



Clouston associates

LANDSCAPE ARCHITECTS

65-69 KENT STREET • SYDNEY NSW 2000
PO BOX R1388 • ROYAL EXCHANGE NSW 1225 • AUSTRALIA
sydney@clouston.com.au
www.clouston.com.au
FACSIMILE +61 2 8272 4998
TELEPHONE +61 2 8272 4999

Liverpool Hospital
Elizabeth Street
Liverpool NSW 2170
Attn Chris McGillick – Ethos Urban

S19-0011_LHAP SSD10389 LETTER MW CLOUSTON_Rev 1_CL
21.8.2020

Dear Chris,

LIVERPOOL HOSPITAL INTEGRATED SERVICES BUILDING (SSD 10389) - RESPONSE TO AGENCY SUBMISSIONS

CLOUSTON Associates are the Landscape Architects for the LHAP (SSD 10389) project. The following responses address key landscape-related comments received from Liverpool City Council.

Comment – Goulburn Street Forecourt Paving

The pavement design for any public domain works need to be in accordance with the paving strategy outlined in the draft LCC PDMP. See Chapter 6.13 'Paving' for core street paving typology (i.e. for treatments along Goulburn Street and Elizabeth Street). Paving treatments need to extend from the kerb to the building line on the ground floor, to create a seamless public/private domain (i.e. also consistent with Council's DCP). If any other paving design (e.g. feature paving) is being proposed within the lot boundary, the proposed paving within the private domain needs to integrate with the paving design in the public domain, as per the draft LCC PDMP.

CLOUSTON Response: Goulburn Street is not part of this SSD DA. Works to Goulburn Street, including works to the footpath and street planting have been approved under a separate application in consultation with Council.

With respect to integrating paving from the streetfront into the hospital forecourt, taking material inspiration from the surrounding granite street paving, directional bands of dark granite are proposed for the paving on the forecourt area of the hospital. Starting at the property boundary along Goulburn Street bands of granite within exposed aggregate concrete seamlessly transition from the all-granite streetfront paving.

The directional nature of the banding draws visitors through the lushly planted forecourt into the Main Entry of the Hospital. This granite banding is repeated across the site as an additional layer to the wayfinding strategy to subtly differentiate main building entries and provide a simple unifying ground plane footprint.

Comment – Plant Species Selection

The proposed planting palette should include sensory plant species that significantly assist in improving the mental and physical wellbeing of the users and would help create a healthier environment around the hospital precinct. A suggested list of sensory plant species has been outlined in the Draft LCC PDMP (see Chapter 6.12 'Trees & Vegetation' for further details and references).

CLOUSTON Response: The planting palette for the site incorporates species outlined in the Draft LCC PDMP. This list of species has been extensively supplemented with species with a proven record in difficult conditions with a particular focus on plants which offer lush ground level foliage



and long-lasting displays of colour throughout the year. As much of the planting is to be primarily experienced visually – in what for many visitors, and patients will be a stressful time - ensuring a lush and thriving garden view is of utmost importance.

Core species are featured throughout the ground floor courtyards and various roof gardens to provide a unified design, being supplemented by diverse species selected to ensure each space provides a unique experience for visitors.

Comment – Removal of *Corymbia citriodora*

*All new tree planting must be installed as minimum 100L potted stock. Council requests the retention of the *Corymbia citriodora*, Lemon Scented Gums on Campbell Street. These are significant trees with large canopies and must be retained.*

CLOUSTON Response: CLOUSTON confirms that all new tree plantings will be minimum 100 litre stock. The retention of the *Corymbia citriodora* has been raised with LCC previously. Retention is not possible due to crown impacts with adjoining buildings. These trees will be replaced with *Lophostemon confertus*, which can be managed to avoid the recurrence of such impacts, while providing additional benefits to heat island impacts from a denser canopy.

All planting within the Hospital site is required to provide a number of functions from aesthetics to habitat creation and heat island mitigation. Species proposed as part of the landscape works have been selected based on these functions.

While the loss of visual amenity of these trees is acknowledged, it is worth noting that findings in the Liverpool City Council's pilot study on heat mitigation (described in the LCC PDMP), demonstrates that the more open canopy tree species, typically seen in *Corymbia citriodora*, has less impact on heat mitigation than the denser canopy of native species such as *Lophostemon confertus*.

Comment – Tree Removals and Future Canopy Coverage

There are tree removals proposed across the site, which will reduce the urban tree canopy in Liverpool. The project must provide a positive contribution to the urban tree canopy in Liverpool. Council requests the m2 of tree canopy removed for construction in each stage of work be returned via advanced tree planting from project completion for each stage of work.

CLOUSTON Response: Tree removal is a regrettable but inevitable aspect of any major redevelopment of an existing site such as a hospital. Care has been taken to retain as many significant trees within the site as possible. Mature palms and the large mature fig on the corner of Goulburn and Elizabeth Streets have been retained along with a number of other mature trees in the Forbes Street entry and courtyard.

While some trees have been removed to provide an additional 70,000m² of health services, new tree planting has been provided throughout the site, creating a more even and extensive long-term tree canopy cover across the campus.

While it is not feasible to replace the canopy cover removed from site in its entirety from the immediate time of planting, proposed tree plantings will provide an increase of more than 40% coverage in 10 years, a significant improvement which will only increase over time; it is anticipated that canopy coverage will increase threefold from the current coverage in 30 years.

The below table provides estimates of canopy coverage change over time.



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Canopy Coverage Description	Area of Canopy Coverage (m ²)	% coverage relative to existing canopy coverage
Existing canopy coverage (55,98	N/A
Expected canopy coverage at planting day (Including retained existing trees)	2,902	51.8%
Expected canopy coverage at 5 years (Including retained existing trees)	4,902	87.6%
Expected canopy coverage at 10 years (Including retained existing trees)	7,902	141.2%
Expected canopy coverage at maturity 30 years (Including retained existing trees)	19,795	353.6%

We trust these responses are clear, but please do not hesitate to contact us if you require any clarifications.

Yours faithfully

CLOUSTON Associates

CROSBIE LORIMER

Managing Director

Registered Landscape Architect No 891