

21 February 2018

APP
116 Miller Street
North Sydney NSW 2060

Attention. Kris Gracey

Dear Recipient,

RE: Response to Government Architect Comments on HKH Stage 2 Redevelopment SSD

We have reviewed the issues raised in the Government Architect NSW independent design review commentary 15 December 2017. Our response is outlined below and reference made to the additional design information provided date 19 January 2018, Rev 01.

Zonal Master Plan

The Zonal Master Plan was updated for the Stage 2 preliminary business case in December 2014. The SSDA lodgement is consistent with that endorsed zonal master plan. Key points in the zonal master plan were noted:

- The main entry to the hospital to be maintained off Palmerston Road with the drop off zone as close to the main entry doors as possible.
- Concentration of clinical services to be continued adjacent the Stage 1 STAR building. A compact solution was preferred to minimise horizontal access distances; hence a medium rise solution was preferred.
- Provide community connections so that public are welcome into the grounds. The public open space connects through from Palmerston Road, linking the car park public access, main pedestrian access through to the main entry forecourt and the café open space. This links also to the lower garden and the existing through site pedestrian connection to Derby Road.
- Provide clear wayfinding through a clear, identifiable entry and link to a hospital "street" which serves as a primary circulation for all departments.
- Separation of public and services. The creation of a service zone off Derby Road was established in Stage 1 STAR building. The primary functions of the hospital such as the loading docks, stores, kitchen were all constructed as part of this project. The Stage 2 building continues this service zone along Derby Road for the medical gas truck delivery (Gas tanks are existing), electrical sub station and mortuary pick up.

The car park project was subject to a separate approval process with Hornsby Shire Council as the consent authority and is currently under construction. The location of the car park was established as part of the Zonal Master Plan and was also the subject of a separate Business Case.

Main Entry Design

The main entry and emergency entry are both clearly identifiable from Palmerston Road from both a car and pedestrian approach. The priority at the entry has to be balanced between pedestrian and car, the requirement to get the car drop off point as close to the main entry doors as possible is to minimise distance of travel for less mobile people; many of the patients/outpatients are significantly less mobile.

The main pedestrian approach from Palmerston Road is via a landscape area located between the main vehicle entry and the multi storey car park. This landscape zone has sufficient width (up to 20m) to provide separation from vehicles. There is a crossing on this pedestrian entry pathway across a one-way link driveway.

There are 2 existing pedestrian entry points on Palmerston Road that are maintained, one at the emergency entry and the other at the mental health building at the northern end of the site.

Vehicles access the site from Palmerston Road and drop off at either the main entry or emergency entry. Once carers have dropped off patients at either entry they will access the multi storey parking structure, which is done via the one-way link driveway. Once the car has dropped off the patient it is expected that the carer will park the car and return to then assist the patient. The link driveway means vehicles do not go back out onto Palmerston Road and the re-enter the site at the northern driveway crossing. This would have a negative impact on the traffic flow and also cause confusion and the potential for disorientation.

The Public Amenity

The goal of the design is to increase public amenity on site. Large areas of landscape and pedestrian zones are interlinked to a pedestrian friendly zone. Pedestrian interface with vehicles has been minimised to increase the public benefit.

The design has considered the ground plane in and around the main entry and other external area immediately to the north. These areas provide an extensive seating, recreational and landscape garden area.

The available areas have been landscaped have been indicated on the landscape plans prepared. Planting heights along the edges between entry driveways, pedestrian path connecting the multi storey parking structure and outdoor seating area have been designed to create a visual buffer and some separation. There are areas of the site that contain existing on grade parking that is retained as part of the overall parking strategy along with the multi storey car park.

Additional information has been provided to better describe all of the amenity that will be available in the hospital from the main entry doors, café, ambulatory care waiting area and the main street seating linking back to the STAR entry. Within the entry and public zones both internally and externally there is a significant number of seating.

The main entry 'waiting' seats at the main entry door overlooking the drop off zone to facilitate people waiting whilst a carer brings the vehicle to pick up. There are also some waiting chairs located directly outside the liaison office, also located only a few metres from the front doors and reception desk. Otherwise it is the overwhelming requirement of the hospital users that patients and relatives do not wait directly in the entry to the hospital.

There is a large café and seating zone within sight of the main entry and located in between the main entry and the main public lifts/stair. This provides a significant amenity to the hospital and the users. It should be noted that the design has separated the café use from the seating; whilst belong to the same space and visually connected it is the case the you do not have to be a customer of the café to sit in the seating area. This seating area also has a direct connection to the outside with more seating. The outside spaces also face north with large roof overhangs to provide significant shading during summer.

The hospital design will employ wayfinding to direct visitors to their destination. The largest cohort arriving to the hospital in a planned manor will be the outpatients, who are directed to the outpatients area. This is located in direct line of sight of the main entry doors deliberately for ease of getting people to this point. There is a large waiting area here, however with the use of "Q Flow" outpatients will be directed with their individual patient journey flow, and are able to wait in the waiting area, hospital street or café.

Through Site Links have been maintained and enhanced in the landscape design. External flow diagrams provided show the landscape design and linkway (North/South) maintain the existing through site links from the mental health building and also through from Building 14 on Derby Road. These new paths and links have a visual connection to the landscape, are covered and provide well lit, safe access.

Additional entries to the hospital are not considered necessary. The focus of the visitors and staff coming to the hospital has been concentrated around the Main entry/ED Entry drop off. Additional entries will likely cause confusion to the users. The pedestrian flow diagrams show that people coming from the north and the east both have safe and clear pathways and options to access the hospital. In addition, these alternative pathways lead people back into main entry space, whichever way they come. In doing so, wayfinding is simplified and unified.

Access to the south of building 14 for public/through site links is not considered safe as this is a necessary service zone for delivery, maintenance staff, gas truck and mortuary pick up.

Derby Road is back of house entrance. The portion of the Stage 2 project interfacing with Derby Road is very much serviced based. Screening and landscaping has been implemented along this frontage to assist in the separate of the residential area from this part of the hospital.

The terracotta aesthetic of Stage 1 has been echoed in the Stage 2 design to provide context and consistency to the hospital street frontages on Derby Road and Burdett Street. The scale of the Stage 2 building has increased on Derby Road. The terracotta band that provides that material connection also assists in reducing the visual scale of Stage 2. By continuing the brick podium and limiting the height of the terracotta material the visual scale of the building is broken into its elements. Further reduction of the mass is achieved by introducing cutouts, outdoor spaces at level 4, and stepping the plantroom and fire stairs back away from the street boundary where possible.

Better hospital design for improved patient health outcomes

Hospitals (generally) do not employ natural ventilation solutions from an infection control point of view. The design of natural ventilation would not be support by the clinicians.

Where possible natural light has been introduced into patient care areas and patient centric areas, as well as staff amenity areas such as staff/lunch rooms. The design recognises the significant health benefits of access to natural light.

The considerations of access to natural light in the design are considerable despite the necessary large deep floor plates that come with health buildings.

Where possible, the user journey has access to natural light. Points that have been implemented in the proposed design:

- The main entry and café areas have significant glazing areas, including large north facing glass and a north facing clearstory glazing area.
- The main street has glazing at both ends (including the STAR entry) and 2 landscaped courtyards along the length where users can sit and see the outside areas.

- The main public light and stair has glazing to all levels except level 0. The void throughout assist in level 0 also having a direct line of sight up to glazing above. At all the upper levels users of the lift and stairs have large amounts of glazing areas.
- The main (North/South) corridor on each level has glazing along the majority and with the except of level 2, has glazing at both ends. Level 2 is still landlocked but maintains natural light from the main stair and also the courtyard separating Stage 1 and Stage 2.
- The Paediatric inpatient/outpatient areas have a major courtyard to overlook and access at level 2.
- Level 3 houses rehabilitation with a cohort that has an average length of stay nearing 3 weeks. Lounge and dining facilities here all have natural light from 2 directions. The large gym and large therapy spaces here also have access to natural light to improve the patient experience.
- All patient lounges and Staff rooms have access to natural light.

In addition to natural light considerations in the design, there have been a number of courtyards and outdoor spaces provided. Whilst the building cannot be naturally ventilated, it is recognised best practice that patients who get direct access to outside air have better health outcomes and faster recovery times. To this end, access to the outside has been provided in the following areas:

- Level 0 has a majority hospital garden with direct access from the public circulation via the link way. A portion of the linkway opens up into the garden area.
- Level 0 has a courtyard visible from the mortuary viewing room and also can be accessed for Aboriginal smoking ceremonies, which will provide a significant cultural benefit.
- Level 1 main entry has access to an outside seating area from the main entry, café seating area or from the main street.
- Level 1 courtyard can be accessed from the main street/ambulatory care waiting area.
- Level 2 Paediatric courtyard has direct access for inpatient infant/toddlers, outpatients and inpatient teenagers, provide each of these cohorts separate and appropriate outdoor spaces for therapy.
- Level 2 ICU has a courtyard that allows for patients in beds to be outside and also have access to direct sunlight. Medical services panels and monitors are provisioned out here to facilitate even ventilated patients.
- Level 3 Rehabilitation inpatient unit has 2 outdoor spaces; one for therapy and one for recreation.
- Level 4 Dementia and Delirium unit has a courtyard with secure access appropriate for this cohort and will have significant benefits for the treatment of these patients.
- Level 4 Stroke unit will have access to an outside space for therapy directly from the therapy room.

Overshadowing

It was a consideration at the master planning phase and also with the DA for Stage 1 that the southern portion of the site have a building mass that reduced in scale to minimise the overshadowing (of Stage 1) to Burdett Street residences to the south. This is shown in the Stage 1 building form. Stage 2 also houses a significant increased number of services and is therefore another storey higher than the norther wing of Stage 1. It should be noted that the level 1 and level 2 functions of Stage 1 building which have this greater overshadowing impact are the kitchen and Operating theatres. Level 3 and 4 house the inpatient units and are less impacted by overshadowing.

Additionally, the courtyard between the Stage 1 and Stage 2 is 16.5m wide providing an appropriate building separation.

Updated shadow study of Stage 1 north elevation demonstrating the impacts is included in the attached additional design information.

Design Considerations

The aesthetic of the bark of the angophora tree was a design feature of the car park (approved under separate DA and under construction). The art screen motif is tree like in the forms that Jade Oakley, the Artist, has developed. This screen forms part of the Stage 2 proposal. The connection of this art screen form and the angophora screen of the car park is not intended to be a direct correlation, rather that both have drawn references from natural forms and those natural forms both reference the angophora trees that once stood on the site albeit in different ways.

The location of the art screen is wrapping the main circulation stair. The location of this stair and public lift is directly on the main north/south corridor. The screen is visible from the ground plane on approach to the hospital on foot/by car. When the users pass under the main entry roof forms, it is true that the screen will not be seen, however as you enter the building the screen is again visible as it comes down to the ground plane. Every user of either the public lifts or stair will experience the screen from the inside.

This sequence is deliberate of seeing the screen from a distance, at the entry and again as the users travel up the main public vertical circulation. Visual studies have been done to ensure that this artwork is seen from as many points and aspects as possible. It is done this way to provide an identifiable wayfinding anchor point in the users experience and journey through the hospital, from entry into the site, parking the car, approaching the building on foot, entering the building and circulating through the building. And then in reverse as they leave they have this reference point.

The design of the roof forms kicking up provides an opening up and welcoming gesture at the entry. Whilst the kicking up does obscure the artwork from some points, it is not necessary that the artwork is always seen.

Conclusion

We trust that the information provided here and in the attached design report dated 19 January 2018 rev 01 address the issues raised in the Government Architect NSW independent design review commentary 15 December 2017.

Yours faithfully,
nettletontribe



Bernard Waller