

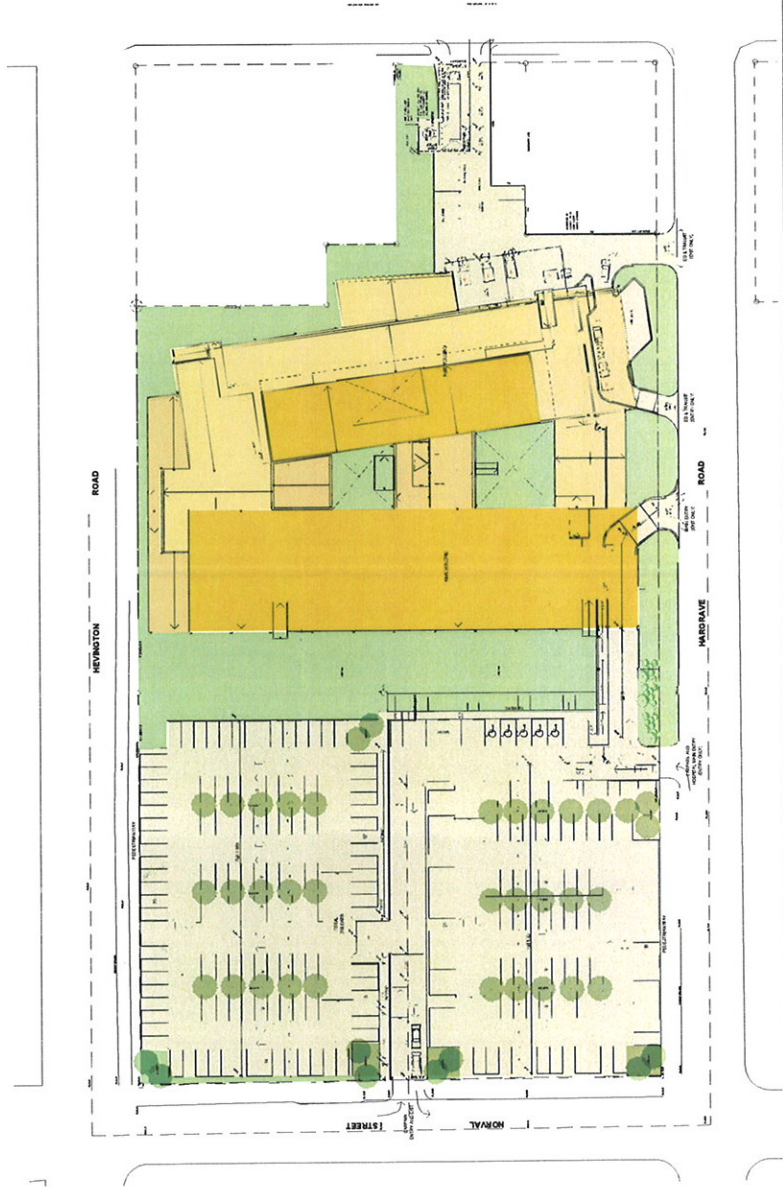
AUBURN HOSPITAL REDEVELOPMENT

Masterplan Modification Application
(s75W EP&A Act 1979)

Prepared for

NSW Health

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HASSELL
August 2007 Issue 6



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Issue No.	Status	Date
1	Final Draft for Review	2 April 2007
2	Final for Approval	31 May 2007
3	Revised Carpark – For Final Approval	14 June 2007
4	Revised Elevations	22 June 2007
5	General Revision	29 June 2007
6	Elevational changes	3 August 2007

01 Executive Summary

This report documents the modification to the approved Major Project 06_0129 for the redevelopment of Auburn Hospital, Auburn NSW.

This report is submitted on behalf of New South Wales Health Administration Corporation to the Minister for Planning in support of modifications under Section 75W of the Environmental Planning and Assessment Act, 1979 (EP&A Act).

The Original Application

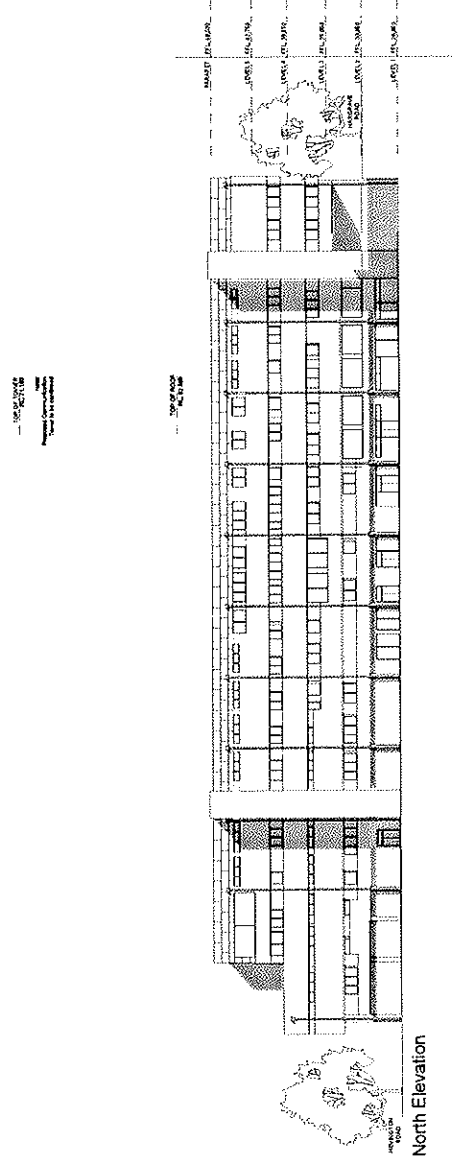
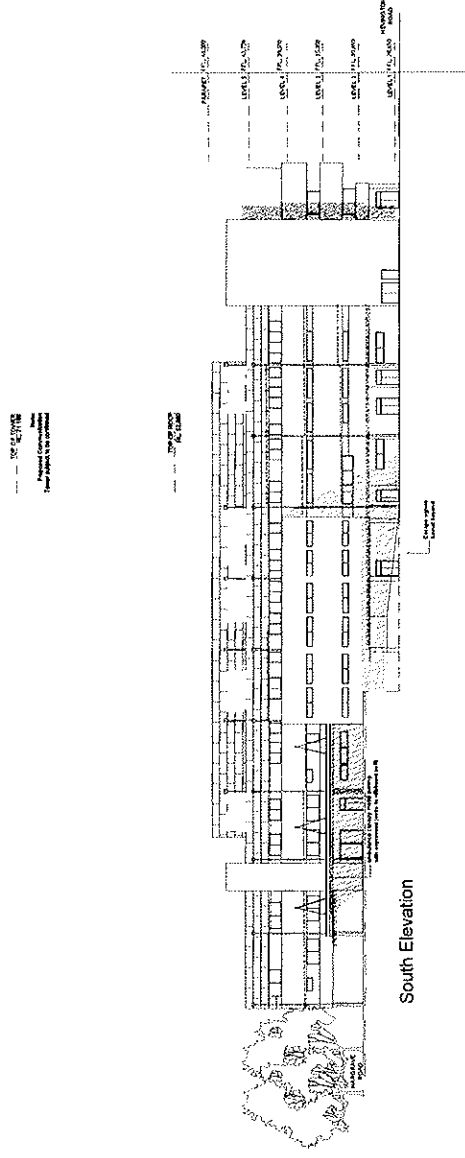
In April, 2006, the Director General of the Department of Planning, as the Minister's delegate, determined that the Auburn Hospital redevelopment as a major project under the terms of the State Environmental Planning Policy - Major Projects.

A project application and Environmental Assessment report was prepared in accordance with Part 3A of the EP&A Act and in response to the Director General's Environmental Assessment Requirements.

The Application and Environmental Assessment Report sought planning consent for the redevelopment of Auburn Hospital incorporating the following:

- The development of a major new 'state of the art' hospital facility to meet the clinical needs of the Sydney West Area Health Service (SWAHS) and the growing regional population.
- Initially, maintain the existing core hospital services on the northern part of the site and part of the Arthur Stone Annex.
- Creation of a temporary car park on the Arthur Stone site.
- Constructing the new Auburn Hospital facility on the southern part of the site.
- Relocating of the existing services into the new facility.
- Demolition of the existing main hospital building.
- Creation of a temporary on grade car parking areas.

On the 26th January 2007 The Minister for Planning approved Major Project 06_0129 under Part 3A of the EPA for the redevelopment of Auburn Hospital.



Background

In February 2007 The Multiplex Construction was awarded the construction contract for the Auburn Hospital Redevelopment based on an alternative planning proposal for the new hospital.

The primary factors of the revised planning were:

- Improved operational efficiency and functional planning.
- Improved environmental performance of the facility.
- Reduced building footprint decreasing the overall impact of the facility and allowing more opportunity for site landscaping.
- Reduced height of the building decreasing the overall impact and overshadowing of adjacent properties.
- Improved internal environment through the utilisation of additional central courtyards providing natural light and landscaped outlook for staff, patients and visitors to the facility.

The level and capacity of clinical and non-clinical services provided by the original planning has been maintained and where possible the functionality and operational efficiency has been improved.

The revised planning, as in the original proposal for the Auburn Hospital will provide 184 beds incorporating Medical and Surgical Inpatient facilities, Paediatric, Maternity, Newborn Care and High Dependency beds. In addition to Emergency and diagnostics units and ambulatory care services will be provided. Supporting this will be engineering, stores and staff amenity facilities with the provision of loading dock and parking facilities maintained as per the approved project.

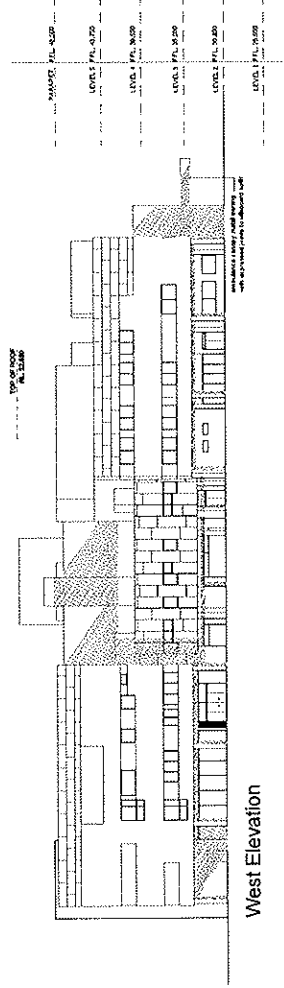
As in the original proposal access at lower ground floor level is available via an on-grade car park from Hargrave Street and service vehicle access from Hevington Road. The Main Entrance is located off Hargrave Street at ground level and a discreet Ambulance Entrance is located at ground level with access from Water Street and egress to Hargrave Road.

To facilitate staging and minimal decanting, the new facility is located to the south of the existing main hospital building allowing the construction of the new hospital while hospital services continue functioning at the existing Auburn Hospital.

Section 75W of the Act provides for the modification of the Minister's approval. Under Section 75W(2) of the Act, a Proponent may request the Minister to modify the Minister's approval for a project. Approval under Section 75W is now sought for the revised planning for the Redevelopment of Auburn Hospital, Auburn, NSW.

TOP OF ROOF
FIN. 10.000
PROPOSED CONSTRUCTION
FIN. 10.000

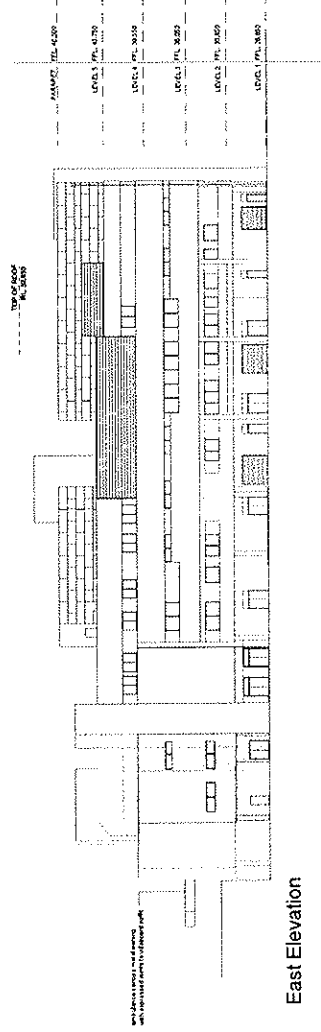
TOP OF ROOF
FIN. 10.000



West Elevation

TOP OF ROOF
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PROPOSED CONSTRUCTION
FIN. 10.000

TOP OF ROOF
FIN. 10.000



East Elevation

02 Revised Planning Proposal

Significant revisions to the to the proposed facility

Item	Issue	Revised Proposal
01	Height of building	The overall building height has been reduced through the reduction of each floor to floor height from the original 4500mm to 4200mm. In addition the replanning of the majority of plant rooms within the footprint of the fifth level of the building has also facilitated in reducing the overall height of the building from the original proposal top parapet level of RL 49.500 to the revised building height of RL48.900. This has effectively reduced the overall building height by 600mm this intum has reduced the overall massing and overshadowing impact of the building on the surrounding developments.
02	Over Shadowing	As stated above the reduced height of building and improved setback from property boundaries has reduced the impact of overshadowing on the surrounding developments.
03	Impact on adjacent residential developments	The overall facility has a greater degree of articulation and massing finesse reducing the visual impact and facilitating improved solar access into adjacent residential developments.
04	Internal planning	The internal planning of the new facility has been based on the establishment of two central courtyards that extend through the full height of the building. This intum eradicates the sense of a deep plan improving the internal environment of the facility for patients, staff and visitors.
05	Natural light	As outlined above the central courtyards running through the full height of the building help to breakdown the institutional feel of the facility through the balance of access to natural light and outlook. This intum will improve the facilities internal working environment and reduce the stress commonly experienced by patients and visitors to healthcare facilities. The provision of natural light to working areas of the hospital has proven beneficial impact on staff reducing both stress and fatigue experienced in facilities based on a deep plan layout with little or no access to natural light and outlook.
06	Energy efficiency	The provision of natural light through the substantial central courtyards will reduce the requirement of artificial lighting to significant areas of the facility bordering the courtyards. In addition the reduction of glazing to the building facade facing west and the incorporation of sun shading devices to the exterior of the building will reduce solar heat gain and improve the energy efficiency of the mechanical ventilation to the building.
07	Landscaping	The incorporation of the two central courtyards and additional perimeter landscaping has enhanced the balance of the facility in relation to open landscaped areas and built form providing an improved environment internally. A pedestrian zone at the main entry has been provided to create a forecourt to the building, facilitating a better urban planning outcome for the precinct.
08	Traffic management	The overall development has revised the entry to the main parking area, locating this away from the original layout of Norval Street and Hargrave Road and positioning the entry adjacent to the main entry and drop-off zone of the Hospital. In addition the separation of general public traffic from emergency public vehicles will improve the flow to and from the main entry roadways of the Hospital. Driveway access to the main entry has been separated from the ED entry to create a pedestrian forecourt zone. Considerable re-planning to the loading dock facilities has improved track access to and from the loading dock areas reducing the possibility of traffic congestion on Hevington Road
09	Building Scale	As discussed above a high degree of replanning of the facility has resulted in a building articulation that visually enhances the Hospital's identity within the urban precinct. As also stated above this has reduced the overshadowing of adjacent redevelopments and reduced the visual impact of the building.
10	Public Facilities	Internal planning has been revised to improve public facility of the Hospital with the provision of amenities at the main entrance for reception, waiting and café facilities adjacent to the primary central courtyard providing both natural light and outlook. This will assist the visitors to the facility in relation to reducing the stress associated with a hospital visit and will enhance aspects of way-finding through the facility.
11	Improved Accessibility	The revised layout of the car park establishes the disabled parking spaces adjacent to the main entry and reduces the level change between the car park and the entry to the Hospital by approximately 2 metres, an accessible ramp provides direct access to the Hospital main entry.

The following scope is the proposed revisions to the approved Major Project 06_0129. Please refer to the adjacent schedule of revisions outlining the primary changes to the proposed redevelopment and resultant benefits.

Facility Masterplan

Some of the key drivers in the revised layout for the new Auburn Hospital were the development of design layouts that would both improve clinical and functional efficiency and improved the internal working environment through the provision of additional natural light and outlook to internal courtyards. The original proposal utilised a single internal courtyard which did not extend through all floors of the building. A key design feature of the revised layout is the establishment of two courtyards within the floor plates which extended through all floors of the building providing the following benefits:

1. Improved internal environment through the provision of added natural light and outlook.
2. Reduction of the "deep planning" inherent in contemporary hospital designs which lacks outlook and creates a disorientating environment.
3. Provision of landmark elements that enhances wayfinding and reduces the institutional feel of the facility.
4. Development of focal points for the facility around which key functions can be planned.
5. Reduced dependence on artificial lighting around the zone encompassing the courtyards and therefore improving the energy efficiency of the building.

Communications Tower

Fundamental to the clinical operation of the Hospital is the ability to communicate with other healthcare facilities especially tertiary institutions providing a higher degree of clinical specialties. The Hospital has identified the need for a microwave tower to be established at the top of the proposed building to provide a high speed and secure telecommunications link with Westmead Hospital. This tower has been placed at the centre of the building and designed as a lattice form to reduce the visual impact. The tower will replace the existing microwave tower currently located on the existing Auburn Hospital and will be the subject of further detailed design to meet the technical requirements of its function. Please refer to Appendix 1 for building elevations for extent of the proposed tower infrastructure.

[illegible]

- Allied Health
- Maintenance
- Food Services
- Waste
- Loading Dock
- Mortuary
- Engineering Services

Loading Dock & Truck Maneuvrability

The loading dock is located on Hevington Road at Lower Ground Floor Level and provides for the delivery of supplies, food, clean and dirty linen and removal of waste from the Hospital.

The dock has been designed to accommodate three 12.5m large rigid delivery vehicles at any one time; a fourth bay provides for the waste compactor.

Vehicles enter and exit the site in a forward direction with all maneuvering contained within the site.

The bulk oxygen vessel is located off Water Street and requires reverse-in access to accommodate the articulated vehicle.

Level 1 Floor Plan

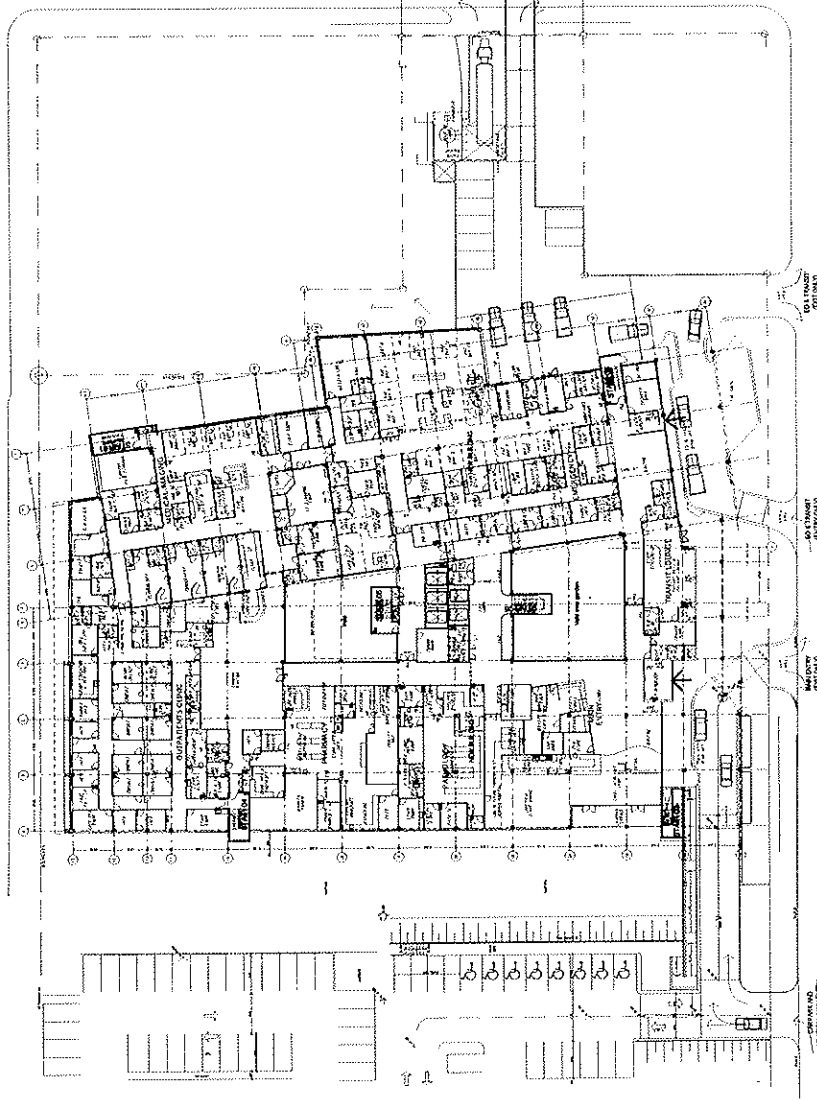
Level 2 Floor Plan

- Main Entry Facilities
- Emergency Department
- Medical Imaging
- Outpatients Clinic
- Pharmacy
- Pathology
- Transit Lounge
- Cafe

This is the main entry level off Hargrave Road forming the primary public entry into the Hospital. This is also the public entry to the Emergency Department. Both the main entry and emergency department are served by a vehicular drop-off zone from Hargrave Street providing a clearly identifiable entry zone while at the same time separating general traffic from emergency traffic.

As stated above the main entry off Hargrave Road will be the main public arrival point allow direct access to the main hospital reception and visual connection with the central courtyards and lift banks. This planning layout immediately orientates the visitor to the hospital and reduces the stress and degrees of alienation experienced in hospitals with a more institutional feel.

This level also provides café facilities forming both a meeting space and further enhancing the environment of the hospital.



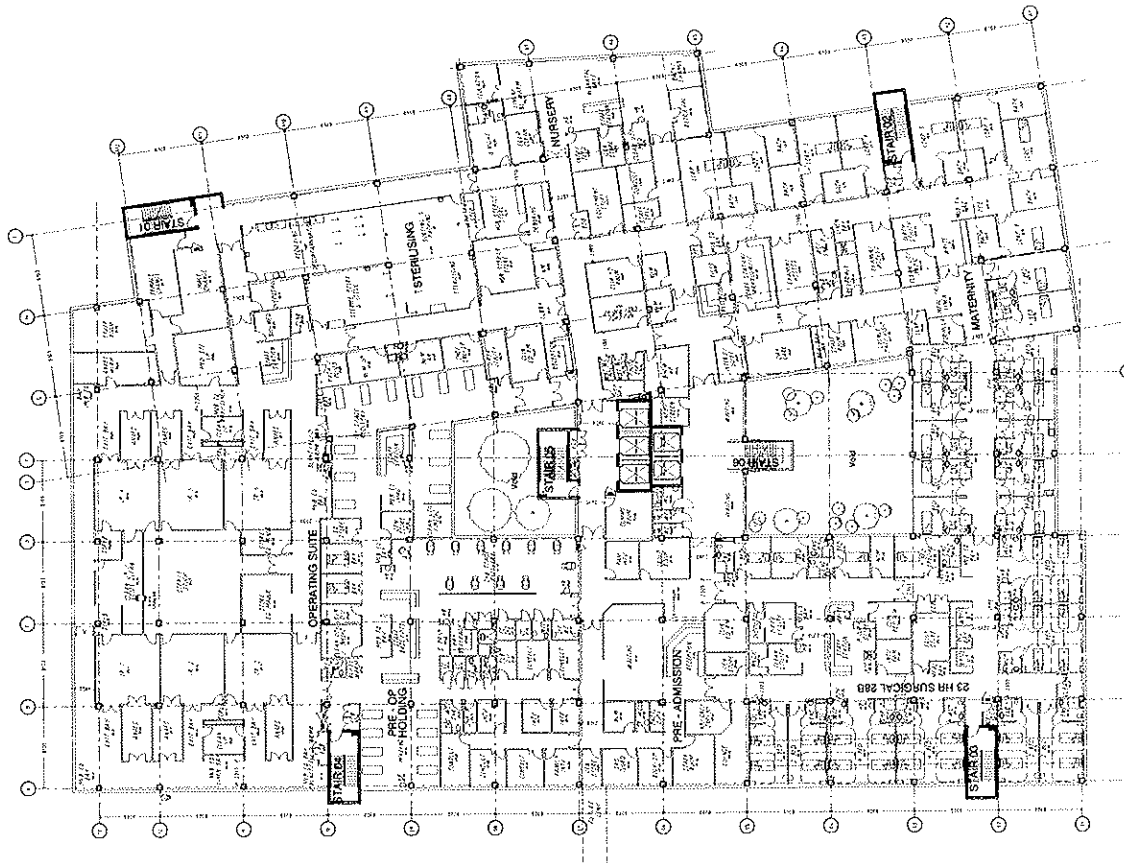
Level 2 Floor Plan

Level 3 Floor Plan

The level 3 floor plan accommodates the primary surgical services incorporating the following departments:

- Operating Suite
- Day Surgery Unit
- Recovery
- Central Sterilising Stores Department
- Pre-Admissions Unit
- Maternity
- Nursery
- 23 Hour Surgical Inpatient Unit

The two courtyard light wells extend through this level providing both natural light and outlook for staff, patients and visitors. They also act as a wayfinding element to help orientate the first time user of the hospital.



Level 3 Floor Plan

This is a detailed architectural floor plan of a large medical facility, possibly a hospital or a long-term care center. The plan is oriented vertically on the page. It features several distinct wings and functional zones. At the top left, there's a section labeled "OR OR HALLWAY". Moving down, a central corridor area contains a "RECEPTION" desk and an "ELEVATOR". To the right of this central area are two large units: a "60 BED MEDIC UNIT" and a "60 BED NON ACUTE" unit. On the far right side, there's another section labeled "STAIRS". The bottom portion of the plan shows more patient rooms and service areas, with labels like "STAIRS" appearing again. Numerous smaller rooms, corridors, and utility spaces are depicted throughout the plan, each often accompanied by numerical identifiers or dimensions. The drawing uses standard architectural conventions, including solid lines for walls, dashed lines for openings or alternative configurations, and specific symbols for doors, windows, and furniture. A grid system with circular markers is visible along the edges of the plan, likely used for reference during construction or design iterations.

- High Dependency Unit
- Telemetry Unit
- Medical Inpatient Unit
- Non-Acute Care Unit

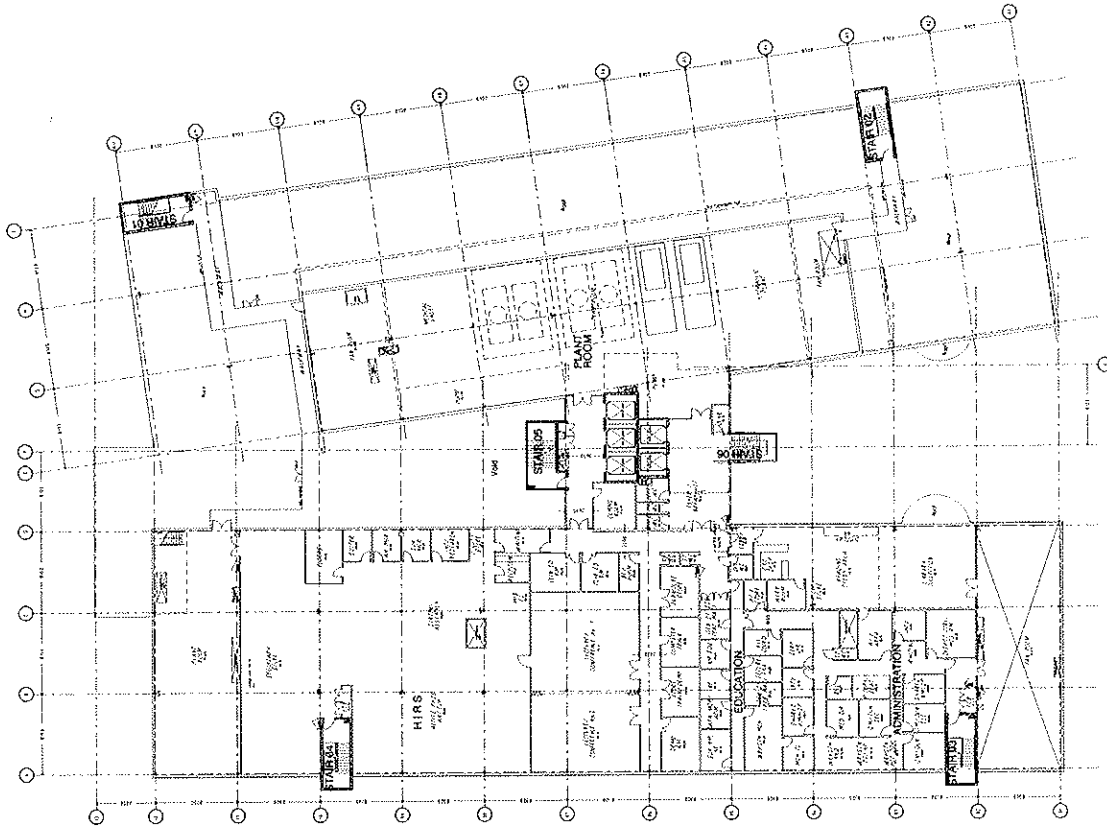
Level 4 Floor Plan

Level 5 Floor Plan

The level 5 floor plan is effectively the last habitable floor of the Hospital and incorporates the following departments:

- Education
- Administration
- Health Information and Records Services

The third floor also accommodates major engineering services plantrooms for air-conditioning equipment, chillers, boilers and medical gas compressors.

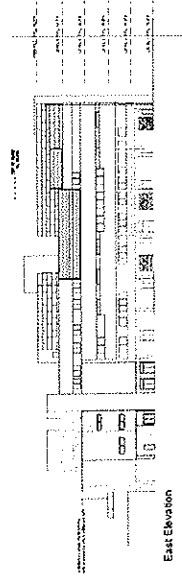
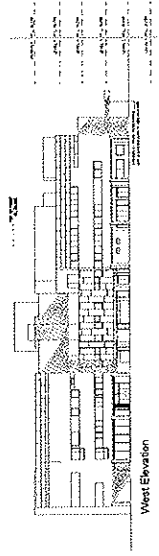
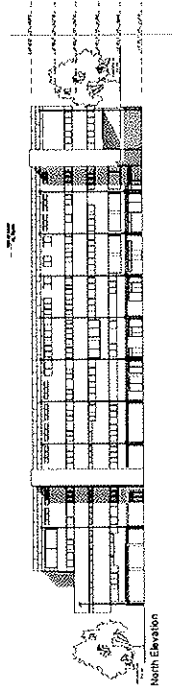
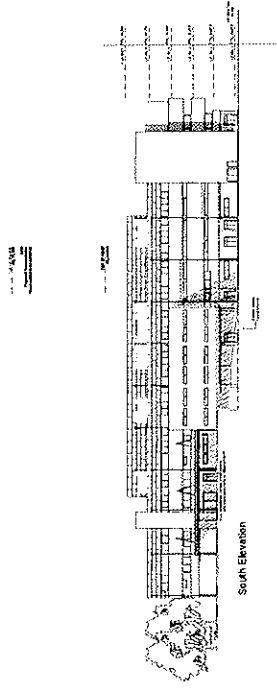


Level 5 Floor Plan

Elevational Treatment

The external façade of the facility shall have a combination of materials.

The Materials shall generally be non-porous to minimise staining without the need for additional surface treatments. The cladding or wall facade should remain clean and attractive to ensure that the Facility does not appear "dated" easily



03 Environmental Impact

Over-Shadowing by the Facility

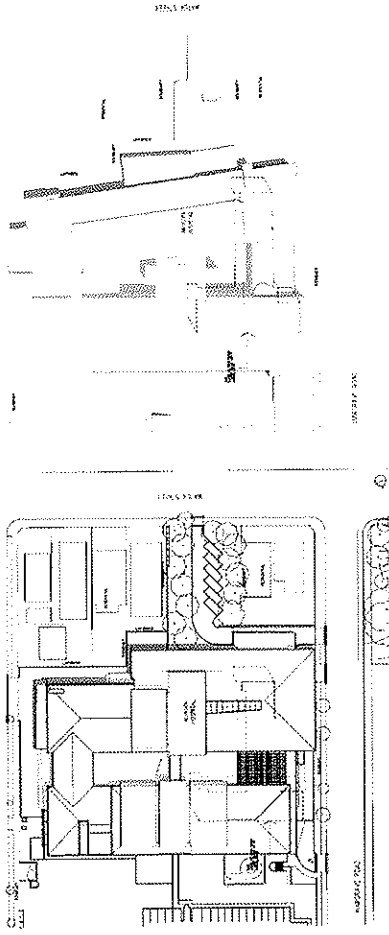
As discussed earlier the replanning of the Hospital facility has allowed the overall footprint of the building to be reduced. In addition the floor to floor height of the Level 1, Ground and Level 4 floors has been reduced from 4.5 metres to 4.2 metres, allowing an overall reduction in the building height. Both the reduction of the footprint and height of the building has resulted in reducing the overall impact of the facility on its surrounding environment.

One key benefit of this reduced impact is the reduced overshadowing of properties surrounding the proposed Hospital site. Refer to adjoining diagrams which equate approved facility shadow impacts to the revised planning shadow impacts

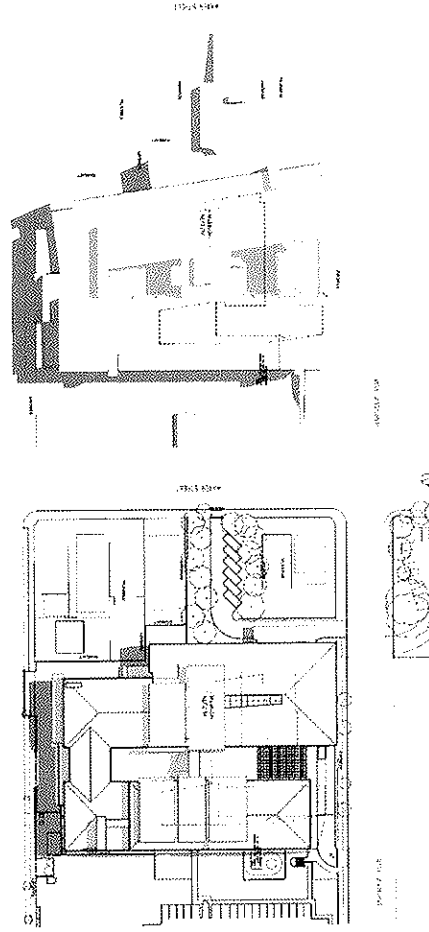
The diagrams represented within this section represent the critical summer and winter periods and as can be seen the revised layout has in every case a reduced overshadowing impact as compared to the approved project.

Please refer to Appendix 2 for all shadow diagrams for the following months:

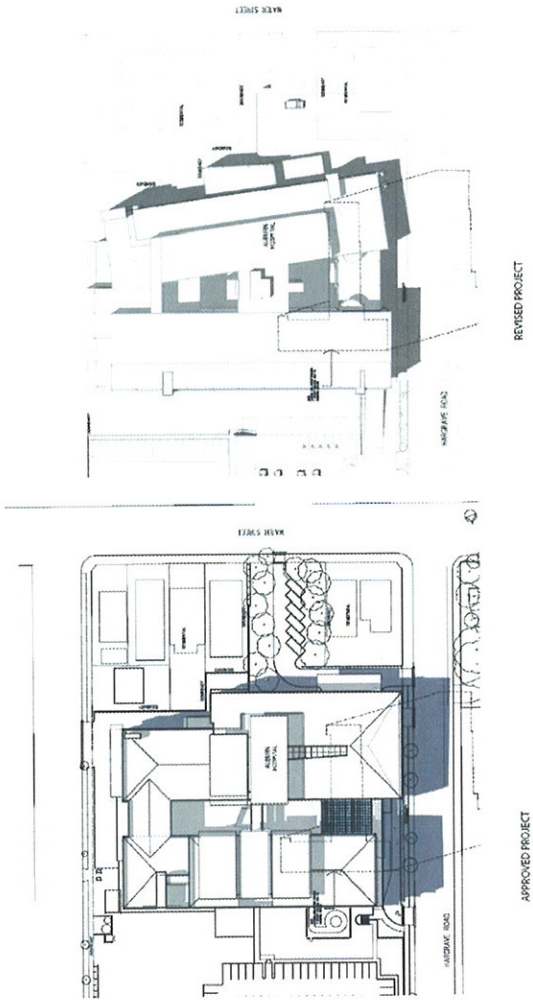
- December
- June
- March
- September



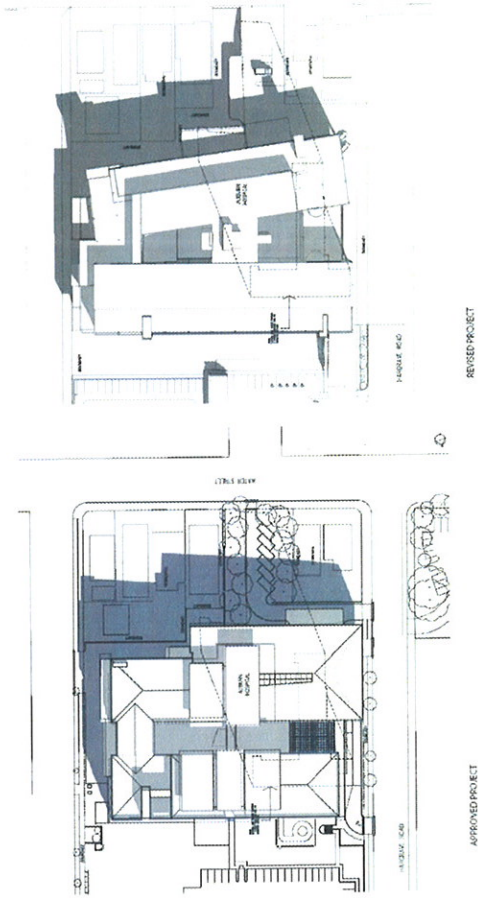
DECEMBER 22 – 12 NOON



DECEMBER 22 – 3 PM

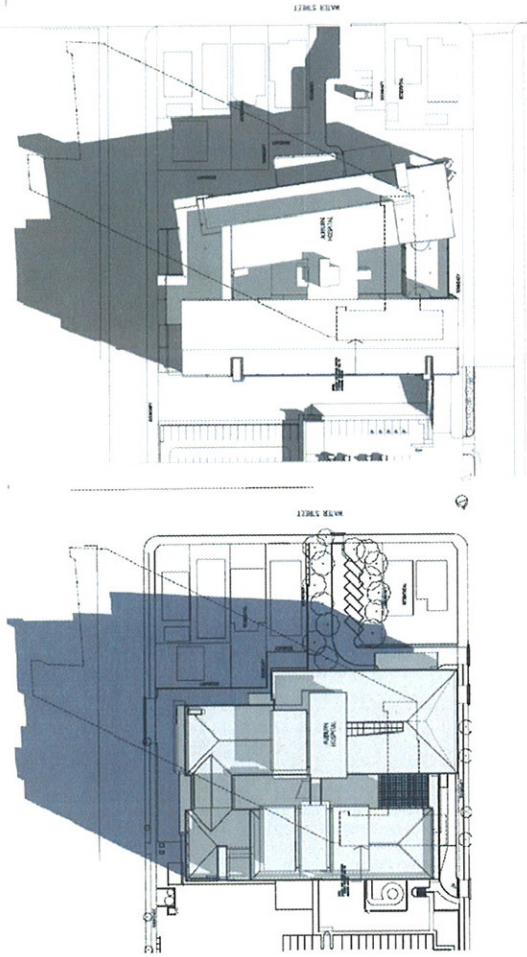


DECEMBER 22 – 9AM

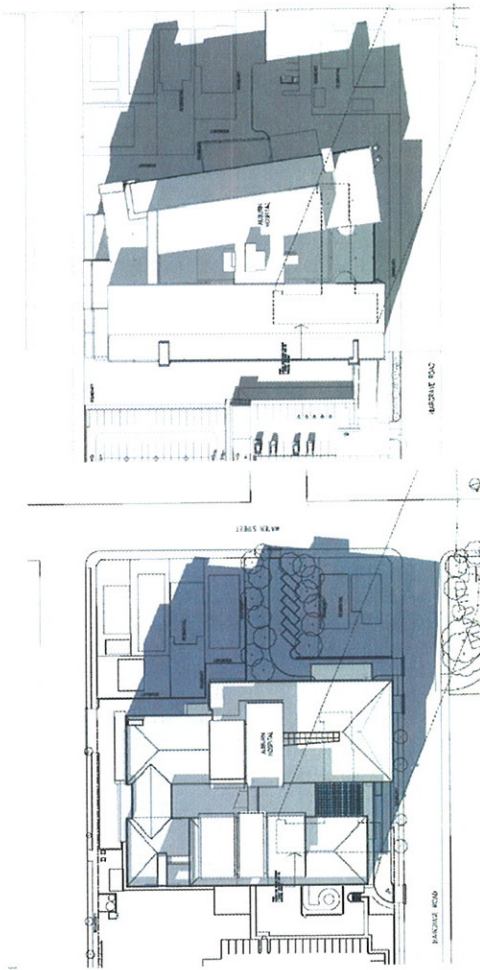


JUNE 22 – 12 NOON

Over-Shadowing by the Facility – con't



June 22 – 3PM



JUNE 22 – 9AM

Over-Shadowing by the Facility – con't

Site Set-Backs

Another benefit of the reduced footprint has been the improved building setback from the southern boundary of the site. This is the prime site boundary which adjoins the existing residential development. The improved building setback to this boundary has yielded the following benefits to the adjoining residents:

- Reduced impact of the development on adjoining neighbors
- Reduced overshadowing of adjoining residents.
- Improved privacy for adjoining residents

04 Conclusion

The information presented within this application presents the clarification of how the revised planning for the Auburn Hospital Redevelopment has enhanced the project and reduced its impact on its environment.

It is envisioned that this report is sufficient and NSW Health looks forward to a favorable determination of this application.