Architectural **Design Statement**

Better Placed - An integrated design policy for the built 1.0 environment of NSW 2017

Better Placed - an integrated design policy for the built environment of NSW" ("Better Placed") was published by the NSW Government Architects Office in 2017 as is described as follows:

Better Placed is a policy for our collective aspirations. needs and expectations in designing NSW. It is about enhancing all aspects of our urban environments, to create better places, spaces and buildings, and thereby better cities, towns and suburbs. To achieve this, good design needs to be at the centre of all development processes from the project definition to concept design and through to construction and maintenance.

Better Placed is an integrated design policy for the built environment of NSW which advocates for sharing the responsibility in delivering good processes and outcomes for NSW, with a focus on "good design".

Better Placed identifies seven Design Objectives for NSW including, better fit, better performance, better for community, better for people, better working, better value & better look and feel.

The design process for the entire redevelopment project of Bowral & District Hospital pre-dates the issue of the Better Placed Policy. Notwithstanding this, it is important to consider whether the development is consistent with the policy to ensure that it achieves a "good design" outcome for B&DH and the Bowral community.

Consideration of the seven (7) Design Objectives on Section 2.6 of the Policy has been undertaken as follows:

Better Fit 1.1

The design of the new building at Bowral & District Hospital (B&DH) has been informed by its site location and local context by the following elements

- » Siting of the building to maintain the key landscape qualities of the site:
- Siting of the building to enhance the existing culturally » significant Administration building which has been the address and main entry of the hospital over the last 80 years and will now sit at the end of the new main entry axis;
- » The new building is place-based in its overall use of materials and forms. Face brickwork with deep window reveals resonant with the surrounding local character, this along with the stucco like facade elements allude to the gualities of the existing Administration building along with the local character and heritage buildings in the surrounding area;
- » The project is part of the growing community of Bowral and provides additional services in a building that will facilitate their future needs. The modern quality of the building evokes the local character and setting to provide a sense of place well the future.

1.2 Better Performance

The project will achieve an environmentally sustainable response by implementing the following key objectives for the development:

- » Healthy and safe internal environment quality designed to assist the healing process;
- » Environmentally sensitive site response to minimise adverse impacts through site analysis;
- » Flexible and adaptable to change with building and services capabilities system that offer long term potential "change of

- Use environmentally preferable materials, locally sourced if » possible with low embodied energy and low VOC emissions;
- » Minimise waste both through the course of construction and after building occupation in both materials and energy:
- »
- Minimise freshwater use: »
- »
- value of the site:
- » The whole building design approach will look at materials, systems, and assemblies from many different perspectives. The design will be evaluated for cost, buildability, quality-oflife, future flexibility, ease of maintenance, energy and resource efficiency, overall environmental impact, productivity, creativity, and how the occupants will be enriched and enlivened by their surroundings.

1.3 Better for the Community

- use" as technology and procedures evolve in the health sector;
- Minimise resources use both during and post construction;
- Minimise emissions and pollution;
- Provide value over the life of the development:
- Empower management to monitor and target the objectives in the operation of the facility;
- » Enhance the site's green areas with additional landscaping to help enhance the healing process and increase the ecological

The project addresses the growing need for additional health services in Bowral. The South Western Sydney Local Health District (SWSLHD) Strategic & Healthcare Services Plan, Strategic Priorities in Health Care Delivery to 2021, has as two of eight priority strategic directions for the LHD to "Build capacity to effectively service growing demands for health care" and "Partnering with external providers to deliver public health care".

Both priority directions are relevant to this CSP given that B&DH is located adjacent to the Southern Highlands Private Hospital (SHPH) and that there exist agreements between the organisations to fund service provision and further opportunities that could be explored. The Strategic & Healthcare Services Plan identifies the redevelopment of B&DH as the 4th highest priority for the LHD with the rationale being because of the imminent need to address the poor quality of aging building fabric there and the need to provide additional medical and surgical beds in the hospital and expand ambulatory care and ED capacity. The aging of the Wingecarribee population indicates that additional aged care, rehabilitation and palliative care beds will be required within the next decade. Community Health also needs redevelopment.

The building will also provide an inclusive equitable environment for patients, their visitors and staff in all aspects including access and use of the indoor and outdoor spaces and facilities that support the community.

1.4 Better for People

As a health care project providing services in an area with an elderly, sometimes frail population the key focus of the project is providing both clinical and public spaces that are designed with comfort and critically safety in mind.

Comfort, safety and accessibility area are essential criteria in a health facility, not only for patients who are ill, with possibly limited mobility but also for staff who have to be mindful of a number of issues ranging from lifting patients to infection control. All spaces, fittings and fixtures are designed with all these issues in mind.

Design features to ensure patient safety include night lighting and a number of bedrooms which have the toilet visible from the bed to reduce the number of falls at night.

All aspects of the design, from the external approaches to public amenities have been considered in terms of patient, staff and public comfort, safety and support.

1.5 **Better Working**

The new building will comprise of spaces and services infrastructure that will provide a flexible, efficient facility which will accommodate future growth enabling the building to remain valuable and well utilised into the future.

Health services on the hospital campus will be more integrated and connected with the key focus being on aligning ambulatory and community services across all clinical services. This will allow staff to work more efficiently and providing a better working experience for both staff and patients.

1.6 Better Value

For B&DH to be capable of addressing the health care needs of the community in the future, a significant capital investment has been made to deliver fit-for-purpose facility. The project will address the most pressing clinical services priorities. This investment will enable safe, high quality, effective and both financially and clinically sustainable health services to be delivered.

The project will provide value for the community by replacing outmoded facilities with a good guality designed building that creates a place that raises standards and creates spaces that will facilitate and enhance the quality of health service delivery which in turn will provide a greater quality of life for all users of the building.

1.7 Better Look & Feel

The current hospital address is unclear and the siting of the new development aims to leave large areas of the hospital garden intact while providing a new clear hospital identity on Bowral Street.

The visual qualities of the proposed building will contribute to the surroundings and promote positive engagement. The new main entry will be a clear welcoming path through the existing landscape to the building allowing the community to safely move through and enjoy the local parkland which is a key feature of the hospital grounds.

The new building is orientated to the north to capitalise on sun access into patient areas. The internal planning seeks to take advantage of this setting by locating bedrooms and lounges to the view and designing outdoor access. The building will form a backdrop to the existing mature trees on the north and north east corner of the site and in term this landscape will contribute to the interiors of the building.

The building will contribute to the existing sense of place by consolidating the pedestrian paths across the site whist providing a building in the existing natural setting that is welcoming and allows the community to use and enjoy the local spaces enhancing the current sense of place.

Objectives.

The building will also provide a welcoming and aesthetically pleasing main entry space and series of lift lobbies with waiting areas that will overlook the existing landscape further allowing the community to enjoy their local place.

The proposal will contribute to the creation of an improved, contemporary and equitable environment where the design focuses on the safety, comfort and requirements of patients, staff, carers and visitors as encouraged in the Better Placed Design

2.1 A Well Designed Built Environment

Section 2.1 of the Policy relates to a well-designed built environment. The proposed development relates to this section as outlined in the table on the right:

2.2 NSW Priorities

Section 1.4 of the policy advocates for good design to help respond to key challenges and directions for NSW. Regarding Health 'There is a growing recognition that urban environment has a significant influence on health'

The design takes into consideration all the latest, including draft policies in consultation with NSW Health of Health Infrastructure's guidelines which in conjunction with the Australasian Health Facilities Guidelines provides a synthesis of the many factors impacting upon health. These templates, along with other benchmarked health projects provide a framework for the built environment so that it can incorporate cohesive, integrated and interconnected solution.

The design of the built environment will incorporate the appropriate health priorities and guidelines to create healthier places for NSW.

Good Design Features	Comments/Response
A well-designed environment is:	,
 Healthy for all members of our communities, promoting physical activity and walkable environments, social cohesion, and community safety and security to support people's well-being. Responsive to the needs and aspirations of local people, now and into the future, inviting innovative use and habitation, interaction, productivity and enjoyment. 	 The proposed development has these principles by: » Promoting a walkable and » Responding to the current needs; » Integrating with the local or patients, visitors and staff; » Providing a new equitable move freely through the pu ambulant and accessible famous and and accessible famous freeds, including demographical changes, or a staff.
Integrated by drawing together the relationships between parts and elements, considering interfaces at multiple scales, and working to common goals and aspirations.	
Equitable by presenting opportunities for all segments of our community so residents and visitors have access to and can move about freely between public domain, infrastructure, open space and buildings.	
Resilient to the dynamic, challenging conditions of our time, to adapt and evolve while retaining essential qualities and values.	
In places that reflect these qualities, each building, area or space:	1
Is a better fit within a rich, evolving and diverse environment, and contributes to the character and quality of place.	The proposed development refl following features:
Performs better by existing in balance with natural systems and resources, supporting comfortable living and the natural benefits of air, sun, light and views without detrimental environmental impacts.	 The design of the new bui infrastructure reflects the of sensitive to the adjoining r The proposal integrates and design, maximising the us impacts on the environme The proposal is better for provides safe, comfortable users The proposed developme and established landscape works and footpaths that and natural environment.
Is better for the community , where all residents and visitors feel welcome, included and valued, and where the streets, open spaces and community buildings are inviting and accessible.	
Is better for people because they are safe, comfortable and vibrant, supporting social interaction and enjoyable, healthy lifestyles.	
Is better working by accommodating fit for purpose activities, and also responding to changes over time, where interventions create new use potentials, while retaining the embedded value in our built environment.	
Delivers better value economically, socially, environmentally and culturally for clients and users, and in return are highly valued by community.	
Reflects a better look and feel because they are refined, aesthetically considered and built to last, creating an engaging, rich and balanced experience for residents and visitors	

ponse velopment has been designed in response to V: walkable and safe environment; to the current and future community health ith the local community, including residents, ors and staff; new equitable facility that allows all users to hrough the public spaces which provide d accessible facilities throughout being able to adapting over time to the eds, including the associated physical and al changes, of the community velopment reflects these qualities through the of the new buildings and associated e reflects the character of the area and is the adjoining residential areas; al integrates an environmentally sustainable imising the use of resources and minimising the the environment; al is better for the community in a facility that e, comfortable and accessible spaces for all ed development supports the existing buildings hed landscape by supplementary landscaping potpaths that enhance the site's functionality

BOWRAL & DISTRICT HOSPITAL (BD&H)

3.1 **URBAN DESIGN & BUILT FORM**

3.1.1 Site, Typography & Streetscape

The Bowral & District Hospital site (B&DH) is characterised by a collection of low to medium density buildings in a gardenesque landscape that includes substantial mature trees.

The hospital campus is bordered by Glebe Park with the Bradman Museum to the north, Loseby Park to the south with the remaining area predominately single and double storey residential. The campus benefits from a hilly outlook, with Mount Gibraltar featuring significantly to the north. Southern Highlands Private Hospital is located in the north western guadrant of the site, with a main entry off Bowral Street and a secondary entry off Sheffield Street. Along with the north east corner of the site, Bowral Street has a mature tree lined footpath.

The site has a 7.5 metre fall from the south west corner to the north east corner. The larger buildings, Milton Park and the Administration Building are centrally located on the site and oriented north east. The original Old Hospital and associated buildings form a cluster of buildings on the southern part of the site. These are accessed by a driveway and turning circle off Sheffield Road.

3.1.2 Siting & Setbacks

The combination of the briefed requirements, site context, streetscape, address and neighbouring residential developments have been taken into consideration in the design of the new hospital redevelopment.

The siting of the building centrally on the site, fronting Bowral St and away from the north east corner provides a new consolidated hospital address with the location of the building next to the private hospital forming a clear hospital identity and presence which;

- » provides one main entry path for all Acute and Ambulatory Care Services including clear links into key existing buildings,
- » provides a main entry access that activates and engages with

the predominate hospital garden on the northeast corner,

- » provides new consolidated key public, ambulance and backof-house access points,
- » maintains optimal zones for future development including the potential to link into the adjacent private hospital.

The siting aimed to maintain the key features of the site in setting the building off away from the north east corner to:

- » maintain the hospital gardens, which have high social and historical value to the community and feature significantly in the north east corner of the site whist also a visual link to the culturally significant Glebe Oval and Bradman Museum,
- » maintain views the Administration Building which presides over the gardens and is the identifiable 'face' to the hospital.

An appropriate setback is maintained on Bowral St so that the established street trees are left to dominate the streetscape.

3.1.3 Bulk/Density, Height & Scale

The building has been planned into an L shaped form so that the apparent 'bulk' is reduced and the scale of the building is in line with existing buildings on site.

The 3 storey form of the new building arranged in an L shape forming 2 wings is in keeping with the surrounding context by;

- » locating the new building next to the Private Hospital centrally along the Bowral St frontage consolidates the main built forms in the in the north-west corner of the site,
- » maintaining a similar scale on the site with the current main hospital building (3 storey plus plant) known as Milton Park and the adjoining 2 storey private hospital building,
- » designing a 2 storey northern wing which fronts Bowral Street to reduce the bulk of the building from the main public address and provide a form more in scale with the surrounding development.
- » providing a roof top plant room to reduce building footprint

- » footprint,

3.2

DESIGN QUALITY

The Bowral & District Redevelopment calls for a built form that delivers an environment of high quality standard health care to meet the increasing demand in the region. This includes:

- capacities,
- high quality staff,

The resultant design provides an enhanced experience for patients, carers and staff. Key relationships between departments and existing site facilities have been developed to achieve the most efficient, user friendly work and patient flows whist within a building form that responded to the site and its context.

» locating the roof plant on the eastern wing of the site so that the perceived height of the building from Bowral Street is in keeping with the scale of the adjacent Private Hospital and surrounding residential properties,

» reducing the impact of roof plant by locating all elements within the building to eliminate unsightly elements,

locating some plant in available space within the building to reduce the mass on the roof without increasing building

» further reducing the scale of the north elevation by introducing terraces and the separate lounge building form.

A low pitched roof has been designed for both wings to minimise the overall height of the building.

» the requirement to expand and enhance the existing service

» providing a 'non-clinical' environment that will become a part of the Bowral community,

» providing a clinical environment that will attract and retain

» creating a facility that has the flexibility to expand and change to suit the future demands of the hospital.

3.2.1 Site Layout, Streetscape & Open Spaces

The key elements of the site's streetscape have been maintained with the established landscape on the north boundary and the north east corner allowing views to and from the 1930's heritage Administration Building and Glebe Oval.

The north east corner of the site has been identified as having high significance due to its concentration of mature and specimen plantings. The main building has been sited in such a way to largely preserve this landscape with the main hospital entry now consolidated off Bowral Street. Careful consideration has been given to locating the main pedestrian and vehicular access way so it provides an axis and visual focus at the end of the drive to the Administration Building.

Key Design Elements have been the:

- » setback and siting of building to allow the retention of existing significant trees located along Bowral St frontage and north east parkland setting. The intent is to retain the existing trees along the Bowral St frontage subject to the Arborist's advice;
- » creation of a new central hospital entry off Bowral Street for both pedestrian and vehicles framed by the building on one side and the existing mature landscape of established trees in the north east corner of the site and maintaining views to the Administration Building;
- » screening and management of services vehicle movement by locating them on the western side of the site, behind the building and away from public view.

The siting of the building also takes advantage of the picturesque established landscape setting by locating majority of bed and breakout spaces around the north and east perimeter.

The Geriatric and Rehabilitation inpatient units have been located on the ground level primarily facing north to enable these units to open out onto an enclosed garden via the ADL dining and patient lounge areas. This outdoor space will be developed

to provide a garden area for patients requiring rehabilitation therapy and the enjoyment of an outdoor garden space for all patients and their visitors. The ADL Kitchen and Dining areas adjoin this enclosed garden via a covered terrace area which can be used for dining and/or sitting in the shade.

The proposed northern garden enhances and augments the existing established street trees on the northern site boundary.

The redevelopment maintains the site's key open spaces and provides a clear definition to their intended uses between pedestrian and vehicular, public and service access.

3.2.2 Massing & Building Articulation

The mass of the building has been broken down by the planning arrangement of the building functions into an 'L-shaped' building. This has allowed an articulation of the building, in scale and built form appropriate to its setting.

The height of the building has been minimised as appropriate to the context with the plant level located on the back/eastern wing of the building allowing the northern wing of the building fronting Bowral Street to be lower in scale and more in keeping with the adjacent private hospital building and the residential properties across the road.

The building has been articulated by incorporating terraces, colonnades and expressed lounge areas providing a human scale to the built form. Planters directly adjoining the building provide a further landscaped articulated edge to the main and secondary service access paths.

The main building entry is expressed by a glass façade allowing views in and out over the landscape for all users of the building.

3.2.3 Heritage

The representative collection of hospital building types, which date from the late 19th to late 20th century are set within a landscaped parkland of specimen plantings have a high aesthetic significance at local level.

The hospital grounds contain approximately 150 trees, ranging in maturity, size and species. Most of the soft landscaping is concentrated to the north east corner of the site and the existing meandering driveway and turning circle of the 1930's Administration building is contained within this landscape.

The original late 19th century Hospital building is located on the south west corner of the site and the southern part of the site contains an assortment of buildings built at various times along with largely unformed paved areas, planting and car parking.

include;

- remain untouched;

3.2.4 External Materials

The landscape on the corner of Bowral and Mona Roads and the two storey brick Administration Building provide a significant contextual reference for the new hospital building.

The proposed materials for the new building will include masonry and concrete elements located at stairs, lift cores and colonnades to mark entries and access ways as well as light weight cladding panels.

The face brickwork was selected to complement in colour and tone, the adjacent private hospital and the existing buildings on the site. The northern facade which forms the hospital

The new building on Bowral St was located to have the least possible impact on the parts of the existing hospital that have heritage and cultural heritage significance.

All of the key elements of heritage are maintained and these

» the original hospital buildings in the south west corner which

» the 1930's Administration building along with its formal circular entry driveway which is maintained and will now form the focal point at the end of the new main entry;

» a major portion of the north east established landscape corner of the site is retained.

address is predominately in face brickwork with discrete window openings and also provides a reference to the historic hospital buildings (particularly the current Administration building which has been the hospital's public address for many decades) in material and form.

The upper levels are proposed to be clad in lightweight metal panels which make reference to the base and upper level stucco composition of the existing building as well as the stucco/ timber cladding that can found on various residential properties in the area. Roofing will be metal deck with a flat roof appearance.

Colour, tone and texture will be used to articulate the form of the building. Materials will be selected to provide the required level of durability, be of long life and low maintenance.

3.2.5 Services Integration

The location of the new building consolidates the current open spaces which have been random and unclear with an undefined main entry area mixing with service access. Open space is now clearly defined between public and service area with the proposal providing a clear main entry. Similarly pedestrian routes, public car parking and services/ambulance access are consolidated and clearly defined as summarised below:

- » located between the building and the hospital gardens, the main public pedestrian and vehicular access points are now off Bowral Street with associated public car parking and dedicated drop off zone at the main entry;
- » located off Mona Road the existing public pedestrian entry and car parking have been enhance to link to the main entry area whist maintaining the original circular driveway of the Administration Building;
- » a separate ambulance and service vehicular access is now provided off Bowral Street;
- » the separate service access off Bowral Street is screened by the building and can provide additional access to the site

reducing travel distances and any pressure on the existing site:

- » the redevelopment maintains the original main service zones in the south of the site for waste disposal, linen services and medical gas deliveries and storage;
- » the main mechanical plant is located on the roof of the east wing of the building in the centre of the site to provide maximum setback from boundaries and in line with the Milton Park roof plant;
- » other services where possible have been integrated into the building to reduce the impact on the site;
- » the substation has been located at the centre of the site away from the boundaries where it can be more effectively screened.

Crime Prevention through Environmental Design Principles 3.2.6 (CPTED)

Whist B&DH is not a high risk crime area the design has taken into consideration the CPTED/Crime Prevention through Environmental Design principles which are a situational crime prevention strategy that focuses on the design, planning and structure of the environment.

The aims are to reduce opportunities for crime by employing design and place management principles that minimise the likelihood of essential crime ingredients by reviewing the 7 main principles of CPTED:

- » Surveillance:
- Lighting and technical supervision; »
- Territorial reinforcement: »
- Environmental maintenance: »
- Activity and space management;
- » Access control; and

Surveillance:

Buildings that address the street help to facilitate natural connections between the occupants and passers-by. In addition, windows, doors and balconies facing semi-public and public areas maximise 'natural' surveillance and in so-doing, increase the risk to potential offenders. Active internal areas of the building, particularly at ground and first floor level also provide surveillance.

The overall siting and internal planning of the new building provides passive surveillance by:

- maintain sight lines;

Lighting:

All external areas of the site will optimise illumination to minimise the potential for fear, loitering, offenders and vandalism. Lighting will meet the Australia and New Zealand Standards for all areas

» Design, definition and designation.

» providing a main pedestrian entry path off the main street which is open to view and is adjacent to the main vehicular entry road and drop off;

» providing a main pedestrian entry path that is activated by location of hospital rooms and the main entry foyer which is glazed over the 3 levels providing a outlook (along with additional lighting at night) both in and out;

» providing pedestrian access from the public car parking is overseen by the building;

» ensuring new planting in these areas will be kept low to

» locating a western service alcove which can be overseen by the new and existing buildings;

» ensuring that any uneven building alignments, inset doorways and the like can be overseen.

with particular attention paid to lighting of pedestrian pathways, adjoining areas and external car parks.

With the siting of the building and its passive surveillance of the key public and staff/service areas comes the added benefit of active, lit internal areas which will augment the external lighting.

Territorial Reinforcement:

Wayfinding is important in large premises such as hospitals, with design and definitional legibility an important safety issue in these environments. In addition, confusion resulting from ambiguous entry design can legitimise exploration, trespassing and excuse making by opportunistic criminals.

The location of the new building consolidates the numerous disparate buildings and entries on the site by providing a strong street presence and clear main entry path for both pedestrians and vehicles. The strategic placement of directional signage will aid wayfinding to the public entrance and around the site.

Environmental maintenance:

The image of an area can impact feelings of safety and danger and influence confidence and decisions whether or not to engage in community life. It can also affect the economic prosperity of an area and the likelihood of visitors returning to that location. Likewise, vandalism can induce fear and detract people from visiting a public space, particularly females and the elderly.

The Hospital is already subject to existing maintenance procedures as it is well maintained with no evidence of graffiti or vandalism, these procedures which would be extended to the new building. The external materials selected will have antigraffiti surfaces to minimise vandalism, damage and decay.

Activity and Space Management:

Space/activity management is important in developing and

maintaining natural community control of a place and involves the formal supervision, control and care of the development. In order to prevent abuse and maximise community safety, a space needs to be effectively and frequently used.

B&DH Hospital is occupied on a continual basis given the nature of its operation and has had a long history on this site. While the Hospital is not identified as a high risk area, it receives surveillance from adjacent areas and uses, such as the bus shelter located on Bowral Street, and surrounding residential properties on all boundaries.

Access Control:

The new building will include an access control system consisting of intercoms, card readers and the like to control access during the day for staff only areas and at night to control entry of visitors to ensure safety of patients and staff.

Design, Definition and Designation:

Conflict between the design, designated purpose and definition of a site should be avoided as it can create confusion and crime opportunity. Many offenders seek to exploit areas and situations that are confusing. That is, areas with unclear spatial definition, borders and boundaries.

Bowral Hospital is a well-established facility and the proposed building is consistent with the pre-existing use of the site. Whist the new building involves the expansion of the existing activities the design definition of the boundaries of the development are clear and there is no ambiguity in terms of the designated purpose of the proposal as part of the Hospital site, or who owns/is responsible for the new facility.

DESIGN QUALITY

3.3

The existing landscape on the site is of key importance in terms of aesthetic heritage and providing an established landscape setting for the building. In order to minimise the impact of new services on the site, the following approaches were taken with

respect to each element below.

3.2.1 Substation & Main Switch Room

truck access.

The new substation has been located in the middle of the site behind the proposed new building where it can be screened by landscaping and not affect the established north east garden or the main public fronts of the new public access and the Bowral St streetscape with its established trees.

The main switch room has been located inside the building fronting the service access area to minimise the impact on views and site open space.

3.3.2 Waste Collection

The redevelopment will continue to use the current B&DH Waste Collection Strategy. Waste will be collected throughout the building is transferred to a Disposal Room on each level. From there will be collected, transferred and stored in the back southern part of the site off Ascot Rd until ready for collection.

3.3.3 Medical Gas Storage

This service will be expanded in its current location in the car parking area off the Ascot Rd. Even though southern boundary faces Loseby Park and there are no adjacent residential properties, the expansion of the storage facilities will have no visual or acoustic impacts on the surrounding area.

3.3.4 Linen, Laundry & Other Services

These will also be handled by the existing facilities on site and there will be no additional impacts as a result of the redevelopment.

3.3.5 Main Plant Room

In order to maximise the open landscape and pedestrian space

These were located in Substation and associated Main Switch Room have been located on the ground level as both require

on the ground level, the main building plant is located on the top level of the building. On this level the plant is set back from the edge of the building minimising the overall height impact of the building.

The cooling towers for the plant room will be located within an open indent of the plant room on the south side to minimise views to them from the surrounding residents. The chillers are also located on the south side of the plant room surrounded on three sides by the other mechanical plant to contain any acoustic impacts. An assessment of any further acoustic treatment that may be required will be investigated further with the final selection of the plant.

Generally in all instances both all plant, service and waste activities are contained within the site and planned to ensure minimal impact on adjoining properties and residents. Truck deliveries will have the still have the same delivery schedule but with an increased delivery load and therefore there will be no additional acoustic or traffic impacts as a result of the redevelopment.

3.3.6 Stand-By Generator

A new generator with an external acoustic enclosure, will the located next to the substation, middle of the site behind the proposed new building where the enclosure can be effectively screen by landscaping.

As the generator will only be used when mains power supply has been interrupted any acoustic affects will be rare and these will be mitigated by the acoustic enclosure.

4.1 ENVIRONMENTAL AMENITY

The new B&DH redevelopment response has aimed to minimise any impacts to the amenity of the surrounding context through the following design considerations:

4.1.1 Solar Access / Overshadowing

The proposed scheme design does not restrict the solar access or overshadow of any adjoining residential buildings.

In summer the building overshadows the service yard in the morning and main pedestrian access path to the building in the afternoon providing a shady walkway. In winter the building will cast a large shadow in the morning across the service zone with minimal intrusion on the Milton Park Ward. On a winter's afternoon the building will overshadow the main pedestrian entry way as well as apportion of the Mona road car parking but a major portion of the north east hospital gardens will remain sunny with no overshadowing of the Administration Building.

The building will have no adverse impacts with regards to solar access and overshadowing on any of the adjoining residential properties bordering the site.

4.1.2 Visual Privacy & View Loss

The combination of the briefed requirements, site context, streetscape, address and neighbouring residential developments have been taken into consideration in the design of the new hospital redevelopment.

The building is sited away from away from the north east corner of the site primarily fronting Bowral Street opposite Glebe Oval and St Jude's Street on the north and across the gardens Mona Road on the east. The north facing wing of the building being set back from Bowral Road with its large established street trees does not compromise the visual privacy of the residence on corner of Bowral and St Jude's Street. The discrete window openings on northern façade also restrict views and overlooking out of the building whist assisting to maintain health client's privacy.

The eastern wing of the building is substantially set back from the boundary and with the substantial established landscape on the corner of the site does not affect the residences on the opposite side of Mona Road.

Similarly there is no loss of views to the residential properties around the site as the central siting of the building maintains the key view features of the site with residents on Mona Rd still looking over the hospital's garden to Glebe Oval.

4.1.3 Acoustic Impacts

the site or precinct as:

- residential properties.

In addition the façade will be designed in accordance with the recommendations outlined in the Acoustic Report. The implementation of these recommendations will not change the form or appearance of the proposed development.

The proposal does not have any adverse acoustic impacts to

» The building will be air-conditioned with fixed windows limiting noise to within the building

» Service and Delivery activities will occur within the site and will not intrude on the adjoining buildings and residential properties. In addition all service and delivery activities occur in the southern part of the site which is opposite Loseby Park and truck deliveries via the Sheffield Rd entry will have the still have the same delivery schedule but with an increased delivery load and hence should be no additional acoustic impacts as a result of the redevelopment.

» Another service access point is now available via Bowral Street but this will be a secondary access point for smaller deliveries during the day as the main stores are located in the southern part of the site accessed off Sheffield St.

» Ambulance access remains as existing off Bowral St

» The substation will be located in the centre of the site and screened by landscape and will not adversely impact on residential properties by any minor noise emissions.

» Air Conditioning Plant is located on the top level of the eastern wing of the building maximising its distance from all

4.1.4 Wind Impacts

The current siting of the building will have no adverse wind impacts on adjoining properties to the site.

Summer afternoon breezes to both Bowral St and Mona Rd residences are unchanged due to the orientation of the building

The residential properties on Mona Rd may benefit from some screening from direct cold winter winds with the building in this location and as the winds come through the site diagonally there should be no wind tunnels created by the new building.

The residential properties on western boundary along Sheffield Rd remain unaffected.

4.1.5 Lighting & Glare Impacts

On Bowral Rd the building primarily sits opposite Glebe Oval and along with the setback on this boundary has little impact on the residence on the corner of Bowral and St Jude's St. As is face of the building contains bedrooms on every level this usage should be in line with the Bowral St residential properties.

Residential properties on Mona Rd should be unaffected due to the setback and usage of the building functions on this eastern side. Potential light spill from departments such as Birthing which may have a 24 hour operation are contained with site facing west on hospital buildings.

As the Birthing Department faces the existing short stay building, potential light spill is not an issue internally on the site. Similarly the top 3rd storey of Milton Park will be vacated and relocated to the new building as hence will not be affected by the level 3 Birthing department.

The selection of façade materials has also considered their glare properties and

- » on the Bowral Street elevation the face brickwork façade will not be a source of any glare
- » on the Mona Rd elevation the lighter coloured metal cladding

is shaded both by the large roof and side blade overhang and the northeast established landscape of the site

Landscape lighting along the new main entry path will be restricted to low level lighting in the evening for security and safety and as this area is well within the site it will be largely screened by the existing north east corner landscape.

4.1.6 Parking Amenity

A Traffic Study has been undertaken to establish existing traffic movements and parking availability. Parking occupancy surveys were undertaken for the entire site which separated between the car parking associated with B&DH and the adjacent to the Private Hospital.

As the redevelopment is primarily about the provision of a new replacement building with up to date facilities, the study showed that B&DH remains relatively static in terms of the number of inpatient beds with an overall provision of 94 beds and therefore a net increase of three beds and 12 staff from the current situation.

The proposal will provide the following parking areas to supplement the existing parking which will comprise of;

- » a new main public pedestrian entry and vehicle parking accessed from Bowral Street with drop off facilities at the main entry;
- » a secondary public parking area off Mona Road which is a reconfigured existing car park area providing additional parking spaces and linking to the main entry driveway;
- » a third parking area is provided on the raised platform of the old Emergency/Short Stay building.

The proposal provides an enhanced outcome for patients and visitors to the site as a drop-off area is part of the new public entry area. This provides a dedicated area on site where the public can drop off patients and/or visitors in close proximity to the building without having to potentially double park and in

or off site to get patients close to their destination. This does provide a greater amenity to the community and surrounding residents in relocating cars on site for drop off activities and not obstructing traffic on surrounding streets.

public or staff.

The 2 main areas of car parking to be redeveloped are also contained within the site, in discrete areas and existing landscape so that the visual impact is minimised.



There is also some immediate parking retained at the bottom of the existing ambulance entry ramp to provide for parking for

With the redevelopment 3 services access points are now available, the existing ones off Ascot and Sheffield roads along with the new one off Bowral Street, allowing for a more even distribution of service/delivery vehicles and will take the pressure off the all the existing residential streets.