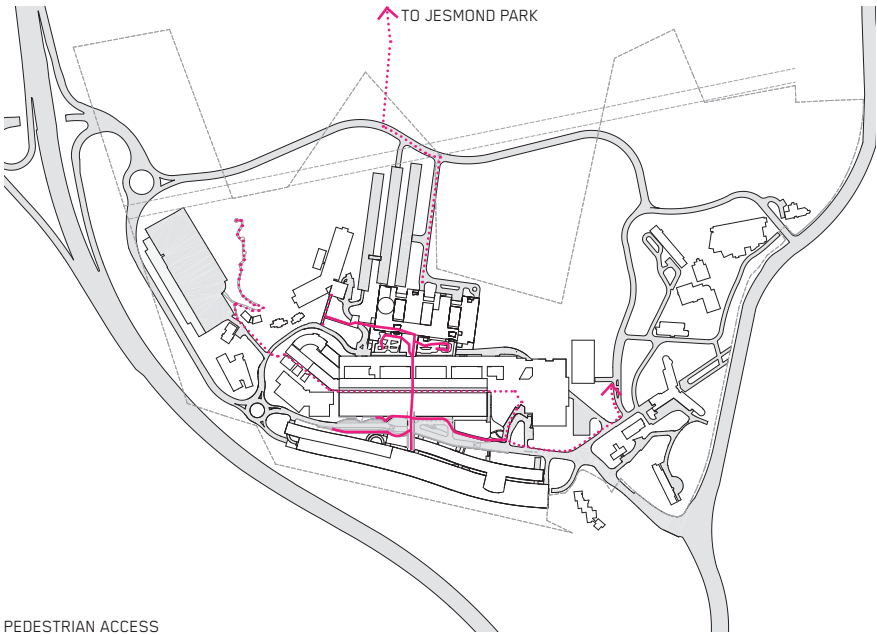
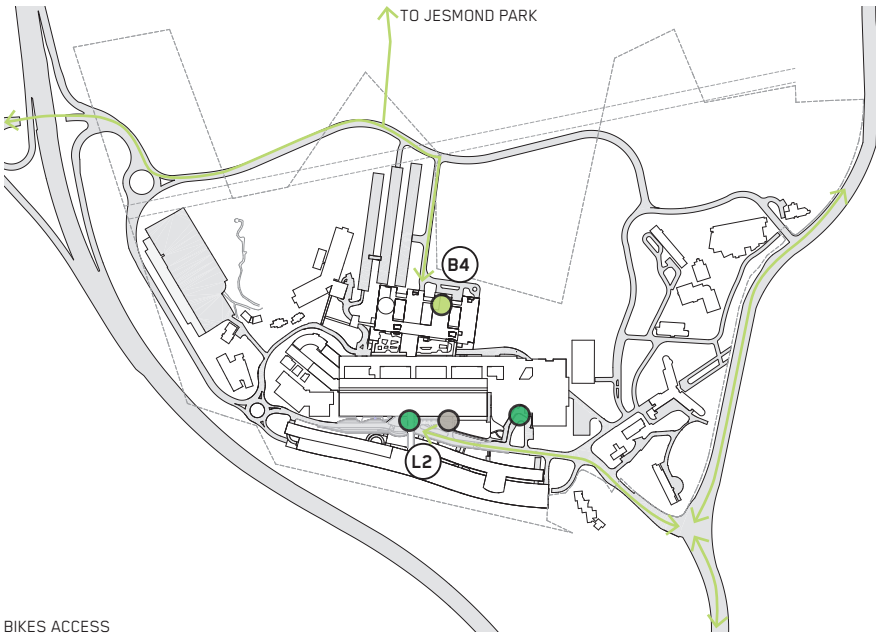
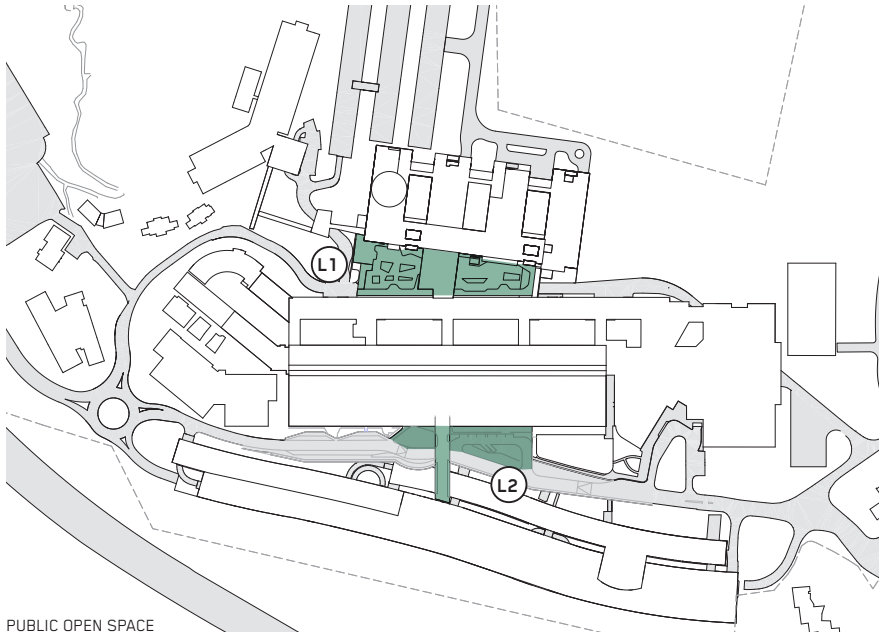
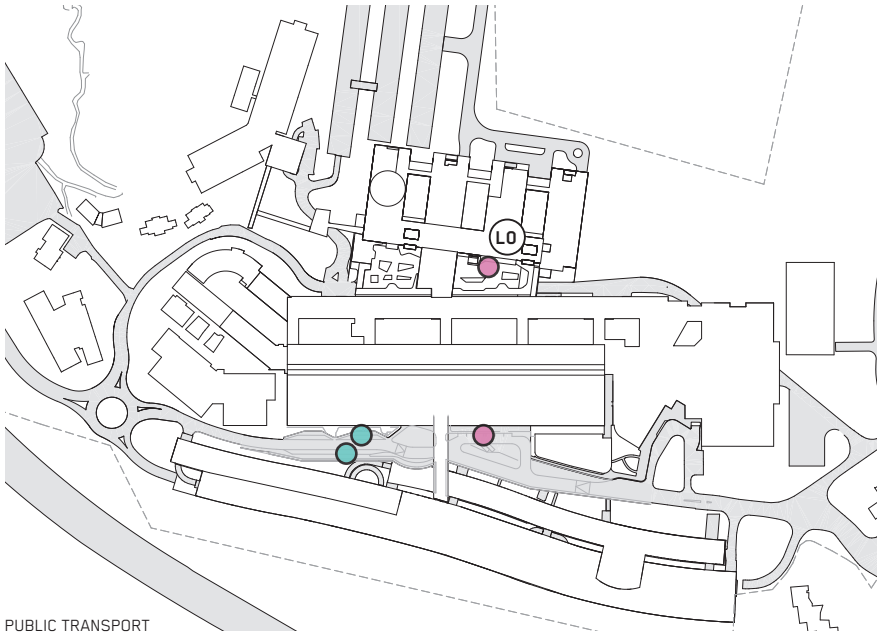
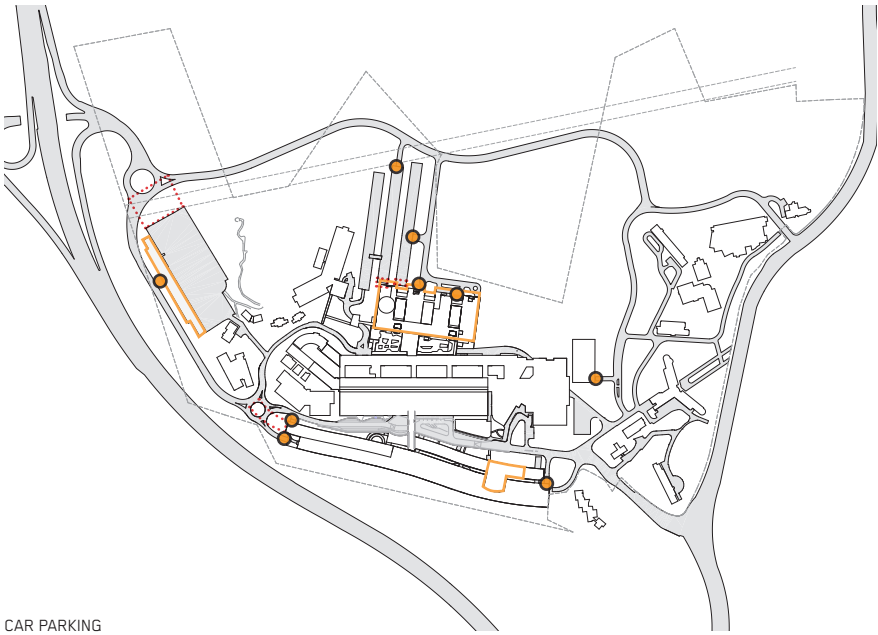
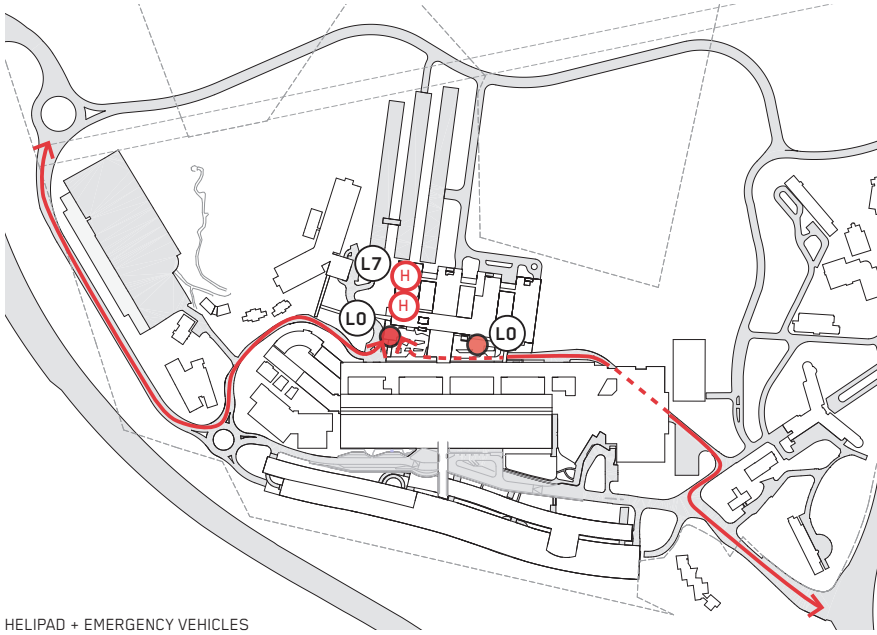


5.6 OVERALL SITE LAYOUT

User experience is a primary driver of the provision of services across the JHH precinct. The following diagrams illustrate the site layout and clarify the predominant flows of vehicles and pedestrians on the site.

- Public open space
- Newcastle Inner-city bypass
- Predominantly public flows
- Predominantly staff and frequent visitor flows
- Existing traffic flows
- Existing Lookout Road
- Primary JHH building entries
- Car park entry
- Demolished car park
- Proposed car park
- Bike paths
- Staff End of Trip facilities
- Public bike parking
- Emergency vehicle flows (ambulance + pubic ED drop-off)
- Public ED drop-off
- Ambulance bays
- Helicopter landing site
- Bus stop
- Public drop-off (incl. taxis and car share)
- Existing pedestrian access
- Proposed and upgrade pedestrian access
- Indicates level where clarity is required



5.7 SERVICES APPROACH

INTENDED BUILDING OPERATION

The design for the JHHIP development considers elements of operation as central to its ultimate success. As a new development within an existing operational precinct, the site offers a pre-existing approach to loading, waste, servicing and plant that any new development must acknowledge.

PLANT

The proposed development aspires to make use of existing services on site for refurbishment areas, as well as introducing services as needed for the ASB. The operation of the proposed ASB is to be facilitated by dedicated plant located within the envelope of the development. Three key locations are proposed to allow optimised provision of services to clinical spaces as well as ease of access and maintenance.

Key plant is proposed to be predominantly located to the lowest level of the semi-basement car park, offering no impact to clinical services, and providing required ventilation, maintenance and replacement access on grade to the north of the development. This has the added benefit of not adding engineering and servicing vehicle movements to Kookaburra Cct.

The design team has worked hard to reduce the extent of roof top plant to limit the impacts of maintaining and or replacing large plant, as well as reducing the visual impact of servicing in this location. The roof-top will house plant best located in this position; cooling towers to offer the best provision of services and reduce impacts of exhaust, mechanical ventilation plant serving the top two levels of the ASB will also be located on the roof to avoid impacts of on-floor maintenance, and hot water plant will also be located on the roof to offer the best provision of services.

An interstitial plant level sits at level 2 of the proposed ASB between the heavily serviced areas of the interventional suites at level 1 and the operating theatre spaces at level 3. This level will also house air handling plant for levels 0 and 4 to optimise the space on this level and provide the best provision of services to the adjacent spaces.

Existing JHH engineering and plant is predominantly located on the northern portion of Kookaburra Cct. This access will be unimpeded by the proposed development and the existing access along Kookaburra Cct north retained.

Refurbished spaces within the JHH will make use of existing plant spaces within the level 4 mezzanine plant space, to enable direct provision of services.

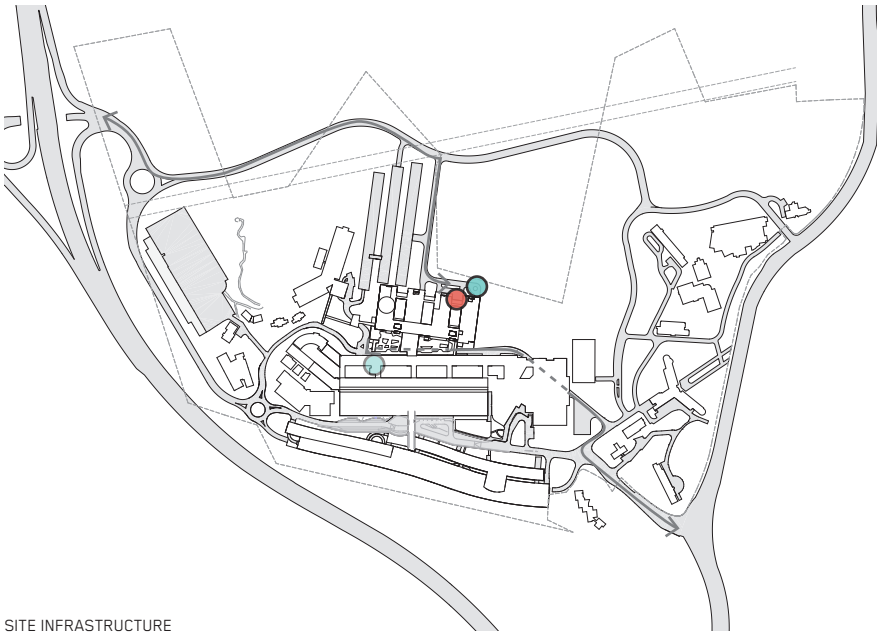
LOADING AND WASTE

The existing JHH has an established methodology for loading and waste collection, utilising a large dock (internal and external space) to the east of the RNC. The proposed ASB development will retain the existing loading dock to ensure its continued support of the JHH and RNC, as well as that of the proposed ASB.

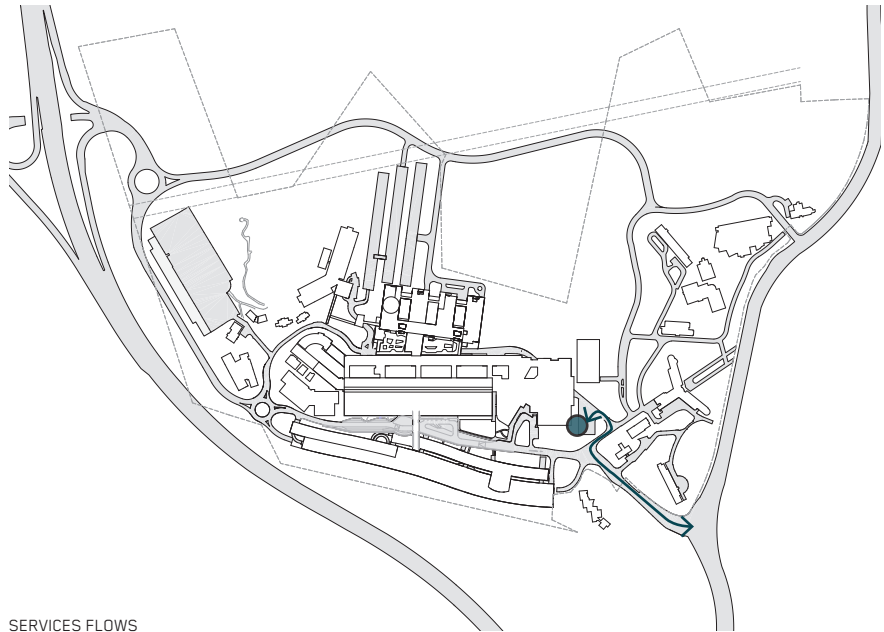
Access to the dock will leverage the rigorous planning of the JHH, with the central east west corridors stacked on each level, running the full length of the building.

To capitalise on the existing infrastructure, and avoid the challenges of separation of service, the proposed development looks to tie into the existing, creating a dedicated back of house link between the two developments, and knitting into the existing services corridor of the JHH. A logistics hub is proposed within the ASB footprint to enable efficiency of goods and services movement.

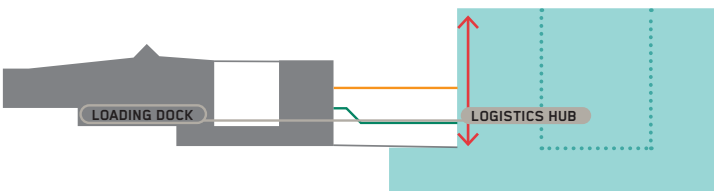
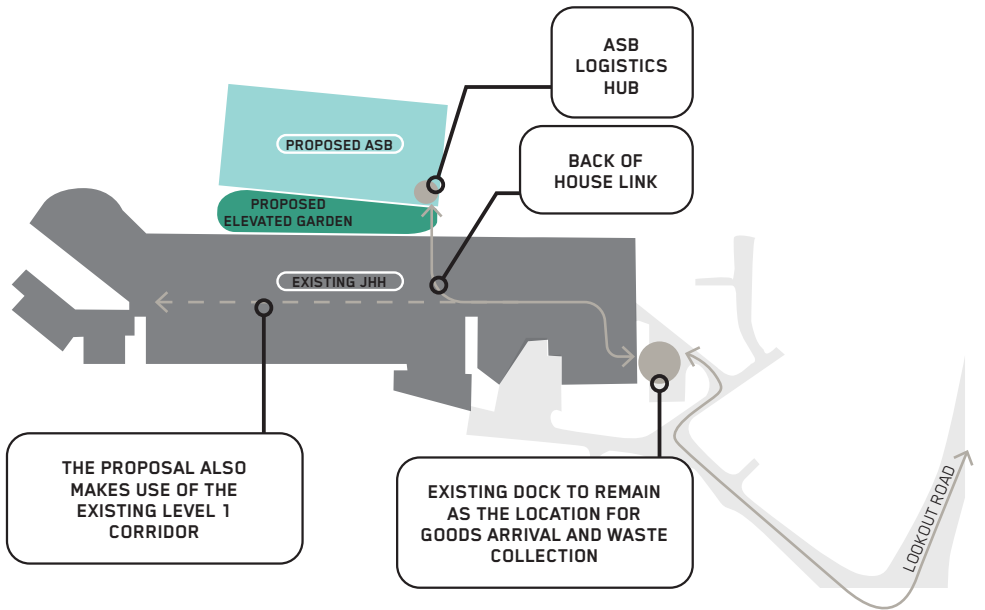
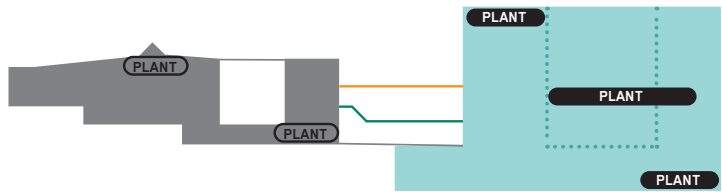
- Existing JHH primary engineering plant
- Proposed primary ASB engineering plant
- Proposed consolidated Fire Booster
- Proposed engineering services flows
- Loading dock



SITE INFRASTRUCTURE



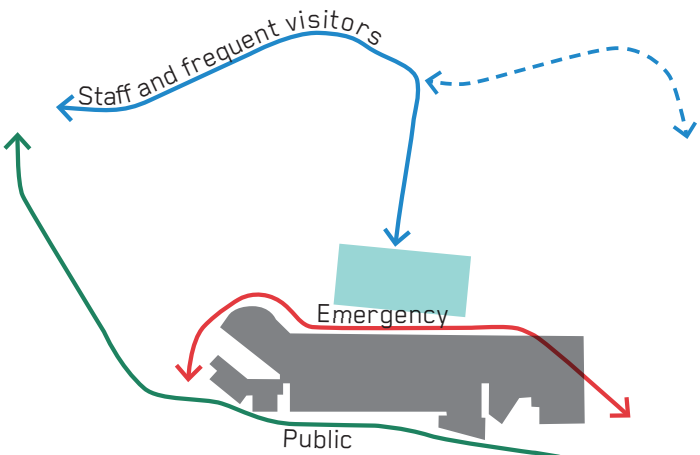
SERVICES FLOWS



5.8 INTERFACE WITH THE EXISTING CONTEXT

ACCESS AND CONNECTION

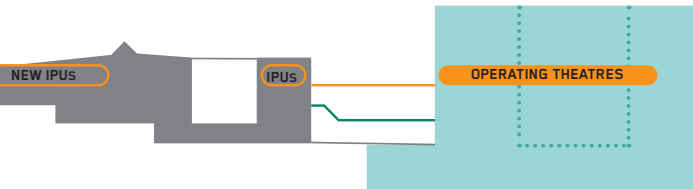
As described the by the design principles, access to the precinct is one of the key drivers of the development. Separation of user flows is an important element of this as it enhances user experience for all; those who know the site well and those who are visiting for the first time.



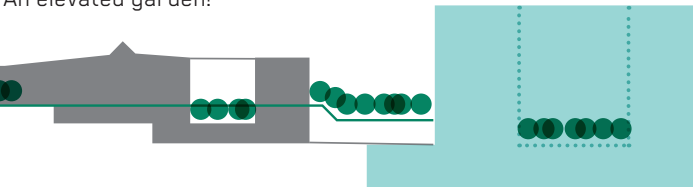
The separation of flows also capitalises on the opportunity to align with the clinical functionality; locating the relocated and expanded Emergency Department of a road primarily dedicated to emergency traffic establishes a flow separated from the public facing entry to the hospital.



With the operating theatres proposed to be consolidated and expanded within the new ASB, direct connection between the JHH and ASB is critical. This need has suggested that the new theatres be located at level 3, consistent with the existing theatre level, and away from the primary public and back of house flows at the existing levels 2 and 1 respectively.



The proposed ASB takes advantage on the entry at level 2 and the emergency entry at level 0 to establish an opportunity for public spaces threading through the building from the existing entry to the platform over the existing Kookaburra Cct. An elevated garden!



PUBLIC DROP-OFF - SOUTHERN ENTRY

The re-imagined public drop-off at the existing JHH entry will become the primary arrival point for visitors to the JHH.

The proposed entry space links the existing southern car park with a mix of public and staff parking, via a covered link way with integrated signage to offer a landmark arrival point as well as improved amenity to those parking to the south of the JHH.

New bus stops and short-term vehicle bays are provided to meet the needs of public transport arrivals as well as those in private vehicles. Community transfer vehicles and accessible vehicles are now also accommodated in this front-door drop-off space.

A landscaped space provides external space near the front door for access to natural daylight and somewhere calm to sit outside in a tranquil and protected space - cognisant that many people travel large distances to reach the hospital, this space offers somewhere for brief pause before entering the hospital.

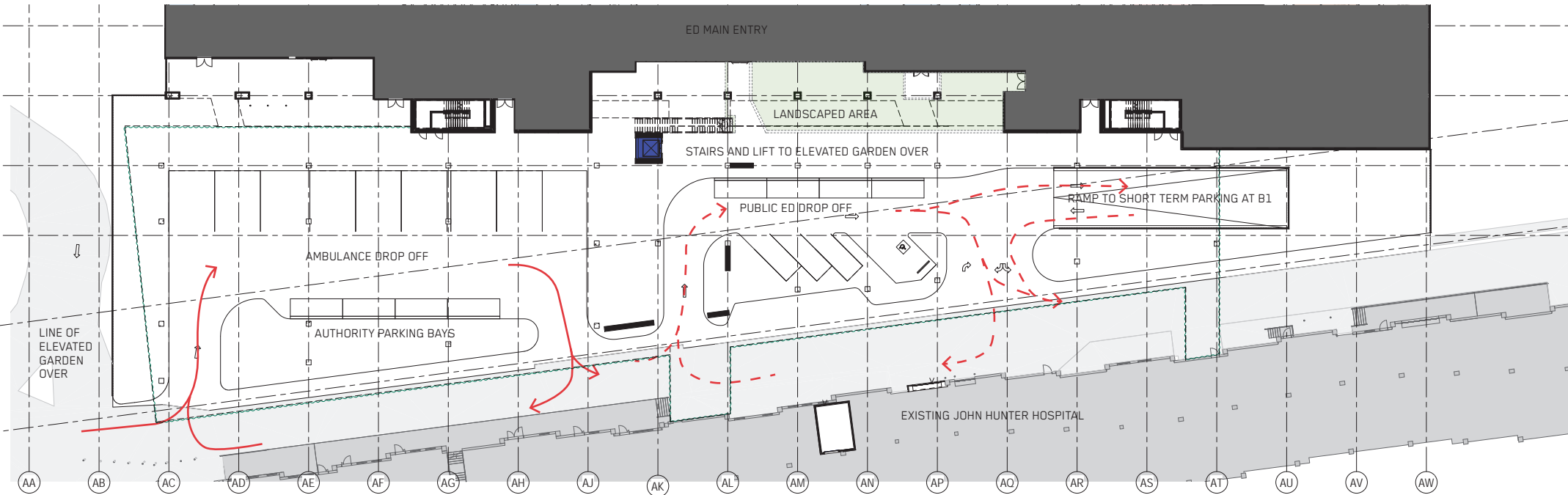
The arrival makes the most of existing infrastructure in this space, reusing the front door to the JHH integrate the proposed ASB and existing JHH built form.

PUBLIC DROP-OFF - EMERGENCY DEPARTMENT

The primary use of the northern extent of Kookaburra Cct for emergency traffic creates the opportunity for a dedicated and discreet entry to ED at the existing level 0 level of the JHH. The

dedicated ED drop-off comprises a space for ambulances as well as a separate space for public vehicles, including taxis and car share arrivals to ED. Under the cover of the elevated garden, the ED arrival space will be a protected entry with clear wayfinding to avoid confusion, with strategic voids to the elevated garden to also create connection to daylight. A public stair and lift establishes physical connection to the more public spaces of the existing JHH and ASB for immediate relief from the activity of the ED.

A ramp access to the basement car parking levels is provided for short-term visitor parking at level B1.



5.9 DESIGN QUALITY AND BUILT FORM

The proposal sets out to embed landscaping into the building framework enhancing the ideas of the 'track' and key settings (section 4.3 Designing with Country) as part of the external spaces and drawing it internally to create a series of spaces each which consider their context and how landscaping might be used as a navigation tool to guide staff and public to the heart of the development in the elevated gardens.

All opportunities will be taken to provide connection to the natural landscape beyond the immediate extents of the building, to ground the built form in its context and offer respite and connection.

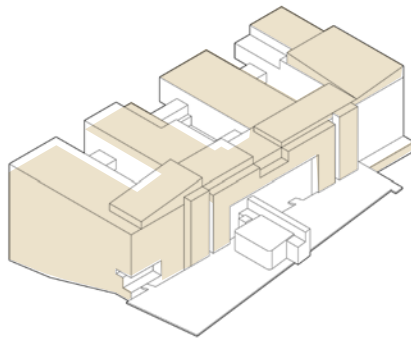
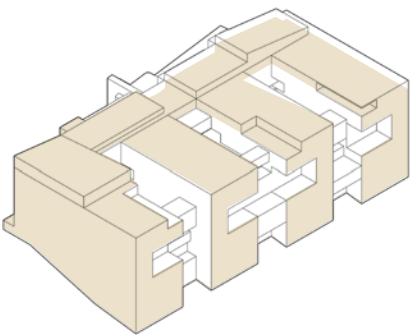
BUILDING ARTICULATION

Conscious of the proximity of the ASB development to the existing JHH as well as its presence on a site where largely built form is limited to 3 or 4 storeys, the proposed ASB looks to break down the scale and at the same time offering improved amenity to both the existing developments and the proposed building itself.

The adjacent diagrams illustrate the key components and considerations for the built-form articulation.

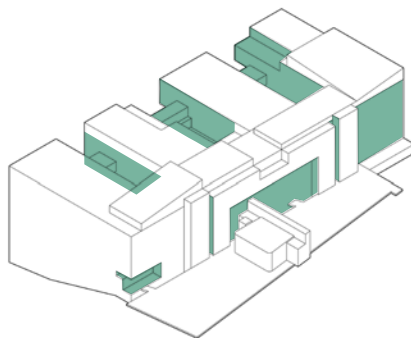
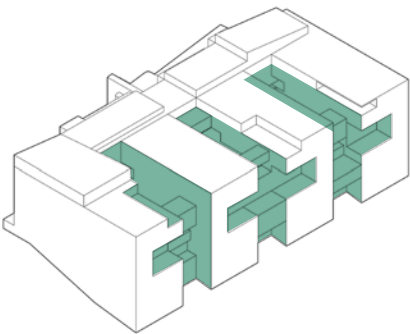
COURTYARDS:

- Recessed courtyard edges expresses form and break down mass
- Permeable edge allows connection into and out of courtyards
- Courtyards afford natural light to floor plates throughout the ASB



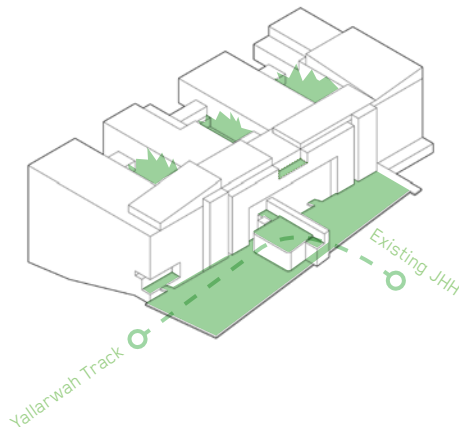
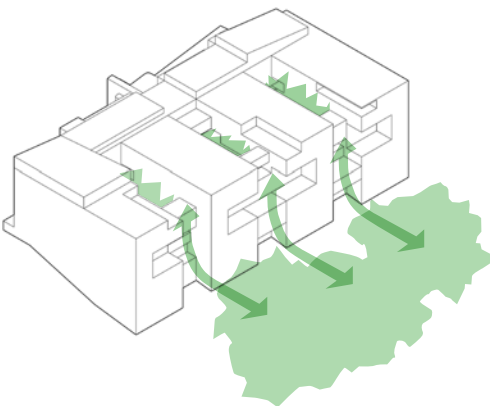
FINGERS:

- Strong formal expression of four fingers at various scales responds to use and breaks up overall mass
- Material and formal expression considers how the building will be read from afar as a mass in the landscape



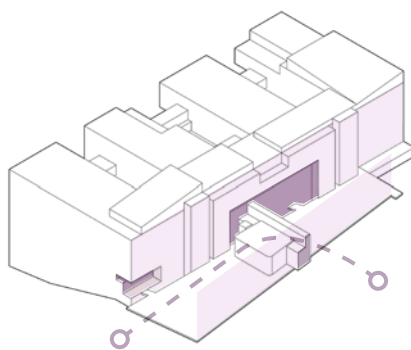
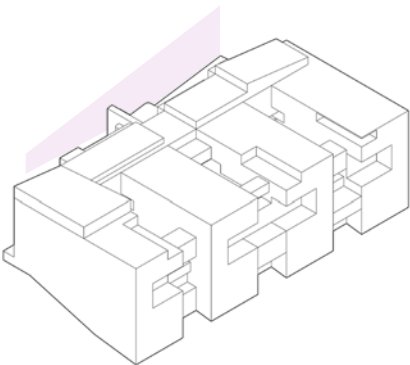
LANDSCAPE:

- A strong relationship with the natural landscape is established.
- Extension of natural landscape into the ASB by creating vertical landscaped facade strategies, gardens and breakout spaces up the levels of the building
- The primary open space of the elevated garden creates useful amenity and delight linking natural landscapes and landscapes in and beyond to the greater JHHIP precinct.



CIVIC CONTRIBUTION:

- Formal and material consideration responds to the existing JHH scale and tectonics
- Creating civic edges which responds to human scale and activity, and allow for transition between garden and associated spaces in the ASB
- A response to how the ASB will be experienced and interacted with from up close, either by car or on foot via the existing JHH and elevated garden
- The Western corner signifies a point of arrival from the HMRI bridge and / or car



ACTIVATED SOUTHERN EDGE:

- Transparency and articulation to the southern facade and link connections contributes to the finer grain articulation associated with the civic contribution noted above and highlights movement and occupation within the hospital.

