

Response to Submissions Report

Bulli Hospital Aged Care Centre for Excellence



Located at 22 Hospital Road, Bulli
Lot 1 DP 175787 and Part Lot 1 DP 165903

Prepared for Johnstaff Projects Pty Ltd
(on behalf of Health Infrastructure and IRT)
by TCG Planning

9 June 2017

Unit 5
174 – 182 Gipps Road
PO Box 7163
Gwynneville, NSW
2500

T +61 2 4228 7833
F +61 2 4228 7844
E reception@tcgplanning.com.au



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Executive Summary

On 2 December 2016, NSW Health Infrastructure submitted SSD 16-7751 seeking approval for the Bulli Aged Care Centre of Excellence (BACCCE) located on the northern side of Hospital Road, Bulli. The subject site at 22 Hospital Road includes two separate allotments which are formally described as Pt Lot 1 DP 165903 and Lot 1 DP 175787, totalling 12,000m² (or 1.2 hectares). Both allotments are currently owned by the Health Administration Corporation.

The proposed development is detailed in the Environmental Impact Statement prepared by TCG Planning (dated 28 November 2016), which was publicly advertised from 8 December 2016 to 31 January 2017 and a number of submissions were received from members of the public, Wollongong City Council and state agencies. This Response to Submissions (RTS) contains the background of the project, a summary of the submissions received during the public exhibition period and a description of the modifications made to the project in **Section 1: Introduction**. A response to the main issues raised in the submissions from government agencies and from the general public is contained in **Section 2: Response to Submissions**. A list of mitigation measures to address potential impacts is contained in **Section 3: Final Mitigation Measures**.

A total of eight (8) submissions were received from members of the public during the consultation phase, as well as seven (7) submissions from government authorities, together with a submission from Wollongong City Council and correspondence from the Department of Planning and Environment. The manner in which the key issues are addressed is summarised as follows:

Car parking and Traffic/Pedestrian

The amended plans incorporate the use of nine (9) existing parking spaces on the adjacent Ambulance Station site, together with 50 car parking spaces within the BACCCE site. This results in a total on-site parking provision of 59 spaces, which meets the car parking rates required under the Wollongong Development Control Plan 2009. Further, the existing hospital has sufficient onsite parking spaces to accommodate its own needs and meet the requirements of the DCP and there is sufficient surplus parking available to accommodate parking during construction.

Flooding

With respect to the request that the proposal should utilise the PMF the proponent advised that the PMF was not selected because it is large event (eg: 1:10000 year event) and the cost of constructing to this design level is prohibitive. A Flood Map Plan - 1% AEP Flood Water Level (Sheet DA.01.0601) contained in Appendix 1 demonstrates that the loading dock is the only portion that is below the PMF (by approximately 40mm). Further, only a portion of the loading dock is affected and the PMF will be diverted by a block wall on the northern side of the loading dock, which will protect the dock and services. Hence, there will be no need to evacuate the hospital in the event of an emergency.

Riparian, Landscaping and Tree Removal

This RTS confirms that as the riparian zone is generally located beyond the boundaries of the subject site and the Office of Environment and Heritage (OEH) has recognised that the development will not have a significant impact on flora and fauna, the preparation of a Vegetation Management Plan is not considered to be

warranted. A Landscape Plan and revised Arboriculture Development Assessment Report have been prepared to address tree removal/retention and landscaping within the site.

Bushfire

A Review of Bushfire Matters undertaken by Peterson Bushfire reconfirms "*the adjoining vegetation mapped on the Wollongong Bush Fire Prone Land Map should not be identified as 'bushfire prone vegetation' due to its very small size, condition and separation from the true bushfire hazards to the north and south-west*". Accordingly, this assessment, together with the Bushfire Assessment prepared by Travers Bushfire and Ecology (dated 5 January 2016) which was submitted in conjunction with the EIS, conclude that compliance with Planning for Bushfire Protection 2006 should not be required and it is unwarranted for the site to be managed as an inner protection zone.

Noise

This RTS outlines proposed revised hours of operation to allow for extended construction and delivery hours. In order to address potential impacts from the use of the loading zone during the night time period this area is proposed to be enclosed with a roof and an acoustic screen. Further, noise generated by the plant will comply with the Environment Protection Authorities noise guidelines.

This Response to Submissions confirms that the issues raised within the submissions have been adequately addressed with through amended documentation and/or management strategies (refer **Section 3: Final Mitigation Measures**) and accordingly approval for the proposed development is sought.

1 Introduction

1.1 Background and Overview of Development Proposal

On 2 December 2016, NSW Health Infrastructure submitted SSD 16-7751 seeking approval for an Aged Care Centre of Excellence located on the northern side of Hospital Road, Bulli. The subject site at 22 Hospital Road includes two separate allotments which are formally described as Pt Lot 1 DP 165903 and Lot 1 DP 175787, totalling 12,000m² (or 1.2 hectares). Both allotments are currently owned by the Health Administration Corporation.

The proposed development is detailed in the Environmental Impact Statement (EIS) prepared by TCG Planning (dated 28 November 2016) and will comprise removal of the existing open bitumen car park and tree removal on the site and demolition of a single storey building. The construction works will comprise a residential aged care facility and relocation of Bulli Hospital facilities, encompassing an aged care inpatient unit and urgent care centre. All services at the existing hospital site will be decommissioned upon commencement of BACCE operations. The majority of services at the existing hospital will be transferred to the proposed development, with the exception of:

- Engineering services, which will be relocated to other campuses of the Local Health District;
- Medical records, Aged Care Assessment Team and Community Health, which may remain on the existing site after commencement of BACCE operations. However, the ISLHD intend to relocate such services in the future.

The proposed development will contain the following facilities:

- Sixty (60) suite residential aged care facility (within IRT Residential Aged Care Facility);
- Sixty (60) bed public aged care in-patient unit (IPU), including secure bed compound;
- Outpatients clinic, including X-ray;
- Urgent Care Centre (4 bays for minor illness and injuries) to be available to all age groups;
- Ancillary main entry/front of house support facilities including reception area, kitchen and loading dock;
- At grade car-parking;
- Clinical and non-clinical support services;
- Outpatients and allied health services;
- A Viewing Room; and
- Transferral of clinical services from the existing Bulli Hospital site, being IPU beds, Outpatients, X-ray, Urgent Care Centre, Support services, and Allied Health.

The Environmental Impact Assessment was publicly advertised from 8 December 2016 to 31 January 2017 and a number of submissions were received from members of the public, Wollongong City Council and state agencies.

1.2 Report Structure

This Response to Submissions Report (RTS) is structured in the following manner;

Section 1: Introduction

Contains the background to the project and a summary of the submissions received. A description of the modifications made to the project is also provided.

Section 2: Response to Submissions

Provides a response to the issues raised in the submissions received from government agencies and the public.

Section 3: Final Mitigation Measures

Provides a list of mitigation measures proposed for the project.

1.3 Submissions

Eight (8) submissions were received from members of the public during the consultation phase. Further, submissions were received from the following government authorities, together with a submission from Wollongong City Council:

- Department of Primary Industries;
- Office of Environment and Heritage;
- Environment Protection Authority;
- NSW Rural Fire Services;
- NSW Roads and Maritime Services;
- Transport for NSW;
- Sydney Water Corporation;

The Department of Planning and Environment requested that the applicant provide a response to the submissions, as referenced in a letter dated 10 February 2017 and email dated 19 April 2017. Responses were subsequently provided on 5 April 2017 (document reference RTS-1) and on 11 May 2017 (document reference RTS-2) submitted to the Department of Planning and Environment.

The Department of Planning and Environment then requested in an email dated 12 May 2017 a further comprehensive 'Response to Submission Report' that:

..integrate(s) ... the previous submission and consolidated to provide one formal Response to Submissions report. The majority of our queries were raised because the responses in the original table were inadequate and required further elaboration.

The format of the Response to Submissions report must also be revised to present as a report that can be referenced in any consent. The report should also have a description of the proposal as modified, including a full set of revised plans given there have been changes, and a final set of mitigation measures. The landscape plans will also need to be updated to reflect the findings of the arborist report and proposed additional tree removal.

In relation to the information provided:

- *parking still has not been adequately addressed. Whilst the addition of the Ambulance spaces would result in the proposal meeting a reduced rate in Council's DCP, the displacement of existing hospital car parking and reliance on on-street car parking is not a sufficient outcome without further justification regarding parking demand/supply or further mitigation measures (i.e. additional car parking on the existing hospital campus to address the displacement of car parking on the site or other measures to reduce hospital parking demand);*
- *the set of plans must be revised to show the ambulance spaces, including details on how these spaces would be accessed. Further justification confirming that the spaces are not required to meet car parking requirements for Ambulance NSW must also be provided;*
- *the arborist report does not provide details of tree protection requirements for T43 on the neighbouring property. There would be works for the on-site detention basin and gas storage areas located in the vicinity of T43 (the OSD has the potential to impact on the SRZ of T43);*
- *who will be responsible for the ongoing bushfire and tree management matters, the hospital or aged care facility, and will there be management plans prepared;*
- *the location of where the perspectives are taken from needs to be identified and a dotted outline of the building on the perspectives would be beneficial; and*

- does the enclosure of loading dock result in the proposal being able to comply with the night time noise criteria. If not, will an acoustic barrier still be provided and where will it be located?

This Response to Submissions therefore integrates the information previously provided and addresses the above listed additional items, which are outstanding matters to be satisfied.

Table 1 summarises the key issues raised in the government agency submissions and public submissions and the relevant section of this Response to Submissions where each issue is addressed. **Table 2 – Amended/Additional Information** provides further detail on supporting documentation lodged in association with this correspondence.

Table 1: Summary of Submissions

Submission Issue Raised	Stakeholder	Report Section
Riparian	Department of Primary Industries Office of Environment and Heritage Department of Planning and Environment	Section 2.1
Geotechnical/Groundwater	Department of Primary Industries	Section 2.2
Contamination	Environment Protection Authority Department of Planning and Environment	Section 2.3
Noise	Environment Protection Authority	Section 2.4
Bushfire	NSW Rural Fire Services Wollongong City Council	Section 2.5
Flooding	Office of Environment and Heritage Department of Planning and Environment Public Submission – Terry Hagan of Bulli, NSW Public Submission – Name withheld	Section 2.6
Stormwater/Drainage/Water quality	Office of Environment and Heritage Wollongong City Council	Section 2.7
Car parking and Traffic/Pedestrian	Department of Planning and Environment Wollongong City Council	Section 2.8
Infrastructure services	Sydney Water Corporation Wollongong City Council	Section 2.9
Landscaping/Tree Removal	Wollongong City Council Public Submission – A Peacock of Bulli, NSW Public Submission – Name withheld Public Submission – Name withheld Public Submission – Name withheld	Section 2.10
Flora and Fauna	Wollongong City Council	Section 2.11
Signage	Wollongong City Council	Section 2.12
Aboriginal Cultural Heritage	Office of Environment and Heritage	Section 2.13
Hospital site usage	Wollongong City Council	Section 2.14
Subdivision/Consolidation	Wollongong City Council	Section 2.15
Retaining Walls	Wollongong City Council	Section 2.16
Safety and Security	Wollongong City Council	Section 2.17
Height and Aesthetics	Public Submission – Name withheld Public Submission – Name withheld	Section 2.18
Design Specific Issues	Public Submission – Ned Kenny of Bulli, NSW Public Submission – Name withheld	Section 2.19
Other	Environment Protection Authority Roads and Maritime Services Transport for NSW Public Submission – Dianne Nixon of Woonona, NSW Public Submission – Raymond Jaegar of Woonona Public Submission – Terry Hagan of Bulli	Section 2.20

1.4 Summary of Modifications to the Proposal

In response to the submissions received, the key modifications to the proposal (as exhibited) are as following:

- An additional four (4) parking spaces on subject site and an additional nine (9) spaces are proposed to be allocated for use as staff parking on the adjoining NSW Ambulance site;
- Provision of acoustic screens on the rear of the loading bay to minimise noise, privacy and any overlooking impacts;
- Additional tree removal on the northern section of the site, as detailed in the revised Arborist Report;
- Size of the loading dock roof has increased;
- Minor amendments to the forecourt area to address planning constraints;
- Minor amendments to the façade of the building with minimal visual impact; and
- Minor amendments to the setout of the site stairs.

Table 2 lists the updated (final) plans applicable to the project and the additional and/or updated documents provided since the exhibition of the proposal which are appended to this report:

Table 2: Associated Plans and Documents and Additional Information

Appendix	Report/Plans	Author	Reference	Date
1	Plans Cover Sheet, Site Plans, Demolition Plan, Tree Removal Plan, Site Montage, Site Analysis, Flood Map, Shadows, Precinct Plans, General Arrangement Plans, Fire Compartmentation Plans, Gross Departmental Floor Areas, Gross Floor Areas, Elevations and Sections	Billard Leece Partnership	Various - Refer to Schedule on Sheet DA.00.0001	Various - Refer to Schedule on Sheet DA.00.0001
2	SEPP 33 Risk Screening	Johnstaff in consultation with Health Infrastructure and ISLHD	-	-
3	Correspondence	Illawarra Shoalhaven Health District	DT17/32589	29.3.17
4	Response To EPA Queries Regarding Acoustic Report	Acoustic Logic	20160002/0302 A/R0/TT	3.3.17
5	Review of Bushfire Matters	Peterson Bushfire	-	7.6.17
6	Bushfire Management Plan	Travers	A16165_BF001 Issue 1	31.5.17
7	Hydrology Design Certificate	Taylor Thompson Whitting	151775	5.6.17
8	Arboriculture Development Assessment Report	Moore Trees	-	21.4.2017
9	Revised Landscape Plans	Arcadia Landscape Architects	Drawing 000, 101, 300-306, 401 -406, 500, 501, 510, 511, 520, 52116-370 Issue F	7.6.17
10	Markup of Siteworks Plan –Additional Car Parking Spaces on Ambulance Site	Taylor Thompson Whitting	C05	16.05.2017
11	Correspondence - Parking Demand and Supply	TTW	151775	7.6.17
12	Car Parking Demand Survey	R.O.A.R. DATA	5945 BULLI Hospital Parking Survey	22.2.2016
13	Electrical and Communications Infrastructure Management Plan	ARUP	246814 (EL-INF-01 R1)	23.8.2016

Appendix	Report/Plans	Author	Reference	Date
14	Correspondence titled 'UCL8027 – LOT 1,1, DP 175787,165903, Connection of Load Application; 22 Hospital Road, Bulli'	Endeavour Energy	UCL8027 – 2016/03330/001	1/3/2017
15	Correspondence - Tree 43	Moore Trees	310517	31.5.17
16	Correspondence - Landscape Design and Car parking	Billard Leece Partnership Pty Ltd Architects & Urban Planners	15617	13.03.2017
17	Anabat and Hollow Bearing Tree Survey Report at Hospital Road, Bulli	Travers Bushfire and Ecology	A16165Ana/HB T	24.3.2017
18	BACCE Tender Documentation - External Signage	Minale Tattersfield	S3212 Issue K	10.02.2017
19	Correspondence	TCG Planning		22.3.2017
20	Retaining Wall Details Sheet	Taylor Thompson Whitting	Drawing C05 Rev D C09 - C13 Rev B13 Rev C	16.5.17 13.3.2017

2 Response to Submissions

2.1 Riparian

The submission from the Department of Primary Industries sought clarification on the distance of the site from Whartons Creek, with the response from the Department of Planning and Environment requesting the submission of further details regarding riparian vegetation management '*as part of the site forms part of the riparian corridor*'. The Office of Environment and Heritage (OEH) has responded that it is satisfied that the proposal is unlikely to result in a significant impact under '*Section 5A Significant effect on threatened species, populations or ecological communities, or their habitats*' of the Environmental Planning and Assessment Act 1979. OEH has however requested that any consent be conditioned to require the preparation of a vegetation/riparian management.

In response to such issues the revised Site Plan – Existing (Drawing No.DA.01.0001) and Site Plan - Proposed (Drawing No.DA.01.0301) contained in **Appendix 1** now demonstrate the distance of the proposed development from Whartons Creek. The plans clearly detail that the northern boundary of the subject site is generally 10m from the top of the creek bank. The proponent has advised that a condition requiring that a vegetation / riparian management plan be prepared should not be required for the site as the creek in question runs in the backyards of the adjacent properties and is partly piped. The riparian zone associated with the creek slightly encroaches on the northern portion of the subject site, however, it is noted that the turning circle for the loading area is the only part of the development which slightly protrudes into the riparian zone. It is considered that the location of the loading dock and the development overall will not detrimentally impact on the ecological value and ongoing functions of the riparian corridor or creek line to the north of the site.

Accordingly, on the basis that the riparian zone is generally located beyond the boundaries of the subject site and OEH has recognised that the development will not have a significant impact on flora and fauna, the preparation of a Vegetation Management Plan is not considered to be warranted.

2.2 Geotechnical and Groundwater

The submission from the Department of Primary Industries (DPI) requested that further detailed assessment of the groundwater conditions on the site including:

- *Geological cross section for the site showing the proposed development in context;*
- *Investigations with monitoring piezometers with due consideration to possibility that dewatering for construction purposes may be required.*

Further investigations will be undertaken during excavation including water level monitoring. Current geotechnical advice from Douglas Partners in the preparation of supporting information lodged with the EIS, indicates the water table is unlikely to impact on earthworks. The proponent has advised that these requirements can be considered as Conditions of Development Consent.

It is noted that two public submissions (Terry Hagan of Bulli, NSW and a submission with name withheld from public view) also raised concerns in relation to flooding on the subject site, with one specific reference to flooding in potential landslip areas. In response to this issue it is noted that Johnstaff advise that the building

has been designed by qualified structural and civil engineers and is supported by a foundation of piles and piers, which sit on solid bearing in ground. Further, a local geotechnical engineer has been engaged through the design to test in ground conditions and provide advice to the design team. It is further noted that Wollongong City Council has not raised concerns, in its submission of 1 February 2017, regarding land stability nor geotechnical constraints.

2.3 Contamination

The submission from the Environment Protection Authority in relation to contamination, referred to the EIS which identified that a long term Environmental Management Plan (EMP) and Validation Report was required by an environmental consultant at the completion of remediation work. The proponent has indicated that this can be provided in consultation with HI, the Illawarra Shoalhaven (LHD) and IRT (land owner and leasee) and can be addressed by a Condition of Development Consent.

As required under the EIS and outlined in the DPI submission, the following will be included in the Construction Contract and can also be provided as Conditions of Development Consent if required:

- Unexpected Finds Protocol and Contingency Plan;
- Construction Environmental Management Plan (EMP), including air quality management and monitoring measures;
- Construction Noise and Vibration Management Plan (refer to discussion under **Section 2.4 Noise** of this RTS);
- Recommendation for site auditor to prepare a Site Audit Statement.

The Department of Planning and Environment advised that a SEPP 33 preliminary risk screening be undertaken for the site, which would need to advise whether a Preliminary Hazard Analysis (PHA) is required and, if so, must be provided. Based on the risk screening undertaken in accordance with Applying SEPP 33 guideline (DoP 2011), as detailed in correspondence prepared in response to this issue (**Appendix 2**), *"...the storage of fuel and transportation to and from the site does not constitute a hazardous industry or a potentially hazardous industry. No Preliminary Hazard Assessment is required."*

2.4 Noise

In response to suggested Conditions of Development Consent provided by the Environment Protection Authority (EPA), correspondence is provided from the Illawarra Shoalhaven Local Health District dated 29 March 2017 (refer to **Appendix 3** of this RTS) in relation to hours of operation. The letter details the need for after-hours access to the loading dock from 5am to 6pm Monday to Friday for service providers, including for the delivery of fresh food by contractors. The letter provides that the Medical Gas vessel will need to be serviced 6am to 7am once a month. Mitigation measures as detailed in **Section 3** of this correspondence are provided in relation to potential noise related issues arising from the servicing of the facility, as discussed in the letter.

It is also requested that the EPA's suggested construction hours of 7am - 6pm Monday to Friday and 8am - 1pm Saturdays, with no work on Sundays and Public Holidays, be extended. The suggested times will not allow for deliveries etc. to occur outside peak hour traffic times during construction and are not consistent with other recent state significant development proposals. On this basis it is requested that the hours be extended to

allow construction work to occur between the hours of 7am to 6pm Monday to Friday, 7am to 5pm Saturday, with no work on Sundays and public holidays. A Construction Contract will be prepared and can be provided as a Condition of Development Consent which will include the preparation of a Construction Noise and Vibration Management Plan, as discussed previously in this RTS.

The Environment Protection Authority has also requested that *“Any approval should contain appropriate conditions to require the project to be designed, built and operated so noise from mechanical plant, including the proposed generator, does not exceed $L(Aeq15min)$ 35dB or $L(Amax)$ 45dB at any time except for generator testing during the day time.”* The correspondence prepared by Acoustic Logic (**Appendix 4**) provides that these requirements are inconsistent with the EPA Industrial Noise Policy and there appears to be no basis provided for the recommendation. As recommended by Acoustic Logic, an appropriate condition of Development Consent can be provided that specifies that plant and equipment noise must comply with the Industrial Noise Policy at all times. The Acoustic Logic correspondence also provides clarification of methodology utilised in the acoustic assessment pertaining to data collection and background noise levels to address questions raised by the EPA.

The Department of Planning and Environment requested consideration of enclosing the loading bay if it would be operational in the night-time period or provide further details of the screening wall and acoustic barrier, including effectiveness in mitigating impacts from the use of loading zone during the night time period. The loading bay is mainly enclosed with masonry walls and a roof. The roof will cover most of a truck sitting in the bay loading and therefore significantly reduce noise from the area. An acoustic barrier is to be provided to the loading dock to minimise the spread of noise during deliveries. The revised Architectural Drawings prepared by Billard Leece Partnership (Drawing Reference DA-06-001 Rev F), as contained in **Appendix 1** show details of the proposed Loading Dock.

One of the public submissions (Ned Kenny of Bulli), who appears to be a resident directly adjoining the subject site, raised issues in relation to noise and odour potential from the proposed location of the loading dock, waste, generator and medical gas areas being adjacent to the back of their property. Concern was also raised regarding the potential for noise as a result of the height of the plantroom and the need to limit hours of use of outdoor dining area. In response to this submission it is provided that the location of the facilities is necessary to service the hospital. All facilities will be required to comply with operational noise criteria as outlined in the Industrial Noise Policy and these criteria will be applied. The loading and ancillary service areas will also be screened.

The requested limiting of hours of use of the outdoor dining area is noted, however, as the development is an aged care facility and the outdoor area in the north-eastern corner of the building will be for the use of in-patients within the facility only, the area will not be utilised outside eating times (evening meals). Therefore a restriction on hours of operation is not required. The area provides fresh air access for in-patients and should not be restricted as to times of use.

The proponent provides that the following mitigation strategies have been implemented to address potential noise issues:

- An acoustic screen is to be provided around the loading dock and a roof provided to reduce noise associated with truck movements, including during deliveries).
- Trucks are not to be left idling when waiting in the loading dock.
- Noise generated by the plant will comply with the EPA's noise guidelines.

The submission also expressed concern with overlooking from the proposed terrace in the north east corner and requested that screening be required. The adverse impacts of the spread of noise and the potential for overlooking from the L2 terrace on the NE corner has been mitigated via the following measures.

- Terraces are locked using access control, so access to such areas is controlled by staff.
- Terraces will not be accessed late at night and will be locked.
- The terraces are adjacent patient rooms, so noise will need to be minimised so patients are not adversely affected.
- The provisioning for terraces has taken into account the patient profile for the L2 ward. This will be an aged care ward and hence the noise generated will be minimal.
- Screening can be included to the terrace on the façade facing the resident's backyard and can be conditioned if required.

Concern was also expressed in relation to location of waste services. In response, all waste is being managed in accordance with the Local Health Districts Waste Management Plan lodged in association with the EIS. Any odours will be minimised via the following mitigation measures:

- Waste is collected at regular intervals during the week and taken away for offsite disposal.
- Waste is contained in bins and skips that are covered via their lids at all times to minimise any odours spreading.

2.5 Bushfire

Wollongong City Council requested that clarification/verification was required from the NSW Rural Fire Service in relation to the recommendations of the Bushfire Assessment prepared by Travers Bushfire and Ecology, which was lodged in association with the EIS. It is noted that this assessment concludes that the land identified as being bushfire prone to the north of the subject site is managed. This land is developed for residential purposes and comprises canopy trees only, with a mown understorey and gardens. Accordingly, Travers Bushfire and Ecology concluded that the site is not bushfire prone land and therefore does not require compliance with the Planning for Bushfire Protection 2006, Guidelines.

The NSW Rural Fire Service (RFS) has subsequently provided a submission which identified the need to maintain the site as an Inner Protection Area, including levels of pruning required. The issues raised by the RFS are agreed to and the site will be managed as an Inner Protection Area as provided in **Table 3** below.

Table 3: Management Measures for Inner Protection Area (Source: Johnstaff Projects Pty Ltd)

RFS Item	Bushfire Consultant Advice on what is required	Mitigation Measures Planned
1	Trees are to be maintained to ensure; ▪ Canopy cover does not exceed 15% ▪ Trees (at maturity) do not touch or overhang the building ▪ Tree canopies (at maturity) should be well spread out and not form a continuous	▪ The building has been designed to avoid the tree canopies, so the trees do not touch the building. ▪ The trees will be managed in the future to maintain the separation. ▪ Six trees are proposed to be removed from

RFS Item	Bushfire Consultant Advice on what is required	Mitigation Measures Planned
	- canopy - There should be no unmanaged vegetation within 10m of windows, doorways, eaves and gutters - Lower limbs should be removed up to a height of 2m above ground	the northern side of the building on the basis that they are either unsustainable (unhealthy) and to avoid a continuous canopy on the north side of the site.
2	Shrubs are to be maintained to ensure; - Large discontinuities or gaps in vegetation - Shrubs should be in clumps no greater than 5m² - Shrubs should be no closer than 10 metres from an exposed window or door.	Shrubs will be cleared from the northern area on site. There are a number of small shrubs and weeds on the northern embankment and these will be cleared as part of the works.
3	Grass is to be maintained to ensure: - A height of 10cm or less - Leaves and debris is removed.	Grass will be maintained to 10cm or less.

Further, a Review of Bushfire Matters undertaken by Peterson Bushfire (Appendix 5) reconfirms "the adjoining vegetation mapped on the Wollongong Bush Fire Prone Land Map should not be identified as 'bushfire prone vegetation' due to its very small size, condition and separation from the true bushfire hazards to the north and south-west". Accordingly, the assessment concludes that compliance with Planning for Bushfire Protection 2006 should not be required and it is unwarranted for the site to be managed as an inner protection zone.

Irrespective of this, the proponent has indicated that the Hospital and Aged Care facility will be jointly responsible of the tree and vegetation management matters. A Bushfire Management Plan has now been prepared by Travers (**Appendix 6**) to facilitate the ongoing bushfire hazard maintenance of the asset protection zone within the site. The landscaping guidelines as recommended by Travers are as follows:

"Any additional planting and/or landscaping is to ensure compliance with the following:

- Canopy cover does not exceed 15% of the APZ
- Trees (at maturity) do not touch or overhang the building
- Tree canopies (at maturity) should be well spread out and not form a continuous canopy
- There should be no unmanaged vegetation within 10m of windows and doorways
- Lower limbs should be removed up to a height of 2m above ground

Shrubs are to be maintained to ensure;

- Large discontinuities or gaps in vegetation
- Shrubs should not be located under trees
- Shrubs should be in clumps no greater than 5m²
- Shrubs should be no closer than 10 metres from an exposed window or door.

Grass is to be maintained to ensure:

- A height of 10cm or less
- Leaves and debris is removed."

The maintenance of the APZ which is recommended by Travers is as follows:

"A recommended performance standard for the fuel load of an IPA is between 0–4 tonnes per hectare. Ongoing maintenance of trees should occur to ensure they do not touch or overhang the building and to ensure lower limbs are removed up to a height of 2m. The understorey is to be managed on a fortnightly basis during the bushfire season (September–April) and on a monthly basis throughout the remainder of the year, taking into consideration the landscaping guidelines above."

2.6 Flood Impact

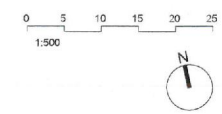
Both the Office of Environment and Heritage, and the Department of Planning and Environment requested that an appropriate flood planning level should be established, with OEH noting the nature of the development and its occupants including critical emergency facilities. Both departments indicated that the minimum flood planning level (FPL) for the proposal should utilise the maximum probable flood level plus freeboard (ie: must be designed to address the Probable Maximum Flood level and not just the 1% Annual Exceedance Probability Flood) to be more consistent with the outcomes of the Collins Creek Floodplain Risk Management documents and the Wollongong DCP 2009 Chapter E13 Floodplain Management. OEH seeks clarity on the levels of the building against the site flood levels.

The proponent (in consultation with Jones Nicholson Consulting Engineers) has advised that the site is only partly flood affected and the building is located away from any flood waters. The PMF was not selected because it is large event eg: 1:10000 year event and the cost of constructing to this design level is prohibitive. This so considered to be insignificant in the probability of an event occurring. However, the levels for the PMF have been calculated and most of the levels comply with the PMF. As recommended in the Jones Nicholson Flood Assessment (CRPT-20151420.01A), the RL of the lowest floor at the north east of the site is 28.0 which is above the AEP level of 27.50. The lowest floor at the middle section of the site is RL32.20, well above the AEP of 29.44. The loading dock is the only portion that is below the PMF (by approximately 40mm), as demonstrated in the Flood Map Plan - 1% AEP Flood Water Level (Sheet DA.01.0601) contained in **Appendix 1**. This plan provides an overlay of the 1% AEP, 200 year and PMF Flood Water Levels. This overlay plan is partly reproduced in Figure 1 over. This plan demonstrates that only a portion of the loading dock is affected and the PMF will be diverted by a block wall on the northern side of the loading dock, which will protect the dock and services. Hence, there will be no need to evacuate the hospital in the event of an emergency.

The Office of Environment and Heritage also questions the utilisation of appropriate hydrological techniques. TTW has responded to this question in correspondence dated 5 June 2017 (**Appendix 7**), with this correspondence confirming that the hydrology methods established in 'Australian Rainfall and Runoff 1997' were utilised in the drainage design. Further, TTW advise that as the design commenced in 2015 and the tender documents were submitted in 2016 "there was no requirement to use more recent hydrological methods".

As stated in the report hydrological modelling was undertaken using iWBNM2010. WBNM ('Watershed Bounded Network Model' Boyd et al, 2007) is an advanced storage-routing model that allows simulation of complex catchment behaviour. TTW advise that the flow rate results provided by WBNM were then input into HECRAS. HECRAS is a 1-Dimensional river/channel analysis tool developed by the US Army Corps of Engineers and capable of steady and unsteady flow simulation. The model permits supercritical, sub-critical and mixed mode simulations, and includes graphics for checking and comparison of calculated flood profiles and levels. TTW also advise that the results gathered using the tools outlined above showed that the development did not have any adverse effects on the flood waters on the site and the surrounding properties. In addition, HECRAS also provides flood levels for the site. TTW have provided flood levels for the 100yr, 200yr and PMF flood events.

Figure 7 (over) - Flood Map Plan 1% AEP Flood Water Level prepared by Billard Leece Partnership



REV
ARCHITECTS



Billard Leece Partnership Pty Ltd
Architects & Urban Planners
Studio 201 50 Holt Street
Surry Hills 2010
New South Wales Australia
T +61 2 8096 4066
E info@blp.com.au
www.blp.com.au



P: 02
F: 02
W: www.hinfra.health.nsw.gov.au

DRAWING TITLE
FLOOD MAP PLAN -
1% AEP FLOOD WATER LEVEL

DEVELOPMENT
APPLICATION

2.7 Stormwater Drainage and Water Quality

The Office of Environment and Heritage seeks clarification on the type, configuration and performance of proposed devices to achieve water quality objectives and also seeks clarification on how surface runoff is to be treated.

Prior to discharge stormwater is required to be cleaned to meet Council standards. Due to site constraints it is proposed to include a below ground treatment system consisting of Stormwater 360 enviropods and storm filters. Table 2 of 'Wollongong Development Control Plan 2009 Chapter E15: Water Sensitive Urban Design' indicates the level of removal adopted. A MUSIC model is available for review and can be provided to the Department on request.

Wollongong City Council has requested that the proponent obtain an easement to drain water over those parts of other land (downstream property) through which stormwater drainage from the land is to be conveyed, prior to approval of development on site. Advice has been sought from Health Infrastructure's internal counsel who has advised that Health Infrastructure, as the Crown, does not require Council approval under s.68(1) of the Local Government Act to do stormwater drainage work if the drainage work is incidental to the erection or demolition of a Building. Specifically, this clause states:

"69 Crown exemption from approval to do things incidental to erection or demolition of building

Section 68 does not require the Crown or a person prescribed by the regulations to obtain the approval of a council to do anything that is incidental to the erection or demolition of a building."

In this regard the incidental test is satisfied as the drainage work is part of the State Significant Development application. In such circumstances it is appropriate and common that a condition be attached to the Development Consent specifying that the requirements of Chapter E13 of Wollongong Development Control Plan 2009 be met. Health Infrastructure raises no objection to the application of such a condition which requires compliance with Chapter E13 and any relevant technical specifications, together with the lodgement of final drainage plans to the Certifying Authority prior to the commencement of works.

Council also advised that the stormwater design details and the tree protection zones of trees T12 - T22 as provided on the Landscape Plan and referred to in the Arboricultural Development Assessment Report (as lodged with the EIS) are inconsistent. These comments are noted by the proponent and reference is made to the revised Arboricultural Development Assessment Report (**Appendix 8**) and to the revised Landscape Plans (**Appendix 9**) which address this issue. With respect to the potential impact of stormwater works on existing trees it is noted that the stormwater infrastructure has been relocated away from the Tree Protection Zones (TPZ) where possible. Further, the pipes are within only 10% of TPZ and outside the Structural Root Zone (SRZ) and cannot be located any closer to the building without being placed under the building. Locating pipes underneath the building prevents maintenance which could result in flooding impacts. As only the pipes are to be located within only the TPZ and correct construction techniques (i.e. no trenching) is to be employed, this is considered appropriate. The hydraulic design utilises the existing drainage infrastructure through the Ambulance Station and this has been tested and designed by a qualified civil engineer in the preparation of the plans.

2.8 Car Parking and Traffic/Pedestrian

The Department of Planning and Environment and Wollongong City Council seek clarification on the availability of car parking spaces in the existing Bulli Hospital site and proposed car parking arrangements on the BACCE site. Specifically, the Department requested details of the additional proposed ambulance car parking and reconfigured drop off and car parking areas. Further, confirmation is sought that the spaces on the NSW Ambulance site to be incorporated as part of the proposal are not required to address car parking requirements of NSW Ambulance. The Department indicated that the displacement of existing hospital car parking and reliance on on-street car parking is not a sufficient outcome without further justification regarding parking demand/supply or further mitigation measures (i.e. additional car parking on the existing hospital campus to address the displacement of car parking on the site or other measures to reduce hospital parking demand).

The revised plans have been provided in association with this correspondence, specifically Site Plan – Existing (Drawing No.DA.01.0001) (**Appendix 1**) and the Site Works Plan (Job 151775, Drawing C05) (**Appendix 10**) have been amended to show the location of additional parking and associated access. Such plans detail the location of nine (9) existing parking spaces on the adjacent ambulance station site, which will be utilised for staff parking associated with BACCE. The plans also indicate details of vehicular access to parking spaces via the ambulance station driveway (existing), as well as the addition of pedestrian access stairs to those car parking spaces located in the north-eastern corner of the subject site. These parking spaces are not currently used by the Ambulance Station and are therefore deemed surplus to requirements. It is noted that the land title of the Ambulance Station and the site containing BACCE (including the IRT facility) will be under the control of the Ministry of Health, with land to be leased to IRT on a 40 + 40 year lease.

A letter of correspondence titled 'Parking Demand and Supply' has been prepared by Taylor Thomson Whitting (**Appendix 11**) as an addendum to the previously submitted Traffic Impact Assessment. This correspondence provides advice on the parking generation for the new facility (hospital and RAC) as well as the removal of existing spaces at the site and the impact this will have on the existing Bulli Hospital facility. With respect to the allocation of spaces on the Ambulance Station site for BACCE staff parking, this correspondence indicates that the Ambulance Station has a peak demand of 7 parking spaces and further states:

"While the proposed development includes procurement of 9 parking spaces from the adjacent Ambulance Station, this will not impact the operation of this existing facility. At the Station we have been advised that the peak number of staff is 7. There are no expected outpatients or visitors to the Station as it is largely used for the storage and maintenance of ambulance vehicles. For these 7 staff there are 5 internal spaces and 6 external dedicated carparking spaces marked as 'Ambulance Parking Only'. The existing 11 spaces will remain in use by the Station and will not be associated with the proposed Bulli ACCE site."

Since the preparation of the original Traffic Impact Assessment, the design has been updated to increase the capacity of on-site parking. The revised plans (**Appendix 1**) now show 50 car parking spaces within the site, together with the 9 spaces procured from the adjacent Ambulance Station, as discussed above. This results in a total on-site parking provision of 59 spaces, which meets the car parking rates required under the

Wollongong Development Control Plan 2009 as confirmed in the correspondence from Taylor Thomson Whitting, which is summarised in Table 4 below:

Table 4: Summary of Proposed Parking and Requirements

Location	Number of Beds and/or Staff during Peak	Number of Spaces Required
Urgent Care	4 staff	2
Allied Health and Outpatients	21 staff	10.5
In Patient Unit	40 staff and 60 beds	50
Front of House	8 staff	4
Back of House	10 staff	5
Residential Care Facility	13 staff and 60 beds	12.5
Total		84
After 30% reduction for proximity to public transport		59

Taylor Thomson Whitting advise there are no changes to staffing, beds or outpatients and notes that the existing parking on the subject site will no longer be required in the future once the BACCE is constructed and operating, as the existing hospital site will eventually be decommissioned.

With respect to the availability on the existing Bulli Hospital site, following the loss of the existing parking on the BACCE site, TTW advise the following:

"We have been advised by Johnstaff that the existing Hospital site has 138 staff at peak times and 63 beds. Following these staff and bed numbers, according to the DCP requirements the Hospital site would therefore require 101 spaces (without applying the 30% reduction due to the Hospital's proximity to public transport).

During construction of the Bulli ACCE, 75 parking spaces will remain available at the existing Hospital site and 32 temporary spaces will be provided at the adjacent Ambulance Station Site. This will result in a total on-site parking provision of 107 spaces, which exceeds what would be required by the Hospital in accordance with the DCP. The existing car parking spaces at the development site will not be available during construction."

Accordingly, Taylor Thomson Whitting conclude that, with the utilisation of the nine (9) spaces on the Ambulance site, there is sufficient on site parking to meet the demands of the proposed BACCE development and to address the requirements of WDCP 2009. Further, during construction of the BACCE development, the existing hospital has sufficient onsite parking spaces to accommodate its own needs and meets the requirements of the DCP.

TTW also note that in the event that there is an excess of parking demand above the requirements of WDCP 2009, this can be met by available on street parking which is currently not operating at capacity. This is demonstrated within the car parking survey prepared by Taylor Thomson Whitting submitted, contained in **Appendix 12**. In summary, the survey indicates that the existing hospital utilises the existing car park area located on the subject site as well as four (4) car parking areas currently located on the existing hospital site

which in total are utilised at an average capacity of approximately 55% at the highest peak time (car parking areas CP1, 2, 3, 4 and 5 as indicated on page 3 of the Parking Survey). The parking accumulation survey provides that Car park Area 1 was surveyed as having a total maximum of 72 vehicles of a total of 81 available parking spaces at 2pm. Car park areas 2-5 surveyed with a total of 50 spaces out of a total of 75 available parking spaces at 6pm. The survey also indicates in relation to on-street parking that a total 62 spaces out of a total 137 vehicle spaces available, at 8am. It is therefore considered that up to approximately 72 vehicles currently utilise the existing parking area on the subject site. The survey shows that up to 34 currently empty spaces on the existing hospital site can be utilised during construction by existing hospital staff and visitors as required. Johnstaff have also provided that car parking during construction will utilise a total of 32 parking spaces available on the NSW Ambulance site which have been negotiated by Health Infrastructure. A total of 66 vehicles can therefore be accommodated. This leaves a shortfall of just approximately 6 vehicles requiring parking during construction of the proposed development. The survey indicates that approximately 62 of the possible 137 spaces available as on-street parking will provide for a possible 75 spaces free for those 6 vehicles or any potential additional if required. This is considered more than adequate to cater with the proposed development during construction.

It is noted neither the Roads and Maritime Services or Transport for NSW provided any objections to the proposed development in their submission in relation to traffic, parking or related infrastructure. Further, the public submissions received during the consultation phase did not raise concern regarding parking provision for either for the existing hospital or proposed development.

With respect to the provision of information regarding the drop off and pick up area Johnstaff advise that the ambulance drop off/pick up will be used to facilitate internal and external patient transfers to and from Bulli. This could include NSW Ambulance, NEPT Patient Transport, Mortuary and private transfers.

A proposed condition of Development Consent was requested by Wollongong City Council in relation to the reconstruction of the Hospital Rd Footpath. The proponent has recognised that the footpath will need to be repaired in certain locations, rather than rebuilt and this could be placed as a Condition of Development Consent if required. The proponent considers that the Hospital Road Pedestrian Refuges do not require upgrading as there will be minimal to no connection with the existing Hospital.

2.9 Infrastructure/Services

Sydney Water Corporation requested that the approved plans would need to be submitted to the Sydney Water Tap in™ online service to determine whether the development will affect any Sydney Water sewer or water main, stormwater drains and/or easement, and if further requirements need to be met. The proponent has advised that the most up to date drawings were submitted on Sydney Water Tap in May 2017. At the time of writing this correspondence, a Section 73 Compliance Certificate under the Sydney Water Act 1994, had been submitted to Sydney Water in late 2016. No response has been received to date.

In response to Wollongong City Council's 'Recommended standard conditions for approval' pertaining to telecommunications and services, an Electrical and Communications Infrastructure Management Plan has been prepared by Arup (**Appendix 13**). Consultation between Arup and Endeavour Energy has occurred in relation to connection service to the proposed development, with a Proposed Method of Supply also lodged

with Endeavour Energy. The Electrical and Communications Infrastructure Management Plan provides copies of correspondence with Endeavour Energy.

In addition, the latest correspondence provided by Endeavour Energy (addressed to Henderson Consulting Engineers Pty Ltd as the Level 3 designers for ARUP) is a Design Brief to assist the proponent in the preparation of a design package to be submitted for certification by Endeavour Energy. A copy of this correspondence from Endeavour Energy is lodged in association with this correspondence (refer to **Appendix 14**).

2.10 Landscaping/Tree Removal

Concerns were raised in four public submissions (A Peacock of Bulli, NSW, and three anonymous submissions), in relation to proposed tree removal, with specific reference to the removal of trees adjacent to the rear property boundary. The Department of Planning and Environment also requested that an Arborist Report be provided in relation to the trees along the northern property boundary of the site.

A revised Arboricultural Assessment has therefore been prepared by Moore Trees (**Appendix 8**). In summary, the proposal includes the removal of six (6) trees adjacent to the northern rear property boundary, as indicated on the amended architectural plans (Drawing No. DA.01.0001 provided in **Appendix 1**). All other trees will be retained. The reasons for the tree removal, as referenced in the Revised Arboricultural Assessment are as follows:

Tree 12 - This has been classed as a dangerous tree in poor condition by the arborist and is therefore proposed for removal.

Tree 15 - This tree has had recent failures and is classed as poor condition by the arborist. It is proposed for removal. It also backs onto a neighbouring property, the resident has requested its removal.

Tree 16 - This tree has had recent failures and is classed as fair condition by the arborist. It is proposed for removal. It also backs onto a neighbouring property, the resident has requested its removal.

Tree 36 - This is a noxious weed species Camphor laurel (*Cinnamomum camphora*). WCC classes it as exempt.

Tree 37 - This is a noxious weed species Camphor laurel (*Cinnamomum camphora*). WCC classes it as exempt.

Tree 41 - This is a noxious weed species Camphor laurel (*Cinnamomum camphora*). WCC classes it as exempt.

With respect to **Tree 43**, the supplementary correspondence from Moore Trees dated 31 May 2017 (Appendix 16) states the following with respect to the need for tree protection measures which were noted as being absent from previous documentation:

" It appears that most of the water basin and gas storage area are all above grade. I understand that there are no piers or strip footing required under the OSD and there will be no incursions into the structural root zone (SRZ) of Tree 43 as the design is base slab with no excavations. "

All existing trees proposed for removal from the site have been clearly marked on the submitted plans (Drawing No. DA.01.0201 in **Appendix 1**) and the numbering aligns with the revised Arborist report. In addition, the Department of Planning and Environment advised that landscape plans will also need to be updated to reflect the findings of the arborist report and proposed additional tree removal. A revised Landscape Plan is contained in **Appendix 9**.

A response to minimum landscape requirements raised by Wollongong City Council (ie: the DCP requires that a minimum 1.5m landscape strip required around the perimeter of the property with hedge type screen plants), and that the development should incorporate shade to a minimum of 50% of parked vehicles has been prepared by Billard Leece Partnership (**Appendix 16**) providing justification of the current design.

2.11 Flora and Fauna/Biodiversity

The Office of Environment and Heritage has advised that an assessment in accordance with the 'NSW Biodiversity Offsets Policy for Major Projects and Framework for Biodiversity Assessment (FBA)' was not required due to the scale of impact proposed, and noted the lodgement of the Flora and Fauna Assessment prepared by Travers Bushfire and Ecology in association with the EIS. DEC has advised that it is satisfied that the proposal is unlikely to result in a significant impact under 'Section 5A Significant effect on threatened species, populations or ecological communities, or their habitats' of the Environmental Planning and Assessment Act 1979.

Wollongong City Council requested that an Anabat Survey be undertaken to determine if there are any roost areas on site, with an updated Flora and Fauna Assessment provided, and should include further details of feed trees on site. An Anabat and Hollow Bearing Tree Survey Report has therefore been undertaken by Travers Bushfire and Ecology (**Appendix 17**). The report concludes that the proposed development area and surrounding study area at 22 Hospital Road, Bulli was not found to support any likely important fauna habitat features for threatened species. It is considered that updating of the Flora and Fauna Assessment is not required, as the survey is provided as additional supporting information as requested.

2.12 Aboriginal Cultural Heritage

It is noted that the Office of Environment refer to the findings of the Due Diligence Assessment (Aboriginal Heritage Assessment prepared by Biosis and lodged in association with the EIS) which provided that, based on the high degree of prior disturbance and the landform type identified during the archaeological survey, no further investigation is required at this stage. OEH advised that should any Aboriginal objects (including skeletal remains) be discovered during construction, all works in the vicinity must stop and the OEH contacted. Health Infrastructure concurs with this approach.

2.13 Signage

Wollongong City Council requested further detail on signage proposed as part of the subject application. A document titled Billard Leece Partnership Bulli Aged Care Centre of Excellence Tender Documentation has been prepared by Minale Tattersfield dated 10.02.2017 which details all signage proposed (**Appendix 18**). Correspondence prepared by TCG Planning on 22 March 2017 in response to this issue (**Appendix 19**) provides a description, summary and assessment of all internal and external signage proposed as part of the development as detailed in the Minale Tattersfield document. As some signage proposed is identified as requiring development consent, the correspondence includes an assessment against the State Environmental Planning Policy No 64 Advertising and Signage Structures and Chapter C1 of the Wollongong Development Control Plan WDCP) 2009. This assessment concludes:

"The INTERNAL signage proposed within the building as detailed in this correspondence and in the documentation prepared by Minale Tattersfield meets the requirements of SEPP (Exempt and Complying

Development Codes) 2008 and would therefore be classified as Exempt Development under these provisions. Under this SEPP, the EXTERNAL signage proposed on the site does not meet the exempt development provisions pursuant to the Exempt and Complying Development Codes SEPP. However, if the Site Identification sign and Entry Markers were not illuminated, these sign could be exempt.

We consider that the proposed EXTERNAL signage meets the exempt development provisions of Wollongong Local Environmental Plan 2009 (Schedule 2 as "Advertisements—public notices displayed by public body giving information or direction about services provided"). Therefore development consent is not required for the proposed signage as it is 'exempt development' under these planning instruments.

In case of any doubt of the above opinion, it is noted that 'signage' is permitted with development consent within the R2 Low Density Residential zone of WLEP 2009. If development consent were required for the proposed signage pursuant to the WLEP 2009 and SEPP 64 requirements, the proposed 'wall signs' being the two (2) awning signs, meet the requirements of Section 22 'Wall Advertisements', and the proposed 'Site Identification' sign is (defined as a 'business identification sign') also meet the relevant provisions of SEPP 64 Furthermore, the relevant controls within the WDCP 2009 Chapter C1 have also been considered and are generally met by the proposed signage, as addressed in Attachment D."

2.14 Hospital Site Usage

Wollongong City Council and the Department of Planning and Environment requested details of the uses that are being transferred from the existing hospital to the new facilities, and the proposed use of the existing areas as a result of the relocation and what facilities will remain. The following clinical services are being transferred from the existing Bulli Hospital site:

- In patient unit beds (56 transfer, plus an expansion of 4);
- Urgent care centre (4 bays for minor illness and injuries) to be available to all age groups;
- Outpatients clinic;
- Allied Health facility;
- Medical imaging (x-ray);
- Pharmacy service;
- Non clinical support services.
- Clinical services including IPU beds, Outpatients, x-ray - Urgent Care Centre, Support services, and Allied Health.

All services at the existing hospital site will be decommissioned upon commencement of BACCE operations. The majority of services at the existing hospital will be transferred to the proposed development, with the exception of:

- Engineering services, which will be outsourced;
- Medical records, Aged Care Assessment Team and Community Health, which may remain on the existing site after commencement of BACCE operations. However, the ISLHD intend to relocate such services in the future.

The letter provided by NSW Health (Illawarra Shoalhaven Local Health District) provided in **Appendix 3** advises that under NSW Health policies, services and assets are regularly reviewed for efficiency, effectiveness and

appropriateness in respect to changing community needs. Therefore the LHD cannot make further comment on the long term service profile for the site.

With respect to the need for relocation of the hospital services to the BACCE site, this matter has been the subject of extensive investigation by Health Infrastructure and ISLHD, as part of its Business Case (V6) which was prepared in April 2017. Relocation of services to the BACCE was identified as the preferred outcome for the following reasons:

- The concept is an aged care centre of excellence by co-locating with a residential aged care provider where both will collaborate in a combined model of care and share services. This model requires purpose design which could not be provided in a refurbishment of the existing facility. The building of a new facility on the existing site would require the decanting of the geriatric facility for 18 to 24 months. There are no available facilities in the LHD for this decanting.
- The existing hospital site has a number of site/building constraints including asbestos due to the age of existing buildings.
- The site is identified as bushfire prone potentially necessitating compliance with bushfire management requirements.
- There may be need for a short term closure of beds to enable space to be available to accommodate buildings works on the existing site.
- There would potentially be disruptions to other services due to disruptions associated with building on the existing site.

In summary the Final Business Case (V6) prepared by health Infrastructure in April 2017 concluded:

"The option of refurbishing and expanding existing facilities was not the preferred option recommended in the initial Business Case. Refurbishing the existing facilities limits the ability to deliver on the aspiration for a fully integrated aged care service model that optimises collaboration between service providers and ensures older residents experience supportive and seamless care as they move between community, residential and hospital based services. The refurbishment option also provides an inefficient clinical design for the facility due to being constrained to the existing building layout.

Detailed site analysis of the existing hospital following the Restart Illawarra funding announcement identified physical site constraints such as asbestos and heritage issues. The initial budget was not adequate to manage these site constraints and further alternatives were investigated."

2.15 Subdivision/Consolidation

Wollongong City Council requested that a boundary adjustment consolidating the area of the existing hall with the western lot should be undertaken prior to issue of any Occupation Certificate. This can be provided as a Condition of Development Consent requiring that lot consolidation of the two lots on site can be undertaken prior to completion of the project.

2.16 Retaining Walls

Wollongong City Council requested changes to retaining wall details, including location of additional retaining walls required. The Retaining Walls Detail Sheet prepared by Taylor Thompson Whitting has therefore been prepared as requested to provide updated design details (refer to **Appendix 20**). It is requested that the

related proposed Condition of Development Consent provided by Council be amended to read that all excavations and cuts should be undertaken and constructed in alignment with the Geotechnical Report from Douglas Partners, as lodged with the EIS.

2.17 Safety and Security

Wollongong City Council raised concerns in relation to security and safety measures to be employed on the site. Health Infrastructure has provided (**Appendix 3**) that the facility has been designed to optimise the security footprint of the building by the installation of internal and external back-to-base monitoring CCTV. However there will not be security guards on site at all times. The Hospital and RACF will have appropriate safety measures in place, similar to those in the existing Hospital, as detailed in Health Infrastructure's correspondence.

2.18 Height, Aesthetics and Visual Impact

Two Public Submissions (both Names withheld) expressed concerns in relation to building height. The Clause 4.6 Variation Statement provided in Appendix 5 of the EIS provides justification for the proposed variation to building height. This has been reviewed and deemed satisfactory by Wollongong City Council who provided the comment that:

It does not appear that the exception would result in adverse impacts on adjoining properties in terms of overshadowing or privacy."

With respect to the visual impact of the development, additional perspectives showing the building outline, have now been prepared by Billard Leece Partnership (**Appendix 1**) as requested by the Department of Planning and Environment in emailed advice of 19 April 2017. The visual perspectives include a view of the development from the adjoining properties to the north with the trees managed in accordance with RFS requirements (Northern Aspect 01c: 02c and 03c Photomontages). These are provided with a dotted line indicating the outline of the building on the perspective and associated mark-up of the existing Site Plan showing the location of the perspectives taken.

2.19 Design Specific Issues

One Public Submission (Ned Kenny of Bulli, NSW) requests more detailed plans to address a number of issues including the purpose of the building and potential hazards, screening to soften the building bulk, size and location of OSD tank and confirmation of stormwater outlet, limiting hours of use of outdoor dining area. It is noted that the submission states it is not totally against the proposal and recognises the need for publicly funded aged care centres. The matters raised have been addressed within the previous discussions in this RTS and within the revised architectural plans prepared by Billard Leece Partnership provided in **Appendix 1**.

2.20 General

The Environment Protection Authority requested that the proponent ensure that all activities on site comply with Protection of the Environment Operations Act (POEO Act). The Construction Contract will be prepared in line with these requirements, which can be provided as a Condition of Development Consent for the development.

One submission (name withheld) discussed the proposed fire rating of the building. The proponent has advised that the building will be constructed to comply with the relevant Australian Standards, Building Code of Australia and fire safety codes.

Two Public Submissions (one Raymond Jaegar of Woonona, the second Terry Hagan of Bulli) raised concerns in relation to the nature of the public vs private joint venture proposal and funding details. One submission (name withheld) also discussed perceived property value impacts. It is considered that these issues do not constitute a planning consideration under relevant planning legislation and therefore a response is not required.

One of the Public Submissions (Dianne Nixon of Woonona, NSW) indicated support for the proposed development, due to the increasing need to address housing for the ageing population. The submission provides a positive approach such that *"...a quality medical facility such as this will allow people to age well and continue to contribute to the life of their communities and families. Etc....."*

3 Final Mitigation Measures

'Section 10 Environmental Risk Assessment and Mitigation Measures' of the Environmental Impact Statement provides an Environmental Risk Assessment (ERA) to identify the key significant environmental impacts associated with the construction and operation of the proposal and identifies how those impacts are to be mitigated or managed. Specifically, Table 20 of the EIS presents the Mitigation Measures proposed to address the key issues identified in the Environmental Impact Statement and how they have been considered as part of the proposal.

The mitigation measures provided in Table 20 of the Environmental Impact Statement have been incorporated into the summary List of Final Mitigation Measures provided below as **Table 5** of this Response to the Submissions correspondence as requested by the Department of Planning and Environment, to address specific additional issues or concerns raised in submissions and to include additional mitigation measures and strategies which it is intended will be employed by the proponent for the project, as provided in detail in this Response.

Table 5: List of Final Mitigation Measures

Potential Impacts	Potential Impact	Comment	Proposed Mitigation Measures
Construction (adapted from Table 20 of EIS)	- Potential construction management impacts including, construction traffic and excavation works. - Acoustic impacts associated with construction (including excavation and traffic impacts).	The Preliminary Construction Management Plan (Appendix 24 of the EIS) prepared by Johnstaff (September 2016) addresses potential construction impacts and provides mitigation strategies to minimise disturbance to adjacent residents.	A Construction Contract will be prepared which will include: - Unexpected Finds Protocol and Contingency Plan; - Construction Environmental Management Plan (EMP) which provides mitigation strategies to minimise disturbance to adjacent residents, including traffic and pedestrian, air quality management and monitoring measures; - Construction Noise and Vibration Management Plan to manage construction activities, to ensure noise does not impact on the adjacent residences and to ensure compliance with EPA noise emissions; - Recommendation for site auditor to prepare a Site Audit Statement; - Restrictions for loading dock operation and construction hours.
Hazards (adapted from Table 20 of EIS)	- Presence of uncontrolled historical filling of up to 6m in depth. - Construction issues relating to presence of high strength sandstone. - Potential site contamination due to presence of fill to accommodate the car park and demolition of previous structures. - Hazardous building materials may have been		- Prepare a CMP prior to commencement of work. - Implementation of recommendations from Douglas Partners including extensive earthworks to remediate the site, ongoing monitoring by a geotechnical engineer and alternative methods of excavation below depths of approximately 4.5metres. - Undertake additional geotechnical assessment as

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	used in the construction of the ambulance station.		the planning and design of the development proceeds to address the variable ground conditions encountered. This shall include a geotechnical specification for earthworks as part of the final design. - Regulate the operation of excavation and percussion plant due to the potential for plant with heavy hammers to cause ground vibrations sufficient to damage nearby buildings. Monitoring of vibration levels to occur in order to regulate set-backs necessary to ensure that vibration levels do not reach those likely to cause building damage. - A hazardous building materials survey shall be completed prior to the demolition of the building. - The site shall be remediated in accordance with the submitted RAP and a Validation Report prepared.
Riparian	- Vegetation/riparian management plan, details of riparian setbacks, riparian zones and management measures. - The amended plans indicate a portion along the northern rear property boundary is affected by the riparian zone, with a slight encroachment for the turning circle for the loading area.	Amended plans lodged in association with this Response clearly detail the location of the creek and the associated riparian zone, being 10m from top of the creek bank.	Refer to revised Arboricultural Impact Assessment and Revised Landscape Concept Plans for details of tree and vegetation assessment and management of vegetation adjacent to the riparian zone. It is considered that due to the minor encroachment on the riparian zone, that a condition requiring that a vegetation / riparian management plan be prepared should not be required for the site as the creek in question runs in the backyards of the adjacent properties and is partly piped.
Geotechnical	Potential geological and water level impacts during construction.	TTW note that the impact on the ground water is likely to be minimal and localised across the development site.	- Further investigations will be undertaken during excavation including water level monitoring and any additional geotechnical assessment if required to address the variable ground conditions encountered. - The operation of excavation and percussion plant will be regulated due to the potential for plant with heavy hammers to cause ground vibrations sufficient to damage nearby buildings. Monitoring of vibration levels will also occur in order to regulate set-backs necessary to ensure that vibration levels do not reach those likely to

Potential Impacts	Potential Impact	Comment	Proposed Mitigation Measures
			cause building damage. ▪ A detailed CMP will be prepared prior to the commencement of work. ▪ A range of water sensitive urban design measures will be incorporated into the development to reduce water consumption and to minimise the effects of rainwater discharge from the land. This includes rainwater on site detention system (OSD), water quality treatment devices and water efficient fixtures and fittings. ▪ Sediment and erosion control measures should be implemented to minimise impact to local drainage lines. ▪ Conditions of Development Consent can be provided to mitigate the issues raised.
Contamination	▪ Potential for contamination exists at the site primarily through the filling of the site to accommodate the car park and demolition of previous structures. Furthermore, hazardous building materials may have been used in the construction of the ambulance station.		▪ The site shall be remediated in accordance with the submitted RAP and a validation report will be prepared, as required. ▪ A long term Environmental Management Plan (EMP) and Validation Report will be prepared by an environmental consultant at the completion of remediation work. ▪ A Construction Contract will be prepared which will include the following: ➢ Unexpected Finds Protocol and Contingency Plan; ➢ Construction Environmental Management Plan (EMP), including air quality management and monitoring measures; ➢ Construction Noise and Vibration Management Plan; ➢ Recommendation for site auditor to prepare a Site Audit Statement. ▪ The above can be provided as a Condition of Development Consent if required.
Noise	▪ Potential noise impacts on adjacent or nearby residences.	▪ Acoustic Logic confirm that compliance with EPA noise emission controls can be achieved through adoption of the recommendations set out in the Assessment and with the preparation of a construction noise	▪ The following mitigation strategies have been implemented as detailed on amended plans prepared by Billard Leece Partnership: ➢ An acoustic screen is to be provided around the loading dock and a roof provided to reduce noise associated with truck

Potential Impacts	Potential Impact	Comment	Proposed Mitigation Measures
		and vibration management plan during construction certificate stage to determine whether there are any construction activities that will require noise management in order to reduce impacts on the adjacent residences.	movements, including during deliveries). ➤ Trucks are not to be left idling when waiting in the loading dock. ➤ Noise generated by the plant will comply with the EPA's noise guidelines. ▪ The adverse impacts of the spread of noise and the potential for overlooking from the L2 terrace on the NE corner has been mitigated via the following measures: ➤ Terraces are locked using access control, so access to them is controlled by staff. ➤ Terraces will not be accessed late at night and will be locked. ➤ Screening can be included to the terrace on the façade facing the resident's backyard, if required.
Bushfire	▪ Potential bushfire impacts ▪ The site is to be managed as an Inner Bushfire Protection Area	▪ Compliance with Planning for Bushfire Protection 2006 should not be required and it is unwarranted for the site to be managed as an inner protection zone. ▪ The building has been designed to avoid the tree canopies, so the trees do not touch the building.	▪ Six trees are will be removed from the northern side of the building on the basis that they are either unsustainable (unhealthy) and to avoid a continuous canopy on the north side of the site. ▪ Shrubs will be cleared from the northern area on site. A number of small shrubs and weeds on the northern embankment and these will be cleared as part of the works. ▪ The requirements of a management plan will be adhered to.
Flooding	▪ Proximity to a watercourse, referred to as Wharton's Creek and partly located within each of the identified Low, Medium, and High Flood Risk precincts. ▪ Consideration of evacuation measures for the development and its occupants including critical emergency facilities.	▪ The loading dock is the only portion of the building which will potentially impacted on by the PMF (by approx 40mm). Access from the loading dock is available to the building in a storm event which might reach maximum flood levels.	▪ Only a portion of the loading dock is affected and the PMF will be diverted by a block wall on the northern side of the loading dock, which will protect the dock and services. Hence, there will be no need to evacuate the hospital in the event of an emergency.
Stormwater/ Drainage/Water Quality	▪ Proposed excavation with potential to impact on water quality ▪ Treatment of stormwater discharge and flow of stormwater within the site.	▪ A MUSIC model is available for review and can be provided to the Department on request. ▪ Health Infrastructure, as the Crown, does not require Council approval under s.68(1) of the Local Government Act to do stormwater drainage	▪ Prior to discharge stormwater is required to be cleaned to meet Council standards. ▪ A range of water sensitive urban design measures will be incorporated into the development to reduce water consumption and to minimise the effects of rainwater discharge from the

Potential Impacts	Potential Impact	Comment	Proposed Mitigation Measures
		work if the drainage work is incidental to the erection or demolition of a Building.	land. This includes rainwater on site detention system (OSD), water quality treatment devices and water efficient fixtures and fittings. A condition be attached to the Development Consent specifying that the requirements of Chapter E13 of Wollongong Development Control Plan 2009 be met.
Access, Traffic and Transport	- Localised traffic impacts. - Adequacy of Pedestrian facilities in the vicinity of the development. - Loading dock – potential noise concerns – refer to Noise in this Table.	A pedestrian footpath connects the carpark to Bulli Hospital, with a pedestrian refuge island located on Hospital Road to assist in road crossings.	The proposed development includes a loading dock at the rear of the eastern section of the site building, which will allow for on-site manoeuvring of a 12.5m service vehicle.
Parking	- On-site Parking - On street parking associated with the operation of the BACCE.		Provide a total of 59 carparking spaces, which meets the car parking rates required under the Wollongong Development Control Plan 2009.
Infrastructure Services	Potential impacts on Sydney Water sewer or water main, stormwater drains and/or easement.		- Section 73 Compliance Certificate under the Sydney Water Act 1994, had been submitted to Sydney Water - Consultation between Arup and Endeavour Energy has occurred in relation to connection service to the proposed development, with a Proposed Method of Supply also lodged with Endeavour Energy. - Design Brief to be lodged for certification with Endeavour Energy by Henderson Consulting Engineers Pty Ltd (Level 3 designers for ARUP) in accordance with their criteria.
Landscaping/Tree Removal	Visual impact of the development including car parking areas can be reduced through the use of appropriate landscape treatments.	- The current design aims to maximise car parking where possible whilst minimising disruption to existing trees and landscape. The design locates the car parking areas away from the northern boundary to maintain the existing trees along the perimeter. - The car parking has been divided into two separate zones to minimise impact on the site and located away from the northern boundary where the existing significant landscape is located. Planting beds are	Retain a large number of significant trees, to the perimeter, in accordance with the Landscape Plan.

Potential Impacts	Potential Impact	Comment	Proposed Mitigation Measures
		proposed amongst the parking areas, with the south-western boundary to Hospital Rd retaining the existing trees and adding significant extra landscaped areas.	
Flora and Fauna/ Biodiversity (adapted from Table 20 of EIS)	Potential impacts on biodiversity/flora and fauna within the site and in vegetation adjacent to the nearby watercourse.	- The proposed development is unlikely to have significant impact upon threatened species, endangered populations or endangered ecological communities. - Replacement landscaping includes the use of endemic (locally occurring native) species including tree, shrub and ground covers to limit erosion and to encourage local fauna use.	- Sediment and erosion control measures shall be provided to minimise impact to local drainage lines. - Adhere to the recommendations of the Flora and Fauna Assessment prepared by Travers Bushfire and Ecology which includes recommendations which propose mitigation measures to minimise adverse ecological impacts. - Hollows are to be inspected under supervision of a project ecologist prior to tree removal. Any resident fauna if any is to be managed or relocated as per the advice of the ecologist.
Aboriginal Heritage (adapted from Table 20 of EIS)	Potential to encounter items of Aboriginal Heritage during demolition or construction works.		- Should any Aboriginal objects be encountered during works associated with this proposal, works will cease in the vicinity and the find will not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations, which may include notification to OEH and Aboriginal stakeholders. - If any suspected Aboriginal ancestral remains are discovered during any activity the proponent will immediately cease all work at that location; notify the NSW Police and OEH; and not recommence work at that location unless authorised.
Adjacent Dwellings	- Potential minor overshadowing impacts - Potential low level impacts on visual privacy. - Potential acoustic impacts associated with construction (including excavation and traffic impacts). - Potential visual impact.	Visual impact - The main vantage points of the site are short distance views from dwellings to the west, south-east and north. The impact from the west and south-east will be reduced due to the siting of Building 1 at a lower level than Hospital Road and due to the two storey form of Building 2 when viewed from the street The visual impact when viewed from dwellings to the	Acoustic Impacts to be managed and documented within a detailed Construction Management Plan.

Potential Impacts	Potential Impact	Comment	Proposed Mitigation Measures
		north will be reduced due to the significant separation distances provided and the siting of the vegetated buffer and watercourse. No mitigation strategies required.	
Safety and Security	Potential security and safety issues.	There will not be security guards on site at all times.	'Safer by Design' principles to be implemented within the development to encourage passive surveillance and minimise entrapment opportunities. - Install internal and external back-to-base monitoring CCTV. The Hospital and RACF will have appropriate safety measures in place, similar to those in the existing Hospital, as detailed in Health Infrastructure's correspondence.