

a division of Resolution Response Pty Ltd
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29 October 2020

Mr Shamma Hasan Project Manager Johnstaff Level 5, 9 Castlereagh Street SYDNEY NSW 2000

## LIVERPOOL MULTI-STOREY CAR PARK (MSCP) – SSD RESPONSE

#### References:

- A. Johnstaff Aconex JOHNST-GCOR-006836 dated 15 Oct 20
- B. GL2020\_014 NSW Health Guidelines to Hospital Helicopter Landing Sites in NSW

Dear Shamma,

Reference A requested AviPro confirmation that the increased height of the carpark would not impact on the operations of the helicopter landing surfaces on the hospital site.

#### **Factors**

The following factors are noted:

- a. The maximum height of the proposed car park building has been revised to RL 35.7m.
- b. The height of the Primary helicopter landing site (HLS) is RL 42.71m.
- c. The preferred flight paths are in a generally east/west direction.
- d. The Secondary HLS is now decommissioned.

From the above, AviPro can confirm that the height of the completed MSCP at 35.7m will be below the height of the Primary HLS and therefore will not impact the operations of the HLS.

# **Crane Illumination**

During construction, it can be expected that the cranes will provide an obstruction to any approach/departure using a northern flight path. As the primary flight paths are oriented east/northwest, these cranes will NOT impact the normal operations of the HLS.

As the cranes are in close proximity to a busy HLS, they will need to be illuminated in the following manner. This includes the obstruction lights required per the CASA Manual of Standards (MOS) Part 139. This is because the MOS Part 139 does NOT take into account flight using night vision devices which is a standard practice for NSW Ambulance helicopter contractors.

Therefore, as a minimum for all tower cranes:

- Top of crane A frame or cabin: medium intensity red obstruction light (night) and white (day)
- Both ends of Jib: medium intensity red obstruction light (night) and white (day)
- Along Jib: line of white LED fluro on a PE cell along the full length of the jib, or Heliflex along the last 10m of the jib (ensure this can be seen from all directions)
- Tower section: stairway lights or spot lights attached to the top of the tower pointing down and onto the tower

Further, as a minimum for all luffing cranes:

- Top of crane A frame or cabin: medium intensity red obstruction light (night) and white (day)
- End of Jib: medium intensity red obstruction light (night) and white (day)
- Along Jib: line of white LED fluro on a PE cell along the full length of the jib, or Heliflex along the last 10m of the jib (ensure this can be seen from all directions)
- Tower section: stairway lights or spot lights attached to the top of the tower pointing down and onto the tower

The LED jib Fluro details are:

- LED WEATHER PROOF EMERGENCY FLUROS (minimum 90-minute battery back-up)
- Lights are controlled via a PE Cell

The Heliflex details are:

- A LED strip light developed in conjunction with NSW Ambulance helicopter contractor
- Night Vision Device compatible
- Available through Cameron Ivers (ACIA Electrical Services Pty Ltd 0416176166)
- Lights are controlled via a PE Cell

## **Summary**

In summary:

- 1. The completed MSCP at 35.7m will be below the height of the Primary HLS and therefore will not impact the operations of the HLS.
- 2. Cranes used in the vicinity of the HLS will need illumination in addition to what is required in the CASA MOS Part 139.



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