**Australian Government**

**Civil Aviation Safety Authority**

STAKEHOLDER ENGAGEMENT DIVISION

*CASA Ref: GI18/418*

21 June 2018

Mr David Gibson
Team Leader
Social Infrastructure Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Email: David.Gibson@planning.nsw.gov.au

Dear Mr Gibson

Thank you for your email of 28 May 2018 requesting comment from the Civil Aviation Safety Authority (CASA) on the development application for the Lismore Base Hospital Redevelopment Stage 3C.

CASA has reviewed the information provided and notes that the proposed building (Stage 3C) is planned to a maximum height of 63.38m Australian Height Datum (AHD). I am advised the inner horizontal surface for the Lismore Aerodrome Obstacle Limitation Surface is 54.5 m AHD. Therefore, the proposed building will penetrate the inner horizontal surface by up to 8.88 m.

The proposed building is adjacent to the existing Lismore Base Hospital South Tower (Stage B) which is 78.69m AHD and penetrates the Inner Horizontal by 24.19 m.

The current and proposed towers have been assessed as hazardous objects under regulation 139.370(1) of the Civil Aviation Safety Regulations 1998 (CASR) due to the height and location of the buildings.

CASA recommends that:

- the highest point of both towers be lit with low intensity steady red lights at night as per Section 9.4 of the Manual of Standards (MOS) Part 139 - Aerodromes. (Characteristics for low intensity lights are stated in subsection 9.4.6.1);
- the developer provides information about the height and location of the buildings to Lismore Aerodrome;
- Lismore Aerodrome is to monitor the ongoing availability of the obstacle lighting in accordance with CASR 139.350(1) and subsection 7.1.4 and 9.4.10 of the MOS; and
- any obstacle lighting outage must be reported immediately by the proponent to the aerodrome operator.

CASA is aware that the existing South Tower (Stage B) has an Aviation Obstacle light that is only activated when helicopter operators are accessing the hospital. The operations of these obstacle lights should be changed to ensure operation at night or during low visibility operations.

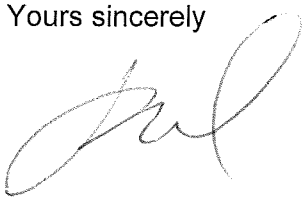
This response does not include an assessment of any cranes that may be required during construction. CASA advice must be sought prior to the operation of any crane above 54.5m AHD. The application for CASA advice about proposed cranes must include location, height and times of activity.

Council mays also consider the specific issues which are contained in the attachment as part of any planning and development.

For more information or to discuss this matter further please email anaa.corro@casa.gov.au.

I trust this information is of assistance.

Yours sincerely



Steve Neal
Section Head
Government and Corporate Relations

## ATTACHMENT – CASA Recommendations

### Departure and Approach Procedures

Any proposed structures and cranes if used in construction should be referred to the procedure design organisation/s responsible for the maintenance of instrument flight procedures at the Aerodrome. Please be aware that there may be more than one organisation responsible for the procedures at the aerodrome.

To check which organisations are responsible you can view the procedures at http://www.airservicesaustralia.com/aip/aip.asp then Departure and Approach Procedures. The logo on the bottom of each procedure plate indicates the design organisation responsible.

### Compliance with standards

Any aerodrome developments to aviation facilities associated with the planning proposal need to be consistent with the requirements of *Civil Aviation Safety Regulations 1998* Part 139 and the associated Manual of Standards. Further details are available on the CASA website. https://www.casa.gov.au/standard-page/casr-part-139-aerodromes

The National Airports Safeguarding Framework provides guidance on planning requirements for development that affects aviation operations. This includes building activity around airports that might penetrate operational airspace and/or affect navigational procedures for aircraft. The Framework consists of a set of guiding principles with six guidelines relating to aircraft noise, windshear and turbulence, wildlife strikes, wind turbines, lighting distractions and protected airspace. Further information is available from the following link: https://infrastructure.gov.au/aviation/environmental/airport_safeguarding/nasf/

### Aerodrome operations

Consultation should also be undertaken with the aerodromes operational management team to manage the following issues with developments adjacent to any aerodromes:

- Airport master planning: Council should ensure that the proposal does not affect any future development or upgrades planned by the aerodrome's operational management.
- Obstacle limitation surfaces (OLS) and Procedures for Air Navigation Services – Aircraft Operations: Prior to construction, the development and crane activity should be reviewed by the aerodrome's management team for the protection of these surfaces.
- Wildlife hazard management plan: Consideration needs to be given to the final heights and bird attractions of landscaping provisions which potentially may cause a risk to aviation activities.
- Obstacle lighting: The building and any construction cranes would need to be marked to comply with CASR 139 and associated MOS, paying particular attention to the quantity, type, luminescence and whether day and/or night marking is required.
- Lighting in the vicinity of an aerodrome: Any proposed non-aeronautical ground light in the vicinity of an aerodrome may by reason of its intensity, configuration or colour, cause confusion or glare to pilots and therefore might endanger the safety of aircraft.
- Gaseous plume: Exhaust plumes can originate from a number of sources and aviation authorities have established that an exhaust plume with a vertical gust in excess of 4.3 metres/second may cause damage to an aircraft airframe, or upset an aircraft when flying at low levels.
- Control of dust: During any construction the emission of airborne particulate may be generated which could impair the visual conditions.