

30 June 2022

RTeref: 22022

Chief Executive Officer
City of Gold Coast
C / - Gassman Development Perspectives

Dear Sir / Madam,

**PROPOSED WAREHOUSE DEVELOPMENT
LOT 502 HOMESTEAD DRIVE, STAPYLTON**

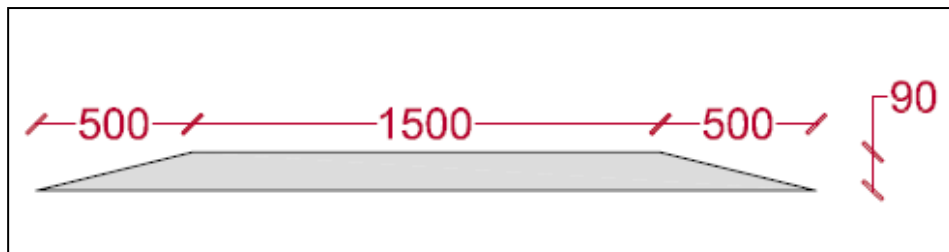
The following information is provided in response to the following transport related item raised by Council in its Information Request MCU/2022/242 dated 23 June 2022:

4. Raised pedestrian/cyclist pathway

To ensure compliance with M38 Industrial Estate Place Code Performance criteria PC41 and Car parking, Access and Transport Integration code Performance criteria PC12 and PC19 amended drawings must be submitted showing raised pedestrian pathways through the staff car park to help slow traffic and prioritise pedestrian safety. In accordance with AS2890.1 Section 2.3.3, the primary concern with aisle lengths greater than 100m is the need to manage traffic speed. Given effective aisle lengths up to 120m are proposed, traffic control devices, such as speed humps must be introduced to ensure internal traffic and pedestrian safety.

Response:

It is proposed that raised speed platforms be provided as suggested. The proposed section and dimensions are shown below. These are shown on the amended site plan.



5. Queuing assessment

To demonstrate compliance with Car parking, Access and Transport Integration code Performance criteria AS7.3 the Traffic impact assessment is to be amended to include:

- a) Queuing and congestion assessment. Submit a queuing and congestion assessment for the staff car park. At the end of the 5am shift traffic volumes will be significant, potentially 188 vehicles egressing and 175 vehicles entering, all through one driveway crossing. The potential for long queuing and traffic congestion around the car park entrance is considered high.

If the carpark remains within the front with no changes, consideration may be given for two driveway crossings for the staff car park, one dedicated entry and one dedicated exit. These two driveway crossings must be located either side of the Eastridge Street intersection and may be reduced in width to reflect one way traffic flow. Where a safer and more efficient design is proposed compliance with M38 Industrial Estate Place Code PC43 is considered to be achieved.

Response:

The proposed car park operations and traffic volumes will be manageable particularly with security personnel in place who will continually monitor car park operations. For context, the volumes that will be generated before and after each shift time will be well less than that of a shopping centre with an equivalent sized car park. For example, 270 parking spaces equates to a shopping centre with a floor area of approximately 5,400m², which would typically generate in the order of 675 vehicle movements per hour, or 170 movements every 15 minutes. It is typical for such sized car parks to operate with a single access point.

By comparison, there will be three 45 minute periods over each 24 hour period where the proposal generates significant volumes. At the busiest time (1pm shift start), approximately 158 will arrive over a 30 minute period, and then 170 vehicles will exit during the 15 minute period after all of those vehicles have arrived. Entry and exit movements will generally occur separately.

Staff will typically arrive gradually during the 30 minutes period before their shift is due to start, and then leave during the 15 minutes after the shift finishes. A typical arrival departure profile is shown in Table 1. When staff arrive there will generally not be any vehicles leaving and so entry traffic flow will not be obstructed significantly by cars manoeuvring from parking spaces. Staff will typically only exit the car park after staff have already arrived for the next shift.

The maximum entry flow rate will be prior to the 5am shift start, when approximately 170 vehicles arrive over a 25 minute period. This equates to 7 cars per minute which is satisfactory given that boom gates are not proposed to be closed. If necessary, security personnel will be on hand to direct drivers entering the car park, however workers will become familiar with the car park and such is unlikely to be required. Workers will be instructed to fill the car park from the eastern side so to minimize parking manoeuvres near the entry area.

Table 1 – Estimated staff car parking turnover

Start time	No. vehicles	
	Arriving	Departing
4.15am	0	0
4.30am	85	0
4.45am	85	0
5am (SHIFT START)	0	34
12.15pm	0	0
12.30pm	79	0
12.45pm	79	0
1pm (SHIFT START)	0	170
8.15pm	0	0
8.30pm	17	0
8.45pm	17	0
9pm (SHIFT START)	0	158

* Assumes 0.9 cars per staff member

6. Sliding and boom gates

To demonstrate compliance with Car parking, Access and Transport Integration code AS9.1 and / or PC9, the Traffic impact assessment must be amended to include the following:

- a) Clarify how the boom gate systems located at the car park entrance will operate. Issues to address include, but are not limited to: When and how do the car park and service road boom gates open? How are the two traffic streams prioritised? How is risk and conflict between different traffic streams managed during the shift change over period when traffic volumes are high? Will queuing acrossing the service road intersection be permitted?
- b) Clarify when and how the proposed Auto sliding gates at each driveway entrance will be opened and closed. How do they function in combination with the boom gates at the staff car park entrance? How will the sliding gate be activated at the northern truck entrance?
- c) Relocate boom gates. If a single driveway access is proposed to the Staff car park, amended drawings must be submitted showing the boom gate post located to the side of the driveway so that it does not reduce the effective width and efficiency of the driveway.

Response:

The boom gates and auto sliding gate will remain open except when a heavy vehicle is required to cross. Queuing will be permitted across the service road intersection.

This will be infrequent and supervised by security personnel.

Please contact the undersigned regarding and queries in relation to this matter.

Yours faithfully



LUKE RYTENSKILD
DIRECTOR, B.ENG (Civil), RPEQ 6293