Clause 3.3 of AS 2890.1.

- The vehicular access has a width of 5.5 metres between kerbs for the first 6.0 metres inside the property boundary and will narrow to 3.5 metres internally. The driveway ramp will therefore accommodate one-lane, two-way traffic flow, as demonstrated by the swept path analysis results included in **Attachment 2**. This arrangement complies with AS 2890.1 and is considered acceptable given the low traffic generation and tidal nature, with most vehicles departing the site in the morning and arriving at the site in the evening.
- The Ground Floor Basement 01 ramp has a maximum grade of 20% (1 in 5) with a top transition of 12.5% (1 in 8) and a bottom transition of 10% (1 in 10), thereby satisfying Clause 2.5.3 of AS 2890.1 and Clause 3.3.3.3 of AS 2890.2.



- The Basement 01 Basement 02 circulation ramp has a maximum grade of 25% (1 in 4), with top and bottom transitions of 12.5% (1 in 8), thereby satisfying Clause 2.5.3 of AS 2890.1.
- The proposed internal arrangements have also been assessed using swept path analysis which confirms compliance with AS 2890.1, and that the proposed internal arrangements will operate safely and efficiently. The results of the swept path analysis are included in **Attachment 2** for reference.

#### **Parking Layouts**

- All car parking spaces are provided in accordance with the User Class 1A requirements of AS 2890.1, having a minimum space width of 2.4 metres and length of 5.4 metres, with an aisle width of 5.8 metres.
- All accessible car parking spaces are provided with a minimum space width of 2.4 metres and length of 5.4 metres, with a minimum aisle width of 5.8 metres. Additionally, these spaces are located immediately adjacent to a 2.4-metre-wide and 5.4-metre-long shared area, thereby satisfying the requirements of AS 2890.6.
- All walls and columns are located outside of the space design envelope, as required under Figure 5.2 of AS 2890.1.
- All bicycle parking spaces are provided as Security Level B facilities, in accordance with AS 2890.3.
- All motorcycle spaces are provided in accordance with Clause 2.4.7 of AS 2890.1.
- All car parking spaces will be allocated to particular on-site residents and accordingly, there would never be an instance when a resident would enter the car park and not be able to park within their designated parking space.

#### **Head Heights**

- A minimum clear head height of 2.2 metres is required above all traffic circulation and car parking areas in accordance with Clause 5.3.1 of AS 2890.1.
- A minimum clear head height of 2.5 metres is required above the accessible car parking space and shared areas, in accordance with Clause 2.4 of AS 2890.6.

In summary, the internal parking arrangements have been designed in accordance with AS 2890.1, AS 2890.3 and AS 2890.6. Any minor amendments considered necessary (if any) can be dealt with prior to the release of a Construction Certificate.

#### **SUMMARY**

In summary, the traffic and parking impacts of the development are considered acceptable, and the parking layout complies with the relevant requirements of AS 2890. The development is therefore supportable on traffic planning grounds.



Please contact the undersigned should you have any queries or require anything further.

Yours sincerely,

**Paul Corbett** 

Director, PDC Consultants

Email: <u>pcorbett@pdcconsultants.com.au</u>

#### Attachments:

1) Private Waste Truck Specification Sheet

2) Swept Path Drawings



### Attachment 1



# 616 IFS Auto 616 IFS Hybrid 616 IFS Manual



\* Illustration may contain items not standard to the model

**KEY SPECIFICATIONS** 

### **KEY FEATURES**

Manual Transmission

Fully Automatic Transmission Options

Hybrid ProShift Transmission Options

**Dual SRS Airbags** 

Ventilated Disc Brakes Front & Rear

Anti-lock Brake System (ABS)

Vehicle Stability Control (VSC)

ADR 80/03 Emission using Euro 5

Also meets EEV emission levels

GVM. . . . . . . . . . . . . 4,495kg, optional 5,500kg GCM. . . . . . . . . . . . . . . . 7,300kg, optional 9,000kg Wheelbases . . . . . . . 2,525mm, 2,800mm, 3,400mm **Max Nominal** Body Length . . . . . . . 3,460mm, 3,900mm, 4,860mm

A Toyota Group Company





## 616 IFS Auto 616 IFS Hybrid 616 IFS Manual

## Engine & Driveline specifications

#### DIESEL ENGINE

Engine transmission combination Engine model Max output (ISO Net) @ 2,500 RPM Max torque (ISO Net) @ 1,400 RPM Maximum engine speed

Type

Combustion system
Bore & stroke
Piston displacement
Fuel injection system
Air intake system
Air cleaner
Fan clutch

Exhaust system

Exhaust outlet

Emission control system

616 IFS Auto & Manual NO4C US

616 IFS Hybrid NO4C UR

110kW/150 HP 420Nm/42.8 kgf/m 3,100 RPM

Diesel, four cycle, four-cylinder in line, overhead valve, water cooled Direct injection type

> 104 x 118mm 4.009 litres

Electronic control, common rail type Turbo-intercooled, stack-type air intake Paper element

Equipped

Catalytic Convertor with Diesel Particulate Active Reduction System (DPR) Horizontal

EGR & DPR meeting ADR 80/03 using Euro 5
Also meets EEV emission levels

#### HYBRID DRIVE SYSTEM

 Motor type
 AC Synchronous motor

 Rated voltage
 300V

 Max output
 36kW

 Max torque
 333Nm

 Idle stop
 Equipped

 Battery type
 Nickel-metal hydride

Battery capacity . . . . . . . . 288V/6.5Ah

CLUTCH

Hybrid Manual Dry single plate, diaphragm type with Clutch type damper springs 300mm 325mm Facing outside diameter 423 x 2cm<sup>2</sup> 483 x 2cm<sup>2</sup> Facing lining area Electronic with Hydraulic with Control transmission vacuum booster

#### TRANSMISSION

616 IFS Auto	616 IFS Hybrid	616 IFS Manual
A860E	M550 ProShift 5	M550
Full Automatic	Automated Manual	Manual
6	5	5
Double Overdrive	Single Overdrive	Single Overdrive
	A860E Full Automatic 6 Double	A860E M550 ProShift 5 Full Automatic Automated Manual 6 5 Double Single

#### BRAKES

Hydraulic system with ventilated disc brakes front Service brakes . Vacuum servo with hydraulic assist & dual circuits Control . . . . . . Front disc diameter . . 296mm Rear disc diameter. . . . . . . 281mm Anti-lock system (ABS) . . . . . Equipped Vehicle Stability Control (VSC) . . . Equipped Traction Control (TRC) . . . . . Equipped Easy Start system (ES) . . . . Equipped (except auto) Electric-vacuum actuator with valve in exhaust pipe Exhaust brake . . . . . . . . Drum on the rear of transmission 

#### PERFORMANCE & GEAR RATIOS

Models		616 IFS Auto	616 IFS Hybrid	616 IFS Manual
Engine RPM @ 100km/h		2,250	2,420	2,600
Maximum speed (km/h)		139	128	120
Gradeability tan 0 % @ GVM		60	48.4	52.7
Final drive ratio		4.625:1	4.333:1	4.625:1
Transmission Gear Ratios	1st	3.743	4.981	4.981
	2nd	2.003	2.911	2.911
	3rd	1.343	1.556	1.556
	4th	1.000	1.000	1.000
	5th	0.773	0.738	0.738
	6th	0.634		
	Rev	3.697	4.625	4.625
Torque converto	or ratio	1.95:1		

#### AXLE, SUSPENSION & LOAD LIMITS

Front Axle Model & Type

	Suspension	Co	lid
FRON	Spring Rate	9.9kg	f/mm
出	Axle Limit (including suspension) (kg)	2,6	00
	Tyre Limit (kg)	2,1	80
	Rear Axle Model & Type	SH12, fully floating single speed by	
	Suspension	Main & Aux Tapere absorber &	
8	Spring	Main	Auxiliary
REAR	Dimensions (L & W)	1,300 x 70mm	900 x 70mm
	Spring Rates	18kgf/mm	26kgf/mm
	Number of Leafs	2	2
	Axle Limit (including suspension) (kg)	4,4	00
	Tyre Limit (kg)	4,1	20

Independent Front Suspension

#### WHEEL & TYRES

#### ELECTRICAL (CAB & CHASSIS)

Type	 	24 voit, negauve earui
Batteries		12V x 2, series connected
Charging (80 amp)	 	Alternator with built in rectifier . (Auto & Manual)
	 	Supplied by Hybrid System (Hybrid)
		24V, 4.5kW starter motor (Auto & Manual)
	 	Supplied by Hybrid System (Hybrid)

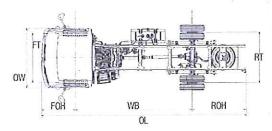


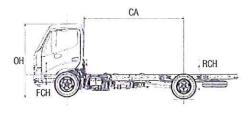
# 616 IFS Auto 616 IFS Manual



### Dimensions







#### DIMENSIONS - mm / Capacities

Models 300	616 IFS	Auto	616 IFS Hybrid		616 IFS Manual	
	Short	Medium	Short	Medium	Short	Medium
Product Code	XZU605R- HKTMSQ3	XZU655R- HKTMSQ3	XKU645R- HKUMSQ3	XKU655R- HKUMSQ3	XZU605R- HKMMSQ3	XZU655R- HKMMSQ3
Nominal Body Length ((WBx.6)+CA-80)	3,460	4,860	3,900	4,860	3,460	4,860
Wheelbase (WB)	2,525	3,400	2,800	3,400	2,525	3,400
Overall Length (OL)	4,710	5,965	5,185	5,965	4,710	5,965
Overall Width (OW) (rear tyre)	1,845	1,845	1,845	1,845	1,845	1,845
Overall Height (OH)	2,095	2,095	2,090	2,085	2,100	2,095
Cab to Rear Axle Centre (CA)	2,025	2,900	2,300	2,900	2,025	2,900
Front Overhang (FOH)	980	980	980	980	980	980
Rear Overhang (ROH)	1,135	1,555	1,375	1,555	1,135	1,555
Front Chassis Height (FCH)	655	655	655	655	655	655
Rear Chassis Height (RCH)	695	695	695	695	695	695
Road Clearance (RC)	170	170	170	170	170	170
Front Track (FT)	1,400	1,400	1,400	1,400	1,400	1,400
Rear Track (RT)	1,435	1,435	1,435	1,435	1,435	1,435
Turning Circle Kerb to Kerb	9,600	12,400	10,400	12,400	9,600	12,400
Wall to Wall	11,000	13,800	11,800	13,800	11,000	13,800
Locking Fuel Tank Capacity (L	ts) 80	100	70	100	80	100
Indicative chasis mass - kg (s	tandard tools	s, 10 litres of	fuel, spare tyr	e and subject	to a +/- 3%	tolerance)
Total	2,015	2,075	2,180	2,235	1,970	2,025
Front	1,395	1,440	1,490	1,530	1,365	1,410
Rear	620	630	690	705	605	615
GVM STD	4,495	4,495	4,495	4,495	4,495	4,495
GVM Opt	5,500	5,500	5,500	5,500	5,500	5,500
GCM STD	7,300	7,300	7,995	7,995	7,995	7,995
GCM Opt	7,300	7,300	9,000	9,000	9,000	9,000

Drawings are for reference only to the table. For specific chassis layouts please refer to Body Mounting Manual drawings.

#### WARRANTY

New vehicle warranty period

300 616 IFS	4 x 2	3 years or 100,000km	36 months	5 years or 160,000km
Light Duty Model	Axle configuration	Standard warranty	Cab corrosion perforation	Hybrid Nickel metal Hydride Battery

Battery warranty - 12 months from date of delivery \* For conditions, refer to the Hino Parts & Service warranty brothure Genuine parts or accessories warranty -3 years unlimited kilometres when fitted by an authorised Hino dealer  $^{\star}$ 















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HS300616IFS-12/14





# 616 IFS Auto616 IFS Hybrid 616 IFS Manual

## Cab equipment & Instrumentation

Wheelhase

Type

Chassis width at rear

Main section in mm

(depth x flange x thickness)

Tensile strength

Tow hook (front & rear)

Front bumper

Auto & Hybrid

Manual

180.0 x 65 x 6.0mm

Ladder-shaped channel section side rails

700mm

177.8 x 60 x 4.9mm

440N/mm<sup>2</sup>

Equipped

Painted in cab colour

Type . . . . . . . . . . . . Forward control, all steel welded construction, Windscreen wipers. . . . . . .

torsion-bar tilt mechanism, fully trimmed Electric, dual wipers, intermittent and 2-speed

Outside rear mirrors . . . . . . Radiator grille . . . . . . . .

Remote control & heated Painted same colour as cabin

HID with washer & fog lamp (Hybrid) Headlamp . . . . . . . . . . . . Halogen & fog lamp (Auto & Manual)

#### CAB INTERIOR

Steering . . . . . . . . . Telescopic tilt column with integral

power steering

Windscreen glass . . . . . . . Laminated glass

Seating capacity . . . . . . .

2-way adjustable, urethane foam pads, high-Driver's seat . . . . . . . . .

back, lumbar support

Assistant's seat . . . . . . . . Fixed bench, urethane foam pads, high-back seat

Seat cover. . . . . . . . . Fabric cover

Seat belts

Driver's seat . . . . . . . . . . . . . . . 3-point type with ELR and pre-tensioner 3-point type with ELR and pre-tensioner

Centre passenger's seat. . . . 2-point type

Sun visors . . . . . . . . . . For driver and passenger Ventilator . . . . . . . . . . Forced type by electric blower

Inside rear mirror . . . . . . One, flat type

Cigarette lighter (24 volt) . . . . Equipped

DAB+AM/FM radio with CD&DVD player & Audio . . . . . . . . . . . . .

Bluetooth Heater and defroster . . . . .

Air conditioner . . . . . . . . Equipped Remote door locking . . . . . . Equipped Immobiliser . . . . . . . . Equipped

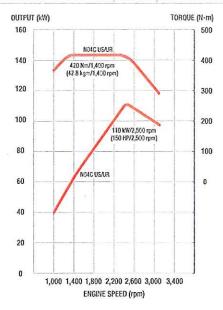
Power windows . . . . . . . . . Equipped

SRS airbag . . . . . . . . . Equipped for driver and left side passenger

Seat back console . . . . . . Equipped (centre) Overhead consoles. . . . . . For driver and assistant

Cup holder. . . . . . . . . Equipped

### POWER & TORQUE CHART (ISO Net) NO4C US/UR



1. Meters and gauges

km-kg system

Engine tachometer

Hybrid battery status (hybrid only)

2, Warning, pilot lamps and buzzers

Turning signal & hazard indicator lamp

Exhaust brake indicator lamp Engine oil pressure warning lamp

Battery charge warning lamp

High beam indicator lamp Parking brake indicator tamp

Engine malfunction indicator lamp

Fuel level warning lamp Fuel filter water accumulating

level warning lamp

Brake fluid level warning lamp

Back-up warning buzzer

Cab-tilt warning lamp

ABS system failure warning lamp

SRS airbag system failure warning lamp

Easy Start indicator lamp (except auto)

Hybrid system lamp (hybrid only)

AMT system lamp (hybrid only)

3. Switches

Lighting switch

Wiper and washer switch

Exhaust brake switch

Easy Start switch (except auto)

Easy Start release timing adjuster switch

(except auto) Traction Control OFF

4. Multi Information Display

Fuel gauge

Coolant temperature gauge

DPR accumulation gauge

Odometer

2 trip meters

Fuel consumption

- Current

- Average

5. Others

One-key starting-stopping

Horn button

Remote door locking

#### STEERING

. . . Telescopic and tilt steering column with

locking device. Rack & pinion with integral power

steering.

Inside: 39° Steering angle . . . . . . .

Outside: 29°

### GENUINE ACCESSORY OPTIONS

Bull bar

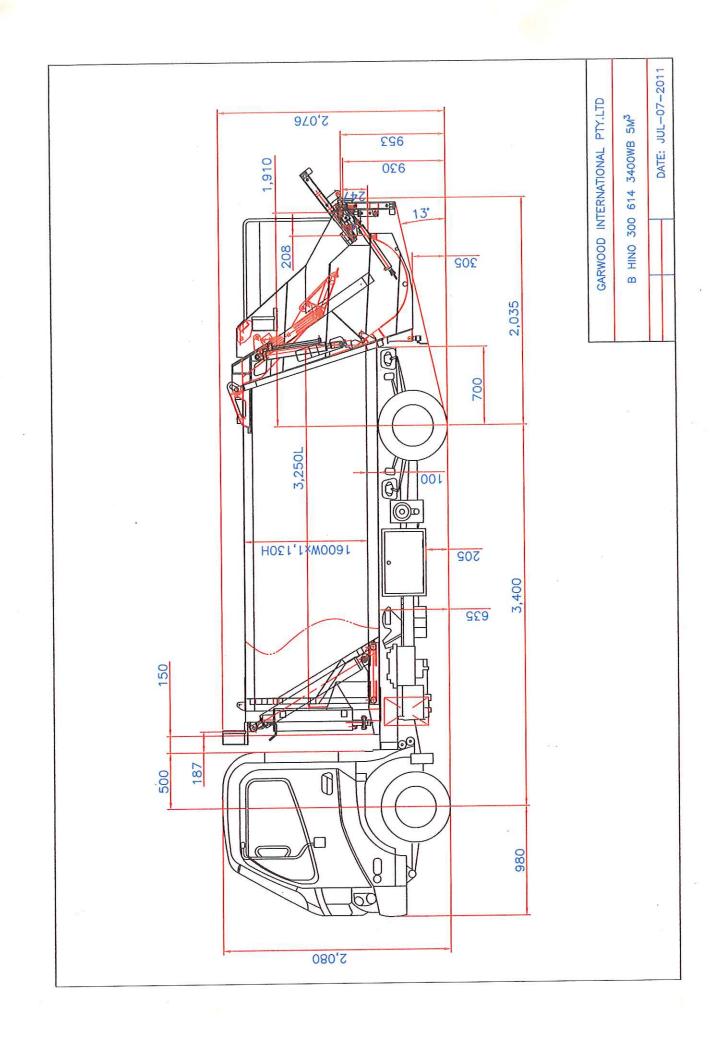
LED driving lights

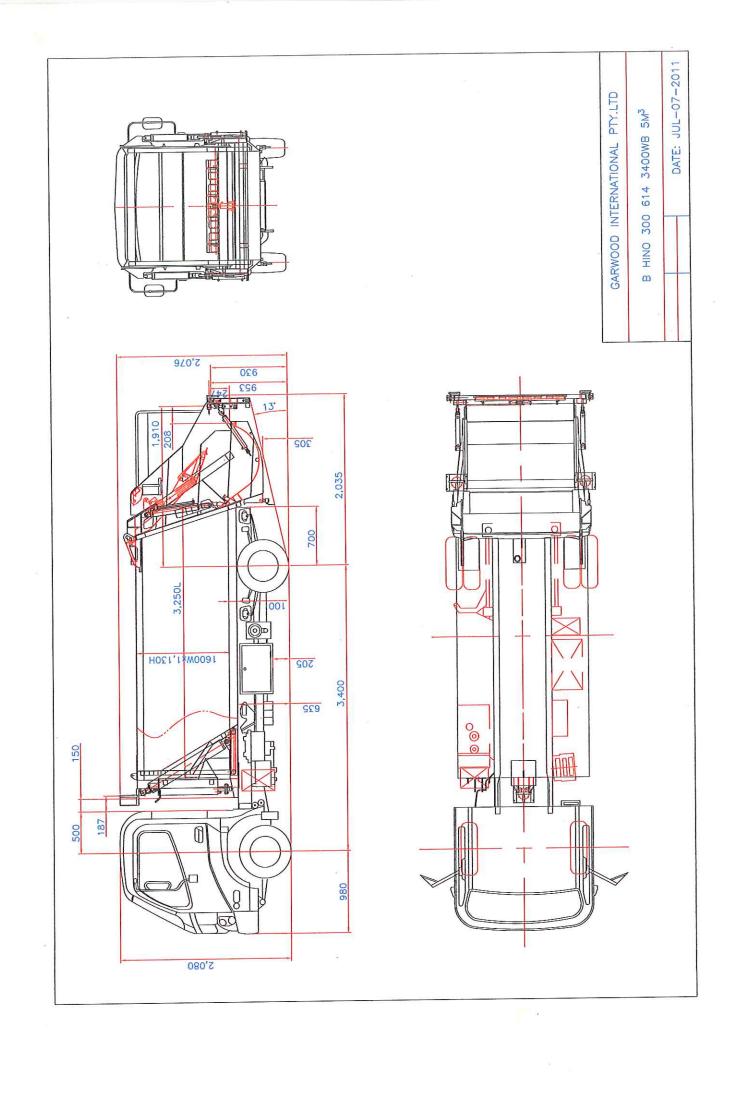
Chrome wheel covers

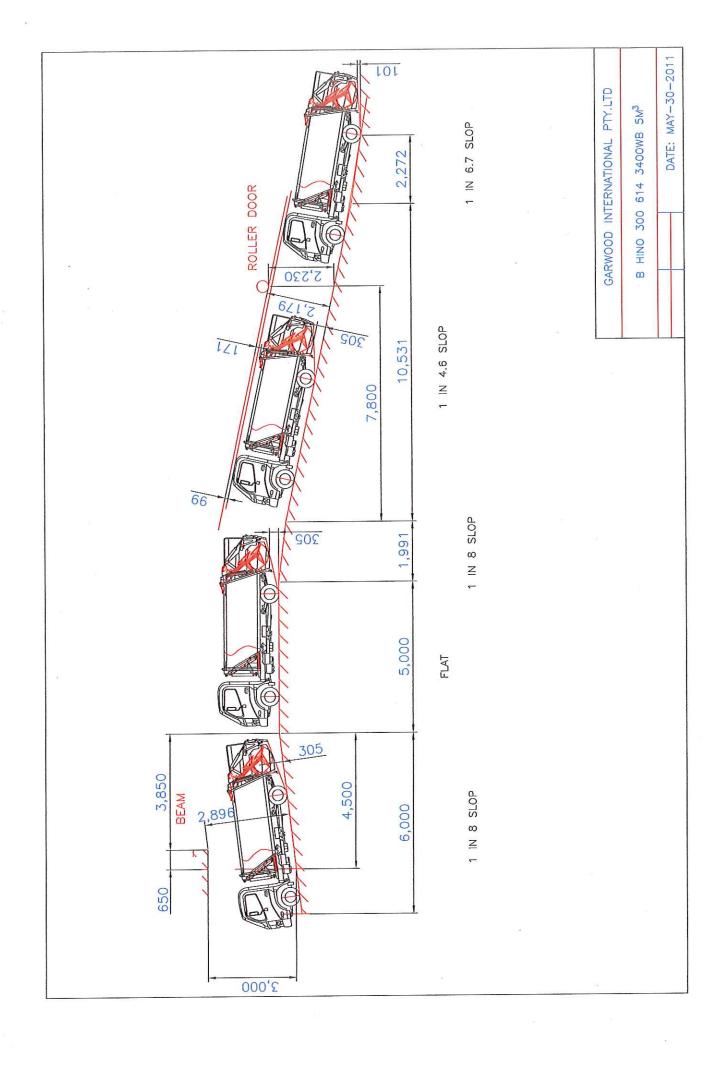
Stoneguard Sunvisor

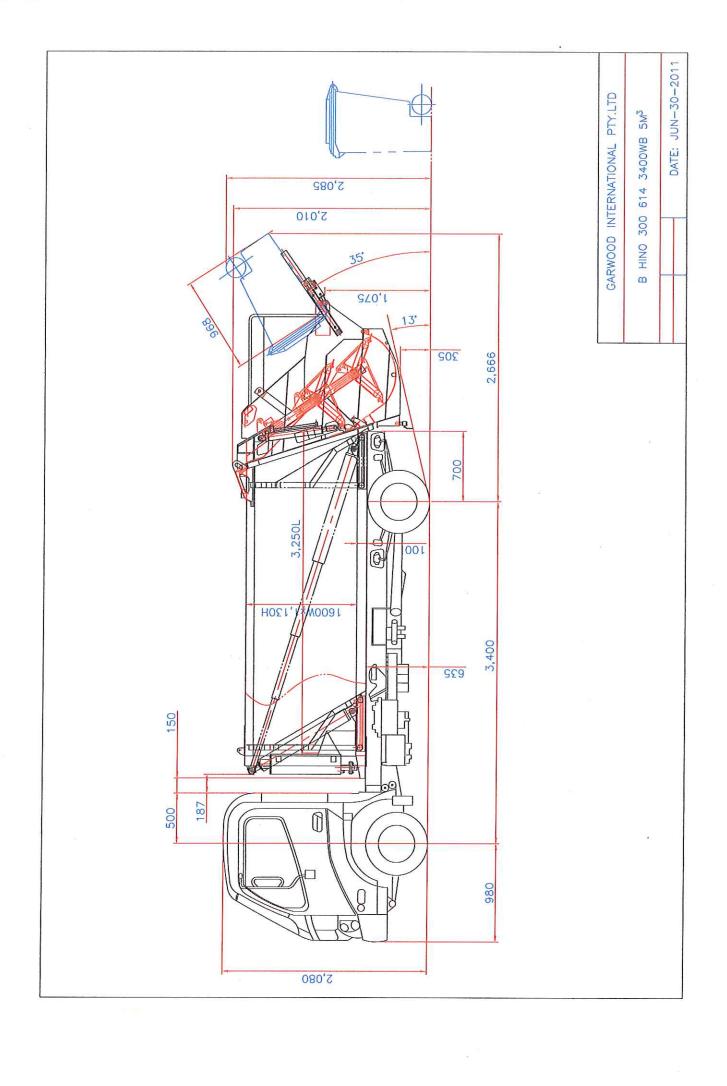
GPS sat nav

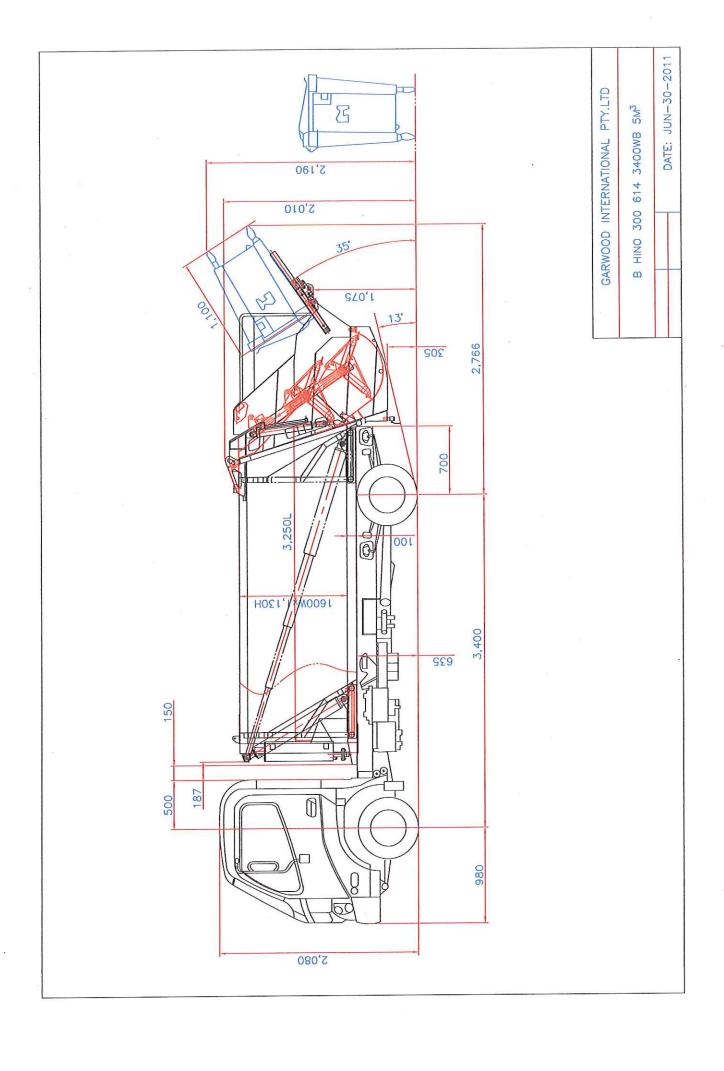
Rear vision camera (up to 3) Please check with your dealer for price, availability & fitment for these options













### Attachment 2

