

DPG 02

Liverpool Hospital HLS and Flight Path

Strategic Direction	Liveable Safe City Deliver an efficient planning system which embraces sustainable urban renewal and development
Key Policy	Strategic Maintenance Plan
File Ref	196533.2016
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EXECUTIVE SUMMARY

This report is to inform Council about the current operation of the existing Helicopter Landing Site (HLS) at Liverpool Hospital, and outline current and future changes in the surrounding urban environment that have potential impacts on development within its flight path.

Liverpool Hospital is classed as a tertiary referral hospital within the South West Sydney Local Health District (SWSLHD), meaning that it receives patients in critical condition for emergency care. The hospital's HLS is crucial to maintaining its tertiary referral status, underscoring the importance of undertaking a review of existing planning controls in order to protect the integrity of the facility.

This report seeks in-principle support from Council to amend the Liverpool Local Environmental Plan (LLEP) 2008 to require referral of development that may encroach on the helicopter flight path, and delegate to the Acting CEO authority for the preparation and submission of a Planning Proposal to the Department of Planning and Environment (DPE) seeking Gateway Determination.

RECOMMENDATION

That Council:

1. Endorses in principle an amendment to the Liverpool Local Environmental Plan 2008 as detailed in this report.
2. Delegates to the Acting CEO the authority to finalise a Planning Proposal to amend the LLEP and submit to the Department of Planning and Environment for Gateway approval.

REPORT

Context

The safe and efficient transfer of critically ill patients to hospital trauma centres is underpinned by urgency: the faster the patient can be treated, the more favorable the outcome is likely to be. Liverpool Hospital is classified as a major Tertiary Referral Hospital, meaning it receives patients in acute or critical condition that other hospitals in the South Western Sydney Local Health District (SWSLHD) do not have the facilities to treat.

Every year, Liverpool Hospital admits over 3000 trauma patients, including over 500 seriously injured and poly trauma patients requiring Intensive Care or High Dependency admission. The NSW Ambulance Service has protocols which bypass other hospitals within the SWSLHD to transport patients to Liverpool when specific 'serious injury' criteria are met.

Many of Liverpool Hospital's critically ill or injured patients are transferred by helicopter, a service which plays a vital role in the provision of emergency care. An effective and safe helicopter ambulance service relies heavily on both the optimal location of the Helicopter Landing Site (HLS) within the hospital itself, and a clear flight path free from obstruction.

Despite the importance of maintaining clear flight paths to hospitals, protective legislation is largely dependent on local councils to prepare and enforce relevant planning controls. The Civil Aviation Safety Authority (CASA), as the statutory body for safety regulation of civil air operations in Australia has released operating guidelines for HLSs (CAAP 92-2 (2) *Guidelines for the Establishment and Operation of Onshore Helicopter Landing Sites*), however these guidelines do not function as enforceable legislation. The NSW Ministry of Health, in conjunction with the Ambulance Service of New South Wales has also developed 'Guidelines for Hospital Helicopter Landing Sites in NSW', however similar to those of CASA, these guidelines do not hold any legal weight.

Liverpool Hospital is located on the eastern edge (Figure 1) of Liverpool City Centre. Given the ongoing and more intensive development of the Liverpool City Centre, the potential for conflict between emergency care and development outcomes gives rise to the need for Council to examine strategies to protect the helicopter flight paths (HFPs). Of particular concern is the current height controls applied to the northern section of City Centre, which allow for development between 35-45m, and the potential for these developments to encroach on the HFP.



Figure 1: Liverpool CBD, and location of Liverpool Hospital HLS

Background

In 2015, the Department of Planning and Environment (DPE) issued Gateway Determinations for Liverpool Local Environmental Plan (LLEP) 2008 - Draft Amendments 51, and 52. The resulting public consultation opened up a dialogue regarding airspace and flight paths with a range of key stakeholders, including the South Western Sydney Local Health District (SWSLHD), Air Ambulance NSW and Careflight Australia.

Both Amendments 51 and 52 applied to land within the Liverpool City Centre (located within the Key Sites Map). Amendment 51 sought to rezone the nominated sites from B3 – Commercial Core to B4 – Mixed Use, and to make changes to various development standards, including the removal of the Height of Building control applied to the site. Amendment 52 sought to rezone much of the City Centre from B3 – Commercial Core to B4 – Mixed Use, and to amend planning controls relating to the land, including amending the height of building and floor space ratio (FSR) controls for land in the Liverpool City Centre.

A report by AviPro (Attachment 1) was commissioned by Air Ambulance NSW and submitted to Council in June 2015 as part of a submission from CASA regarding Amendment 51. The report detailed the current helicopter flight path to Liverpool Hospital, as well as outlining possible changes to the helipad and flight path in the near future as a result of a fleet upgrade. The report recommended that Council undertake work to map the current flight path, and enable protective measures for the areas below the flight paths. In August 2015 the Department of Infrastructure and Regional Development (DIRD) confirmed that CASA was considering changes to regulations which would mandate protection of helicopter flight paths. This regulation remains in initial drafting stages.

On 11 September 2015, a letter from the SWSLHD raised concern with changes to the notification process for development applications, and questioned what the implications would be on the operation of the Liverpool Hospital HLS and flight paths. Council responded to this letter on 16 September 2015, indicating that development in the flight path would be referred to Air Ambulance for comment. It is noted that comments from Air Ambulance and Liverpool Hospital hold advisory, rather than regulatory, weight.

Throughout the second half of 2015, Statutory Planning, Strategic Planning and GIS internally discussed the practicalities of referring development applications to Air Ambulance and Liverpool Hospital for comment. The lack of readily available map layers depicting the height of the HLS and the trajectory of the flight path has restricted the possibilities for such referrals to take place before now.

At a meeting in July 2016 with senior management of Liverpool Hospital and Liverpool City Council, it was agreed to investigate options to protect HFPs in the Liverpool City Centre.

The events over the past 18 months, as detailed above, have highlighted the need for, and guided the preparation of, an LLEP amendment to address the conflict between flight path airspace and development. This report will discuss options and recommend actions to be taken by Council to address the outstanding concerns surrounding the HFPs.

Discussion

Referral versus Mandatory Height Controls

In developing legislation and policy around flight paths, there are two options: implement a referral process, or establish mandatory height limits in the flight path.

This report recommends that a referral system managing HFP conflicts should be created to require development applications that encroach the OIS (Object Identification Surface, further discussed below) to be referred for comment to both Air Ambulance and the Director of Capital Works at the SWSLHD (Liverpool Hospital). The referral of development applications to Liverpool Hospital and Air Ambulance would allow both stakeholders to provide comments and advice on a proposal which encroached on the OIS. Any comments or advice received within 21 days of the referral date would be considered by Liverpool Council as part of the assessment of the proposal.

A referral based system is supported by the 'Guidelines for Hospital Helicopter Landing Sites in NSW (NSW Ministry of Health, Rev07, 2015). Specifically, the guidelines state that:

"...HLS approach paths should be studied and applied to paper to confirm that there are no buildings or other projections forming obstructions with the VFR approach/ departure and transitional surfaces, and that there is no or limited potential for future obstructions within this area' (pg.43).

The Guidelines also recommend that flight paths be protected through the implementation of planning controls, and that any proposed development in the vicinity must be referred to the Ministry of Health (pg.45). As per discussions with senior hospital staff in July 2016, referral

to both Air Ambulance and the Director of Capital Works at the SWSLHD would adequately cover referral recommendations made in the Guidelines.

By requesting comment on development applications that have the potential to conflict with the HFPs, Council avoids the need for restrictive height controls that may conflict with the broader strategic goals of the Liverpool City Centre.

Mapping and Application of the HFPs and OIS

At present, GeoCortex, Council's GIS mapping system, includes a layer that depicts a 2D representation of the flight paths (Figure 2 below) to and from Liverpool Hospital.



Figure 2: Helicopter Flight Paths for Liverpool Hospital applied over the Liverpool City Centre Key Sites Map.

The literature covering HFPs and landing sites is generally uniform in the application of the OIS, which is explained below:

“Under the approach/departure surface, the object identification surface starts from the outside edge of the FATO (Final Approach and Take Off) and extends horizontally out for a distance of ~700 m. From this point, the object identification surface extends out for an additional distance ~2,800 m. while rising on a 2.5° or 22:1 slope (22 units horizontal in 1 unit vertical). From the point ~700 m. from the FATO perimeter, the object identification surface is ~30 m. beneath the approach/departure surface” (NSW Ministry of Health, Guidelines for Hospital HLS Policy, Rev07, Pg. 41, 2015) (Attachment 2).

Given that the flight path and OIS rise at a 4.5% angle for a total distance of 3.5km, the map layer in GeoCortex cannot accurately depict the way in which the proposed height control will be spatially applied.

To support the proposed LLEP (2008) amendment, it is proposed that contour maps be prepared, which depict the sloping trajectory of the HFP in a clear visual way. The preparation of such a map will aid proponents and Council planners alike in determining the threshold height at which referral for development proposals in the City Centre is required.

Using the above information, it is recommended that the LLEP 2008 be amended to include a clause detailing referral requirements for developments that encroach on the OIS, and that a contour map be added to Council’s mapping system to support the draft LLEP clause.

It is considered that the application of the clause over areas in defined Key Sites Maps would achieve the following:

- Protect the flight path and helicopter safety in a broader context of increased development and change in the Liverpool City Centre.
- Promote a working relationship with Liverpool Hospital, which is an important health service as well as providing significant investment and job generation within Liverpool City Centre.
- Ensure that existing land controls in Liverpool City Centre are not altered unnecessarily.
- Limit the scope of the draft clause to areas in which height conflict are most likely to occur.

CASA Regulation Update

CASA is conducting a review of Civil Aviation Safety Regulation 139 (as noted above), which currently applies to licensed aerodromes, and is planning to extend the purview of this regulation to cover HLS. The revised regulation is likely to include guidance on development within helicopter flight paths.

It has been indicated previously that this review would be complete by mid-2016. As yet, no further information has been released. In preparing this proposed draft amendment, Council

has the opportunity to showcase a policy directive that may help set a precedent and guide future local or state policy around Emergency Services HLS.

Recommended LLEP Amendment

The intent of the amendment is to incorporate a draft Clause (shown below) into the LLEP 2008 to ensure the ongoing safe and efficient operation of the HLS at Liverpool Hospital while keeping to a minimum any restrictions on development within the Liverpool City Centre.

This report seeks to gain in-principle support from Council for the drafting of an LLEP 2008 amendment to include the following proposed new clause, and delegation to the A/CEO authority to submit the amendment as per S56 of the EP&A Act for Gateway Review.

Draft Clause 7.17A Development in Emergency Helicopter Flight Paths

(1) *The objectives of this clause are:*

- a. *To facilitate the effective and on-going operation of helicopter operations at Liverpool Hospital;*
- b. *To ensure that the use of the Helicopter Landing Site (HLS) at Liverpool Hospital is not compromised by any proposed development encroaching on the flight path of an Air Ambulance NSW; and*
- c. *To ensure that new developments do not present a hazard to aircraft arriving or departing from the Liverpool Hospital HLS.*

(2) *Where it is proposed to erect a building or structure (including a temporary structure) on land shown edged heavy blue on the Key Sites Map, and the building or structure would exceed the height of the Object Identification Surface (OIS), the consent authority must:*

- a. *Give notice of the proposed development to the NSW Ministry of Health;*
- b. *Give notice of the proposed development to Air Ambulance (or equivalent);*
- c. *Consider any comment made by the NSW Ministry of Health or Air Ambulance NSW within 21 days of its having been given notice of the proposed development; and*
- d. *Consider whether the proposed use of the building will be adversely affected by exposure to aircraft noise.*

(3) *In this clause:*

Land and airspace is in the helicopter flight path of Liverpool Hospital if the NSW Ministry of Health has notified the consent authority that the land and airspace is in such a flight path.

Object Identification Surface heights for the Liverpool Hospital HLS are determined by the NSW Ministry of Health.

Consultation

Throughout the process of researching and writing this report, ongoing consultation with Liverpool Hospital has been of key importance. A meeting was held with the A/ Director of Capital Works and Infrastructure in July 2016, and a copy of this report was also sent to the

same for comment. It is understood that the Hospital has no concerns with the proposed LLEP 2008 amendment. It is also understood that a representative from Liverpool Hospital intends to present at the August Council meeting.

A copy of this report was also provided to Development Assessment for comment, and their suggested changes have been incorporated into the final draft.

Conclusion

Ensuring the successful operation of the Liverpool Hospital HLS has broad implications for Liverpool Hospital, Liverpool City Council and the community at large. Most important is the provision of urgent medical treatment, which is a matter of life and death. The safety of helicopters, buildings and the occupants of both is also key. Less obvious impacts are the continuing role of Liverpool Hospital as a tertiary referral centre within the SWSLHD, and the flow-on effects this has on Liverpool City Centre with regard to job opportunities and economic stimulus.

These planning controls seek not to unnecessarily limit height of buildings, but rather to ensure that the relevant body is properly notified and has the opportunity to make a meaningful contribution to the outcome of the development proposal. The draft clause proposes to establish a referral based system, whereby development applications that seek to build permanent or erect temporary structures at or above the OIS are referred to Air Ambulance NSW and the Director of Works for the SWSLHD. The practical implementation of this clause will be aided by a contour map that depicts the HFP trajectory.

It is proposed that Council resolve to prepare a planning proposal to amend the LLEP 2008, and delegate to the A/CEO the authority to finalise the planning proposal. The planning proposal would then be forwarded to the Department of Environment and Planning under Section 56 of the EP&A Act seeking a Gateway determination.

CONSIDERATIONS

<p>Economic and Financial</p>	<p>Further develop a commercial centre that accommodates a variety of employment opportunities. Encourage and promote businesses to develop in the hospital, health and medical precinct (of the City Centre).</p>
<p>Environmental and Sustainability</p>	<p>Manage air, water, noise and chemical pollution. Support the delivery of a range of transport options.</p>
<p>Social and Cultural</p>	<p>There are no social and cultural considerations.</p>

<p>Civic Leadership and Governance</p>	<p>Act as an environmental leader in the community.</p> <p>Undertake communication practices with the community and stakeholders across a range of media.</p> <p>Foster neighbourhood pride and a sense of responsibility.</p> <p>Facilitate the development of community leaders.</p> <p>Encourage the community to engage in Council initiatives and actions.</p> <p>Provide information about Council's services, roles and decision making processes.</p> <p>Deliver services that are customer focused.</p> <p>Operate a well-developed governance system that demonstrates accountability, transparency and ethical conduct.</p> <p>Actively advocate for federal and state government support, funding and services.</p> <p>There are no civic leadership and governance considerations.</p>
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ATTACHMENTS

1. AviPro Report
2. NSW Ministry of Health Hospital HLS Policy Guidelines (Under separate cover)