

26 October 2015

The Secretary
Department of Planning & Environment
GPO Box 39,
Sydney NSW 2001

Attention: Thomas Mithen

Re: Response to Submissions for Gosford Hospital Redevelopment (SSD 6913)

Dear Mr Mithen,

Further to your letter received on 18 September 2015, Health Infrastructure (HI) has reviewed the submissions received resultant from the exhibition of the above State Significant Development Application (SSDA). Submissions were received from the following parties/agencies:

- i. Gosford City Council (GCC);
- ii. Office of Environment and Heritage (OEH);
- iii. The Environment Protection Authority (EPA); and
- iv. Transport for New South Wales (TfNSW).

There were also a few queries from the Department of Planning and Environment (DPE) raised in your letter of 18 September 2015 and three (3) public submissions (and one (1) late public submission) made in relation to the application.

HI has reviewed the various matters raised in these submissions and provides a collated response in the accompanying tables at **Attachments 1** and **2**. In responding to the matters raised, HI has taken advice from specialist consultants and technical experts and this advice is also attached for your information.

The attached documents address the submissions received. HI has requested Remediation Action Plans (RAPs) for the Gosford Hospital Redevelopment be prepared and these are currently underway. They will be submitted to the DPE by 1 November 2015.

Health Infrastructure
ABN 89 600 377 397

Level 6, 77 Pacific Hwy, North Sydney NSW 2060
PO Box 1060 North Sydney NSW 2059
Tel. (02) 9978 5402 Fax. (02) 8904 1377
Website: www.hinfra.health.nsw.gov.au



Health
Infrastructure

Further to the above, HI notes that the submitted amended proposed site plan at **Attachment 1** includes the demolition of additional buildings on Gosford Hospital campus including the old nurses home and rotary lodge. The demolition of these buildings comprises a minor amendment to the SSDA and does not change the assessment and conclusions of the Environmental Impact Statement prepared by City Plan Strategy and Development.

HI trusts that the above information assists the DPE in finalising its assessment of this application in the near future.

If you have any questions or would like to discuss, please contact Leone McEntee on (02) 9978 5420 or 0410 432 505.

Yours Sincerely,

Sam Sangster
Chief Executive Officer

Health Infrastructure
ABN 89 600 377 397

Level 6, 77 Pacific Hwy, North Sydney NSW 2060
PO Box 1060 North Sydney NSW 2059
Tel. (02) 9978 5402 Fax. (02) 8904 1377
Website: www.hinfra.health.nsw.gov.au

Attachment 1

Response to Agency Submissions

Agency	Issue (Summary)	Response
EPA	No issues raised	N/A
DPE	Site contamination The DPE has requested that a Stage 3 Remedial Action Plan for the existing hospital site and the Health and Wellbeing Precinct (Stage 1) be prepared and submitted.	The required Phase 2 Site Assessment for the HWP is being prepared. RAPs for both the Gosford Hospital Redevelopment and the HWP are currently being prepared and will be submitted to the DPE by 1 November 2015.
As above	Shadow diagrams	The DPE has requested a series of additional plans or updated plans with further detail. These plans are listed below and can be found at Attachment 3 . - Updated shadow diagrams for the main hospital redevelopment have been prepared by Jacobs. - Updated shadow diagrams for the HWP have been prepared by Fitzpatrick + Partners Architects (F+P) identifying the affected properties to the south by address and type and the location of private open space and living areas (where relevant). - A plan which details the proposed public domain works along Showground Road has been prepared by F+P. - A landownership plan for the HWP has been prepared by F+P. - A plan showing the existing and proposed location of the helipad and distance to nearest residential properties has been prepared by F+P. - A pedestrian access plan has been prepared by F+P. - A key intersections plan has been prepared by F+P. Please note that a plan showing the key intersections and known pinch points required to be upgraded was also shown on Page 4, Figure 1: Study Area of the Jacobs Traffic Modelling Study submitted with the SSDA.
As above	Public domain works	
As above	Land ownership	
As above	Helipad	
As above	Pedestrian access plan	
As above	Key intersections	

OEH	Biodiversity OEH raises issues with regards to the Flora and Fauna Assessment prepared by Cumberland Ecology. Comments are largely focussed on the assessment of threatened species within the application of the Framework for Biodiversity (FBA), in particular <i>Syzygium paniculatum</i> (Magenta Lilly Pilly).	A detailed response to the issues raised by OEH has been prepared by Cumberland Ecology and can be found at Attachment 4. The conclusion from that response is provided below: <i>"The proposed Gosford Hospital Redevelopment is situated in an urbanised landscape and no longer supports undisturbed remnant native vegetation. The historical occurrence of intact native remnant vegetation would have likely comprised wet sclerophyll forests and/or swamp forests.</i> <i>The hospital site currently contains three occurrences of S. paniculatum, of which one individual will be removed for the redevelopment works. The remaining two individuals will not be removed for the redevelopment works. Syzygium paniculatum naturally occurs in gallery, subtropical and littoral rainforests, which are not present and are unlikely to have been present on the site in the past.</i> <i>Due to their location within landscaped garden beds and mown lawns, the lack of rainforest habitats on the site grounds and their popular use in gardens and landscaping, we retain our view that the occurrences of S. paniculatum on the site is likely to have been planted.</i> <i>Irrespective of whether S. paniculatum was planted or has naturally colonised the site, it is unlikely that the proposed hospital redevelopment will place the local occurrence of the species at risk of extinction. The proposed hospital redevelopment is also unlikely to place the population in the wider locality at risk of extinction. The proposed hospital redevelopment is unlikely to interfere with important life cycle processes such as pollination and seed dispersal, and is unlikely to fragment or isolate important habitat for the species.</i> <i>When the urban context and scale of the proposed redevelopment, the likely provenance of the occurrences of S. paniculatum on the site and the likely persistence of the species in the locality are considered, it is our opinion that a formal offset under strict application of the FBA would be an unreasonable outcome for the project. As the current offset policy is still in its transitional implementation period, we respectfully request that OEH considers recommending to the Department of Planning and Environment that transitional</i>
------------	---	--

		<i>flexibility is applied in this case to allow the loss of one individual of S. paniculatum from the site to be replaced through replanting."</i>
GCC	Road works Council notes that physical alterations to the road network will require formal approval under Section 138 of the Roads Act.	Comments noted. No further response required.
As above COMMITTED	Traffic, parking and pedestrian movements Council has raised a number of matters related to traffic, parking and pedestrian movements, with the majority of these matters to be addressed as a part of the multi-agency regional Traffic Working Group.	The Gosford City Centre and areas surrounding the Gosford Hospital are currently experiencing regional traffic stress. Long stay, free street parking is exacerbating this situation. A multi-agency commitment should be established to address the issue of road upgrades and specifically, the requirement to replace/upgrade the two railway bridges. There are also a series of "broader road impacts" that Council advises should be addressed by the committee. HI advises that TfNSW has convened a multi-agency Regional Traffic Working Group to address these issues and HI attends regular meetings. Council also provides a series of comments that are relevant to this SSDA. Each of these issues are address by PTC in detail in the response at Attachment 5.
As above	Section 94 Contributions Council states that a contribution of 4% of the CIV is payable prior to the issue of a Construction Certificate, or commencement of work.	Detailed justification for an exemption from payment of development contributions was included in Section 8.12 of the EIS. HI's position on this matter remains unchanged.
As above	Waste Services No objection made by Council regarding waste management but general concern raised in relation to the proposed new loading dock accessed of the closed section of Holden Street. Council recommends that the service vehicle areas be	HI has sought expert advice from the traffic engineer with regard to the configuration of the proposed loading dock, likely service vehicle movements and likely risk profile. No issues were raised by the traffic engineer. HI further notes that an operational management plan will be developed and implemented for this part of the HWP private waste contractor. Hi will further investigate the loading dock configuration once detailed design of that element is completed. HI will discuss this matter and the operational management plan

	reconfigured to allow forward entry/forward exit for service vehicles from the loading bay/loading docks, to enhance Work Health Safety and pedestrian safety.	(when available) with council further.
As above	Drainage Council notes the following: - a drainage easement will need to be created within the closed section of Holden Street over this existing drainage pipeline from the intersection of Holden Street and Ward Street to the existing drainage easement within Lot 25 DP774976. - the proposed diversion of the stormwater drainage system in Holden Street within the multi-deck carpark of the HWP will need to be appropriately engineered. - if the existing stormwater pipeline over Racecourse Road needs to be reconstructed, this will need to be confirmed through Council's Assets Unit prior to the drafting of engineering plans for the works required under the Roads Act. Council's Assets Unit have also indicated	The key items raised by Council have been addressed in the response prepared by TTW at Attachment 8. A summary is below: - TTW agrees that the recommended drainage easement should be provided to Council as part of the Holden Street closure. HI has no objection to this. - TTW notes Council's comment about the stormwater system in Holden Street. Detailed engineering design and construction of the diversion are to be part of the HWP works. - TTW confirms that inspection of the existing stormwater pipe will be conducted and reviewed in coordination with Council's Assets Unit and any works proposed within the road reserve are to comply with Roads Act requirements. - In relation to the issue of overland flow, TTW notes that the potential overland flow flooding area is located south of the proposed Health and Wellbeing Precinct Stage 1 site. Additionally, TTW notes that Council's Assets Unit indicated in a meeting held on 31st March 2015 that the Gosford CBD Overland Flow Study, September 2013, may have underestimated the size of a culvert under the rail corridor draining Showground Road in this area resulting in a potential overestimation of the overland flow flood impact to Showground Road at this location.

	that the entrance to the hospital at the low point in Showground Road between Beane St & Faunce St West could potentially be impacted by overland flow flooding.	
As above	Water and Sewer 307 Contributions Council notes that HI is not exempt from Section 307 contributions.	HI is undertaking negotiations with Council regarding Section 307 contributions and will advise the DPE of the outcome of these negotiations.
As above	Consolidation of lots and re-subdivision Council notes that the preliminary subdivision plans prepared by ADW Johnson do not include a required easement to drain water over the existing pipeline in Holden Street from Ward Street to the existing drainage system and easement through Lot 25 DP774976 (i.e. No 67 Holden Street) that would convey stormwater from a public road (Ward Street catchment) to Showground Road.	Noted. ADW Johnson is currently preparing updated subdivision plans to address the comments raised by Council and will be finalised prior to registration. These plans will include the required drainage easement.
As above	Road closure and purchase Council notes that a formal application must be submitted to Council and the Department of Lands for the closure and purchase of the required part of Holden Street	Noted. A formal application will need to be submitted to Council and the Department of Lands for the closure and purchase of Holden Street and part of Beane Street West and this process has commenced.

As above	Conditions of consent	HI's changes to the recommended conditions of consent from Council is at Attachment 6 .
TfNSW	Traffic Distribution TfNSW requests that a detailed trip distribution map and justification for the adopted distributions be provided.	This issue is addressed in the response prepared by PTC at Attachment 5. An extract from that response is provided below: <i>"The overall distribution of vehicle trips was established on the basis of online and intercept surveys undertaken at the Hospital, which included postcode data relating to staff, patients and visitors. Having established the regional distribution, we applied this to the road network serving Gosford, as presented in Figure 8 within the Traffic and Accessibility Report (the report page 23).</i> <i>At the local level, the trip distribution within the network model was based on the intersection and Origin/Destination surveys. This provides the most reliable basis for determining the distribution of traffic activity and was deemed to be an acceptable method by representation of RMS and Gosford City Council (GCC).</i> <i>Details of the distribution of post development traffic, are presented in the attached letter prepared by Jacobs, who prepared the LINSIG model of the local road network. Subsequent agreement from RMS is not required as the previously agreed Trip Distribution remains unchanged".</i>
As above	Traffic Modelling TfNSW has identified a series of issues have been identified in relation to traffic modelling resulting in the Traffic Report.	The issues raised by TfNSW with regard to the traffic modelling are addressed in detail in the response prepared by PTC at Attachment 5 . As the response is detailed, it is not reproduced in this table. However, HI is satisfied that all issues raised by TfNSW with regard to the modelling have been adequately responded to.
As above	Parking Assessment TfNSW seeks clarification with regard to the following points: • Potential for change in demand associated with pay parking if that is	This issue is addressed in detail in the response prepared by PTC at Attachment 5 with the relevant extract provided below: <i>"Much of the existing parking provision within the Hospital involves a payment/permit scheme, or lease arrangements. The only areas of completely free parking being displaced by the project are the emergency drop-off areas and the on-street parking along sections of Holden Street and</i>

	proposed. The proposed road changes that will likely result in the loss of some on-street parking. It is not clear whether this has been considered in the demand calculations for the multi storey car park. It is requested that the applicant undertakes further assessment to assess the impacts of the potential paid parking and loss of on-street parking due to future road upgrades on the demand forecast for the multi storey and overflowing parking on other nearby streets.	<i>Beane Street West being truncated/closed.</i> <i>Health Infrastructure are in discussions with GCC in relation to the establishment of a Resident Parking Scheme, which will increase demand for parking within the proposed carpark and may have a reduction impact on car usage associated with the Hospital.</i> <i>The loss of on-street parking has been included within the demand calculations that informed the total parking provision within the proposed car park."</i>
As above	Classification of Showground Road TfNSW notes that Section 3.7 of the Traffic Report states that Showground Road is being considered for an upgrade to a regional road and that no such upgrade was recommended.	As requested by TfNSW, PTC has updated the traffic report to include the current Greater Sydney Road Classification Map and the text has been amended to remove the reference to any proposal to reclassify Showground Road. Refer to Attachment 5 for further detail.
As above	Proposed Works and Parking Arrangements on Showground Road TfNSW raises issues with regards to the proposed landscaping, parking arrangements on Showground Road, and potential traffic and pedestrian conflicts between the carpark entrance and the Sydney Trains depot.	The issue of parking arrangements is addressed in detail in the response prepared by PTC at Attachment 5 with the relevant extract provided below: <i>"The proposed traffic management arrangements on Showground Road will be subject to detailed design prior to construction and will be designed to accommodate access to/from the Sydney Trains small staff parking area, the commuter parking area and infrequent heavy vehicle access to the Sydney Trains assets along Showground Road.</i> <i>During the development of the car park access design all access/egress options were assessed having regard for the Sydney Rail access driveway. Based on the projected traffic volumes and safety,</i>

		<i>it was determined that the proposed arrangement would provide the most suitable outcome for the majority of road users.</i> <i>The proposed car park access arrangements will require the construction of a central median island in order to accommodate a right turn lane serving the car park entry and a pedestrian refuge. This will prevent the right turn movement into the Sydney Trains carpark. Egress will remain unaffected as this is currently provided further to the south, outside to influence of the proposed works. The access arrangement will incorporate a pedestrian crossing with the central island providing a safety refuge, which is not provided at the existing crossing."</i> <i>"The detailed design of the carpark access and associated traffic facilities will need to be undertaken prior to the 109R Certification stage. It is common that Road Safety Audits are undertaken prior to the construction of new road facilities".</i> - PTC also responds to TfNSW comment that "commuter carpark is reported as a Roads and Maritime Services carpark". PTC confirms that no reference to a RMS owned commuter carpark was made in its report. The landscape design issues regarding the location of trees along Showground Road and potential conflict with the Sydney Trains power line are addressed in the amended landscape design prepared by Spackman Mossop and Michaels Landscape Architects at Attachment 7.
As above	Impacts to bus services and infrastructure during construction TfNSW raises a series of queries/issues in regard to impacts during construction requests details in relation to public bus routes and bus stop locations within the hospital precinct during construction and how any potential impacts would be mitigated.	This issue is addressed in detail in the response prepared by PTC at Attachment 5 with a summary provided below: - The bus routes in question are Route 41 and Route 70. - In relation to Route 41, three (3) potential options for re-routing are proposed in the response prepared by PTC. - In relation to Route 70, PTC notes that this route can easily be rerouted to commence and terminate at the proposed Showground Road bus stop connecting with Racecourse Road to the north. - PTW further notes that <i>"the closure of Holden Street and the removal of the existing bus stop will only occur following the installation of the proposed bus stop on</i>

		<i>Showground Road, therefore the change to the routes will occur sometime during the construction period. It is not intended that construction activity will impact at all on existing services".</i>
As above	Construction traffic and pedestrian management TfNSW requests that the applicant prepares a detailed Construction Pedestrian and Traffic Management Plan (CPTMP) prior to commencement of construction, which takes into account other construction projects (if any).	As confirmed by PTC in the response in Attachment 5 , a preliminary Construction Management Plan was submitted with the EIS which includes a description of the proposed outline Traffic and Pedestrian Management Plan (Section 7.8). A more detailed CTMP will be prepared once the main Contractor has been appointed. This allows the contractor to establish details such as site compounds, access, material volumes, handling plans, crane locations, contact details etc. All of these details will form part of the CTMP, which HI anticipates will be a requirement implemented via a condition of consent. The CTMP will be prepared prior to construction commencing
As above	Bicycle Network Access TfNSW requests that the applicant include a map showing the existing and planned bicycle routes to access the facility from the regional cycle network.	This issue is addressed in detail in the response prepared by PTC at Attachment 5 . In summary, HI is in discussions with GCC in relation to Travel Plans for the hospital and HWP, which will determine whether bike route infrastructure is viable, given the hilly character of Gosford. PTC will assist HI to set the target for mode share. There are multiple locations throughout the campus where bike parking can be located, plus the proposed end of trip facilities within the HWP. Refer to the comprehensive response by PTC in Attachment 5 for further detail.
As above	Bicycle parking and end of trip facilities TfNSW requests that details are provided in relation to number of bicycle parking spaces for staff and visitors based on the relevant guidelines and the proposed end of trip facilities that are proposed.	As noted above, the proposed HWP includes the provision of end of trip facilities (Level 7) and whilst the cycle parking provision is not yet determined, this will form part of the Travel Plan process currently being undertaken by HI in consultation with GCC. Generally, GH provides a range of opportunities for new bicycle parking facilities as growth in this form of transport increases, noting that surveys undertaken to-date by PTC indicate cycling represents a low proportion (1.2% of staff) of travel mode split due to the local geography and the lack of cycle facilities on the road network. Refer to the comprehensive response by PTC in Attachment 5 for further detail.

Attachment 2

Response to Public Submissions

Submitter	Issue (Summary)	Response
Jenny Hughes	There are no solar panels on the buildings.	HI acknowledges that there are no solar panels proposed as a part of the proposal. However, the EIS documents the wide range of alternative sustainability initiatives in terms of water and energy minimisation, material selection, waste minimisation etc.
Elizabeth Moore , of Kariong NSW	Traffic and parking impacts raised as issues. Staging of carpark (first part of construction) to address parking issues. Etna Street railway overpass upgrade should be completed before works commence.	The Etna Street Bridge upgrade is currently being discussed as a part of a multi-agency Regional Traffic Working Group. The Gosford Hospital Redevelopment project includes a new purpose designed carpark. Works on the Hospital and Carpark will be undertaken concurrently. The new purpose designed carpark will be open for use approximately 12 months prior to completion of the Hospital Redevelopment project which is reasonable staging to ensure the parking issues raised have been addressed.
John Clarkson of Gosford NSW	Concerns raised regarding accessibility to the "fracture clinic". Also suggests signage for the carpark when it is at capacity to avoid any congestion within and surrounding the proposed carpark.	Suitable emergency and mobility impaired drop off / pick up points will be located within the redevelopment. The new carpark will be connected to the hospital main entry by an accessible covered walkway. Also a new pedestrian bridge will be constructed linking the existing hospital carpark to the hospital main entry level. Appropriate signage will be installed prior to the operation of the carpark to direct and inform users accordingly.
Anonymous	Traffic generation as a result of the road closures.	The traffic impacts of the road closures have been considered in the report prepared by PTC and accompanying the EIS and the subsequent submission prepared by PTC at Attachment 5.
As above	Issues raised regarding definition of lots in the HWP.	The lots that are the subject of the HWP are clearly defined in the EIS.
As above	Objects to the location of the carpark. and suggests other "options" considered	A detailed analysis of the options considered and justification for the location of the proposed carpark is provided in Section 4.18 of the EIS submitted with the

	in the EIS would be better outcomes.	SSDA. This analysis provides details surrounding the clear benefits of the proposed option compared with other options considered, with regard to landownership, site levels, functionality, accessibility, connectivity back to the main hospital services and the existing hospital entrance.
As above	Lack of consultation with adjacent landowners.	There is no requirement to undertake consultation prior to lodgement of the SSDA.
As above	Concerns raised with regard to overshadowing and queries whether the acoustic reports recommendation for a sound reduction wall to be constructed above the doors and windows will create additional shadowing beyond that modelled in the submitted shadow diagrams.	The additional acoustic screening that may be required above a portion of the proposed southern boundary fencing could potentially result in some additional minor overshadowing. However, this minor overshadowing is justified on the following grounds: • The main living areas of the affected dwellings within 62-64 Showground Road (including the objectors dwelling) are oriented to the south. This can be seen in the shadow diagrams prepared by F+P. The proposed acoustic screening will not further reduce solar access to these living areas. • Due to the fall of the land towards Showground Road and the height of the proposed fencing (which is consistent with the existing fence height), the additional screening is likely to only be required for the eastern most section of the proposed fence to achieve the objective of the acoustic report recommendation. The additional shadow cast would therefore be limited to only a small portion of the north-facing private open space (POS) of the dwelling in the north-eastern corner of 62-64 Showground Road. In the context of the extensive shadows cast by the existing fencing to the POS areas, the additional shadow cast by additional acoustic screening is minor and reasonable. • As noted in Section 8.3.3 of the EIS, the desired future character for the site and surrounds is for development of a much greater density and scale than existing. This is reflected in the Gosford LEP and City Centre Masterplan. In this context, and given any additional acoustic screening above the aforementioned fencing would represent an LEP height compliant structure, any minor consequential overshadowing is considered to be reasonable. On balance, the benefits of noise attenuation are

		considered to outweigh the minor additional overshadowing, particularly within the context of the above.
As above	Visual bulk and scale and visual impact on adjacent property to the south on Showground.	The appropriateness of the visual bulk and scale of the development is assessed in detail in Section 8.2.3 of the EIS submitted with the SSDA. The conclusion of that assessment is that the proposed HWP (Stage 1) is an appropriate scale for the site and within the desired future context for the land and wider precinct and also results in a positive built form outcome which exhibits design excellence.
As above	Location of driveway/drop off - vehicular noise + potential noise from the carpark plant room adjacent to the drop off zone. Further issues raised in relation to the acoustic report and recommended mitigation measures.	The acoustic report submitted with the EIS has been prepared by an appropriately qualified consultant with reasonable mitigation measures proposed to ensure that all potential acoustic impacts are mitigated, including any potential noise from the carpark operations. Further advice has been received from Acoustic Logic as follows: <i>"Noise from the operation of the site will be designed to comply with the requirements of the NSW EPA Industrial Noise Policy. Treatments include the reduction of noise from mechanical plant using acoustic slicers/louvers, lined ducting, acoustic screening and the like. The operation of the site such as traffic movements and the like comply with the requirements of the NSW regulations as detailed in the SSD Acoustic Assessment."</i>
As above	Student safety compromised by the location of the pedestrian crossing in the HWP.	The relocated and upgraded pedestrian crossing across Showground Road is proposed to enhance pedestrian safety and accessibility from the station including for use by students.
As above	Proximity of pedestrian crossing to the objectors property raised as an issue with regard to light spill, noise at crossing from pedestrians, anti-social behaviour etc.	The pedestrian crossing is a means of enhancing safe pedestrian access and connectivity between the station and the HWP main entrance. The western "landing" of the pedestrian crossing is not the destination and is partially off-set from the dwellings at 62-64 Showground Road. Further, these dwellings are well setback from the street frontage. Therefore, the proposed crossing is unlikely to result in any adverse amenity impact to 62-64 Showground Road, which includes the objectors property.
As above	Likely need for traffic signals at the Showground Road frontage. Even more	The outcomes of the modelling and intersection analysis undertaken in the Traffic and Accessibility Statement prepared by PTC do not identify any

	traffic congestion, car braking noise, etc.	requirement for traffic signals to be implemented at the Showground Road frontage.
As above	Objections related to excessive lighting and spill from security floodlighting. Backyard subject to CCTV resulting in impingement of privacy. Only 24 hour patrolling security guard would be acceptable.	A mitigation measure was included in the EIS to ensure that no light spill would result from the development. HI anticipates this will be included as a condition of consent. There will be no infringement of privacy as a result of the CCTV recommended for the carpark.
As above	Likely smoking in drop-off zone and smell and throwing butts into objectors rear fence.	Gosford Hospital has a non-smoking policy for all areas of the campus and this will extend to the HWP and associated drop off. There is currently existing signage around the campus reflecting this, such as in the sign below.  The non-smoking policy will apply to, and will be implemented for, the HWP.
As above	Lack of anti-graffiti measures.	Graffiti risk assessment and mitigation measures will be considered during the Project's detail design.
As above	Object to the removal of Tree 8 - objects on the basis that this is on the objectors land and not	Tree 8 is a Camphor Laurel which is an "exempt" species in Council's DCP. Therefore, development consent is not required to remove the tree. This is confirmed in the Arboricultural Impact Statement

	within the footprint of the HWP.	submitted with the SSDA. Issues regarding owners consent to remove the tree will be resolved separately to the SSDA process.
As above	Objects to traffic modelling.	The extensive traffic modelling undertaken was informed by detailed consultation with Council, RMS and TfNSW and is considered to be acceptable.
As above	Objects to acoustic report "construction impacts". Not acceptable.	As noted earlier, the acoustic report submitted with the EIS has been prepared by an appropriately qualified consultant with reasonable mitigation measures proposed to ensure that all potential acoustic impacts are mitigated, including during construction.
As above	Objects to hours of construction work proposed.	The hours of construction work proposed are consistent with the standard hours of construction for comparable hospital developments applied by the DPE. A detailed construction management plan will be prepared to ensure that any potential impacts resulting from the works on the surrounding area will be appropriately mitigated.
As above	Objections to the proposed construction zones and impact on "amenity".	A construction zone is required, as would be for any development. Construction trucks will be managed through a marshalling area to minimise vehicle congestion on site. As above, a detailed construction management plan will be prepared to ensure that any potential impacts resulting from the works on the surrounding area will be appropriately mitigated.
As above	Objects to scale of construction truck movements.	The scale of truck movements during construction set out in the preliminary CMP represents a pragmatic forecast, and will be refined based on construction staging, estimated truck turnaround times, and accessibility to disposal sites. HI will engage a Tier 1 Contractor to construct the project and is satisfied that the potential traffic impacts during construction can be adequately managed within the given urban context. Tier 1 Contractors have significant experience with managing truck movements to and from site, and will implement mitigation process to reduce the impact of the truck movements, throughout the surrounding community. The Contractor will implement a Traffic Management Plan, that will include input from both GCC, and RMS, noting that GCC has provided input into heavy vehicle route selection.
As above	Potential runoff and drainage issues to the front	TTW has prepared the schematic stormwater design in compliance with Council standards and guidelines.

	yard of the objectors property.	In summary, overland and piped post-development flows for storms up to and including the 1 in 100 year Annual Recurrence Interval (ARI) event are limited to pre-development flows through the use of On-Site Detention (OSD). Therefore, adverse impacts to downstream properties will be avoided.
As above	Objects to the references to "possibly leasing" the Gosford Golf Club car park for a temporary 320 place car park for "hospital staff and construction personnel".	There are a range of alternatives being considered to manage parking impacts during construction. HI is in discussions with the Gosford Golf Club and also, other landholders, regarding the potential leasing of land to accommodate a temporary parking area for hospital staff and fleet vehicles and construction worker vehicles during construction.
As above	Object to the answer of "N/A" to the Health Urban Development Checklist in the EIS for H1 - parameter "encourage housing that supports human and environmental health".	This particular item in the checklist specifically relates to new housing and is therefore not directly relevant to the subject SSDA.
As above	Flooding issues raised.	See comment above in relation to drainage and overland and piped post-development flows for storm events.
As above	Concerns raised regarding comments in the EIS regarding the current Health shuttle bus from Gosford Station.	The requirement for the future operation of the LHD shuttle bus will be reviewed as the project reaches completion. If this review determines that the shuttle is still required, it's service will be maintained.
As above	Objection to the Parking and Traffic Consultants report - page 55 where it mentions two proposed bus stops, more congestion etc.	To facilitate the strategy to reduce car dependency and increase public transport utilisation, these bus stop are required. This issue has also been further addressed in the submission prepared by PTC at Attachment 5 .
As above	Objections to the "Future HWP Development Site" building in Showground Road between the car park and the street footpath. The objections relate to the impacts of this future potential development site.	A proposal for a future development on this proposed new lot at the Showground frontage will require a separate development consent. During the time of submission of any such development application, representations of this neighbour can be made at that time. Therefore, the redevelopment of the proposed lot fronting Showground Road is not a relevant matter for consideration in the assessment of this SSDA.
As above	Requests that the flight path over uninhabited Gosford Golf Course be the	Matters related to flight paths of helicopters are not relevant to this SSDA and are beyond the control of

	primary used flight path, subject to weather conditions, rather than that over North Gosford.	HI.
--	--	-----

Attachment 3

Updated Plans prepared by Jacobs and Fitzpatrick + Partners



Gosford Hospital Redevelopment

SSDA Submission



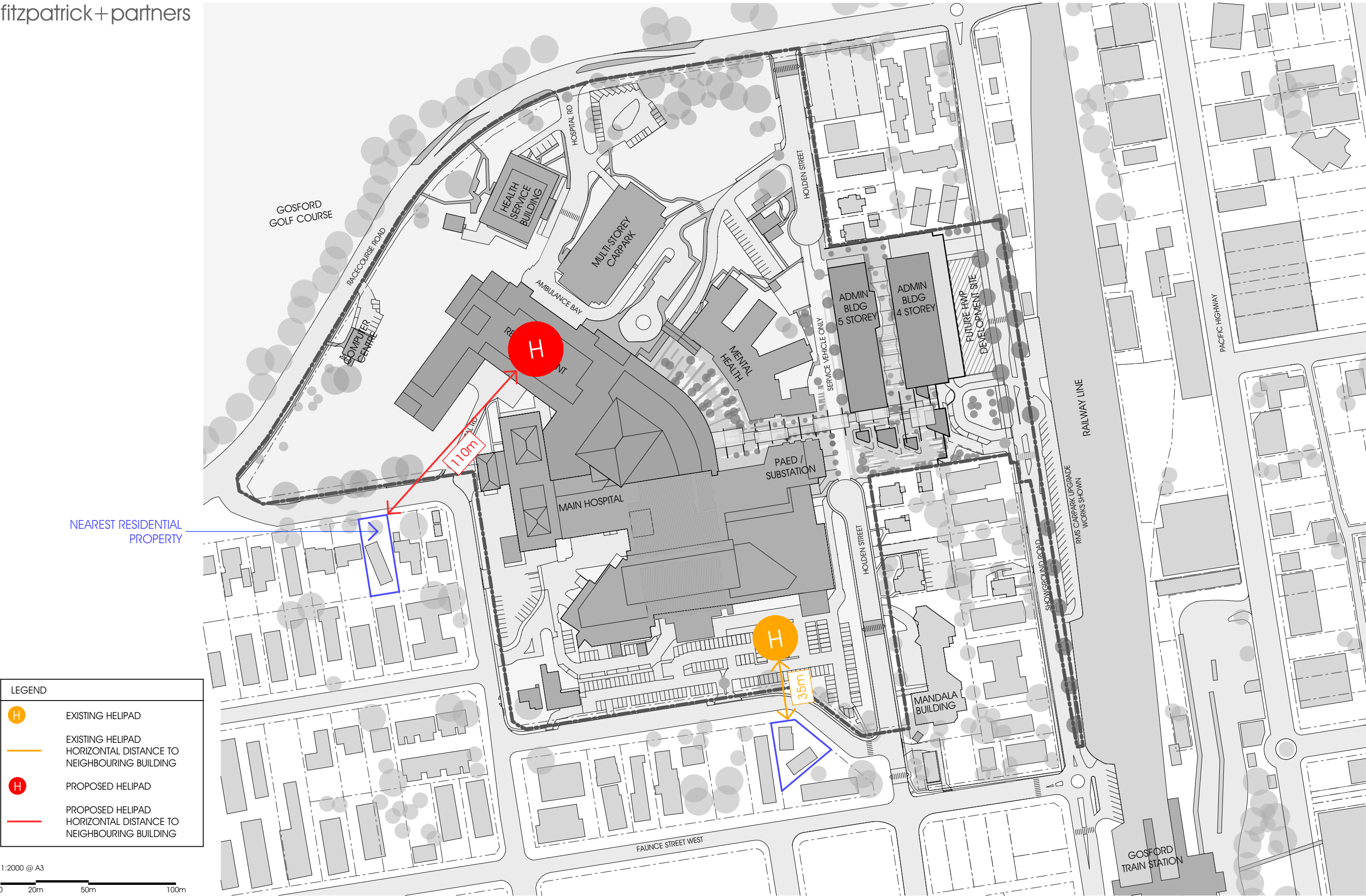
Gosford Hospital Redevelopment

SSDA Submission



Gosford Hospital Redevelopment

SSDA Submission



LEGEND

H

EXISTING HELIPAD

EXISTING HELIPAD
HORIZONTAL DISTANCE TO
NEIGHBOURING BUILDING

H

PROPOSED HELIPAD

PROPOSED HELIPAD
HORIZONTAL DISTANCE TO
NEIGHBOURING BUILDING

1:2000 @ A3

0 20m 50m 100m

Gosford Hospital Redevelopment

SSDA Submission

This drawing is issued upon the condition it is not copied, reproduced, retained or disclosed to any unauthorised person either wholly or in part without prior consent in writing of fitzpatrick+partners.

Drawings show design intent only. Shop drawings are to be provided for approval prior to construction or manufacture. Inconsistencies are to be reported to fitzpatrick + partners.

Do not scale drawings. Check dimensions before commencing work.

CLIENT

NSW Health Infrastructure

PROJECT NORTH

SCALE @ A3

1:2000

PRINT DATE

9/10/2015

fitzpatrick+partners

© Copyright 2014

PJ + 61 2 8274 8200 WJ www.fitzpatrickpartners.com

DRAWING

HELIPAD LOCATIONS

PROJECT NO.

21421

DRAWING NO.

DA-54

ISSUE

A



Gosford Hospital Redevelopment

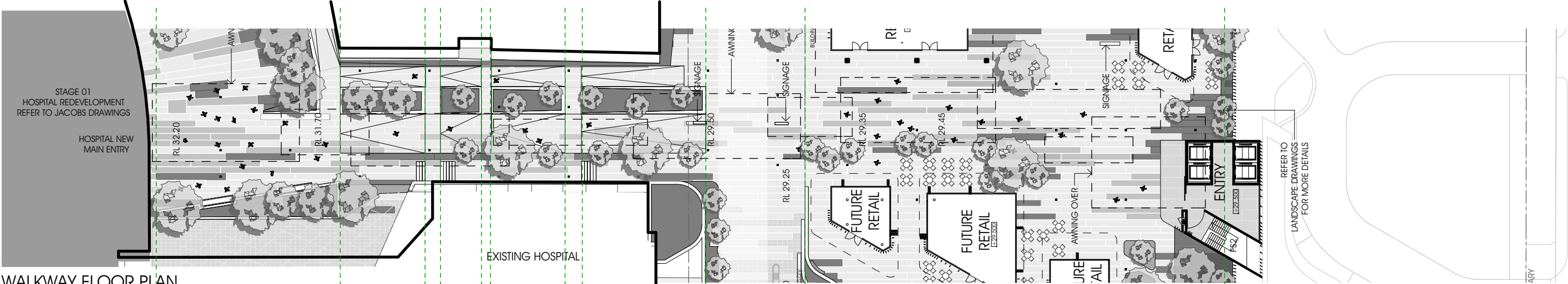
SSDA Submission



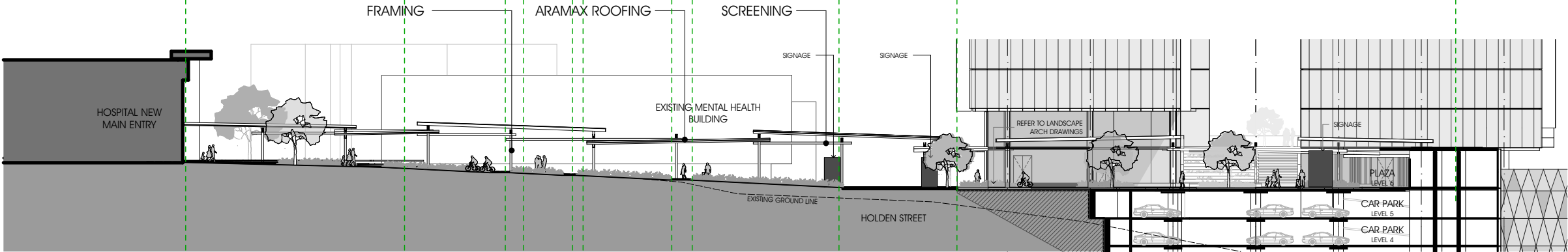
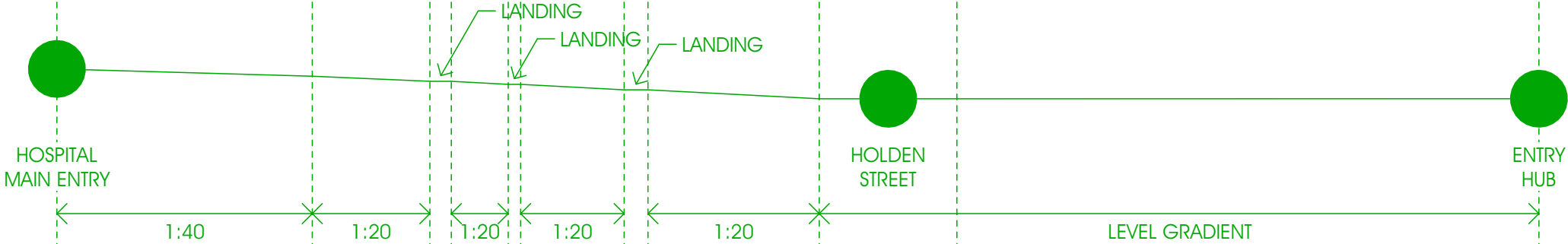
1:2000 @ A3
0 20m 50m 100m

Gosford Hospital Redevelopment

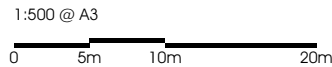
SSDA Submission



WALKWAY FLOOR PLAN



SECTION AA



Gosford Hospital Redevelopment

SSDA Submission

LEGEND

SITE BOUNDARY

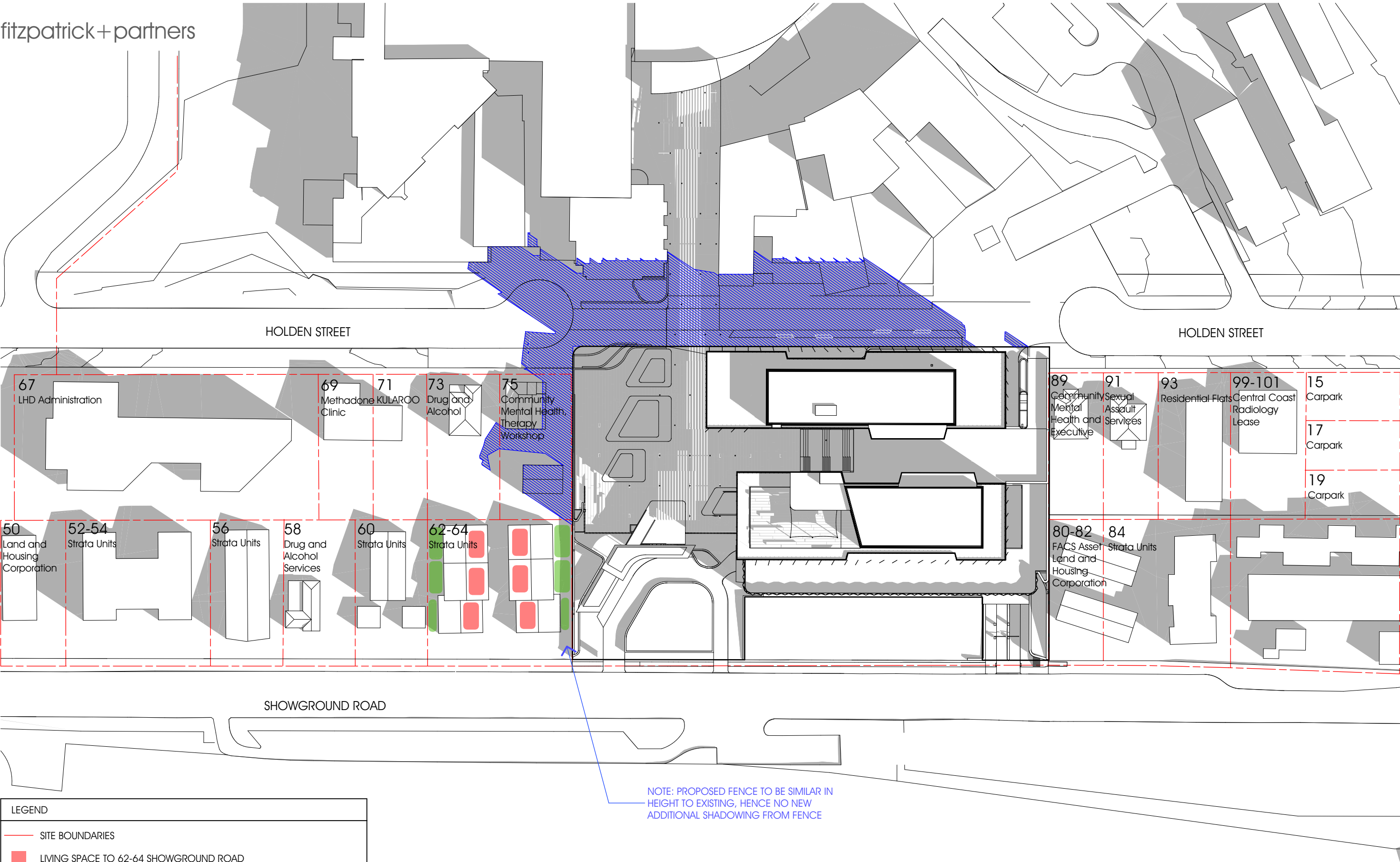
MAJOR INTERSECTION

NOTE: REFER TO TRAFFIC & ACCESSIBILITY REPORT FOR KEY INTERSECTION DETAILS



Gosford Hospital Redevelopment

SSDA Submission



LEGEND

SITE BOUNDARIES

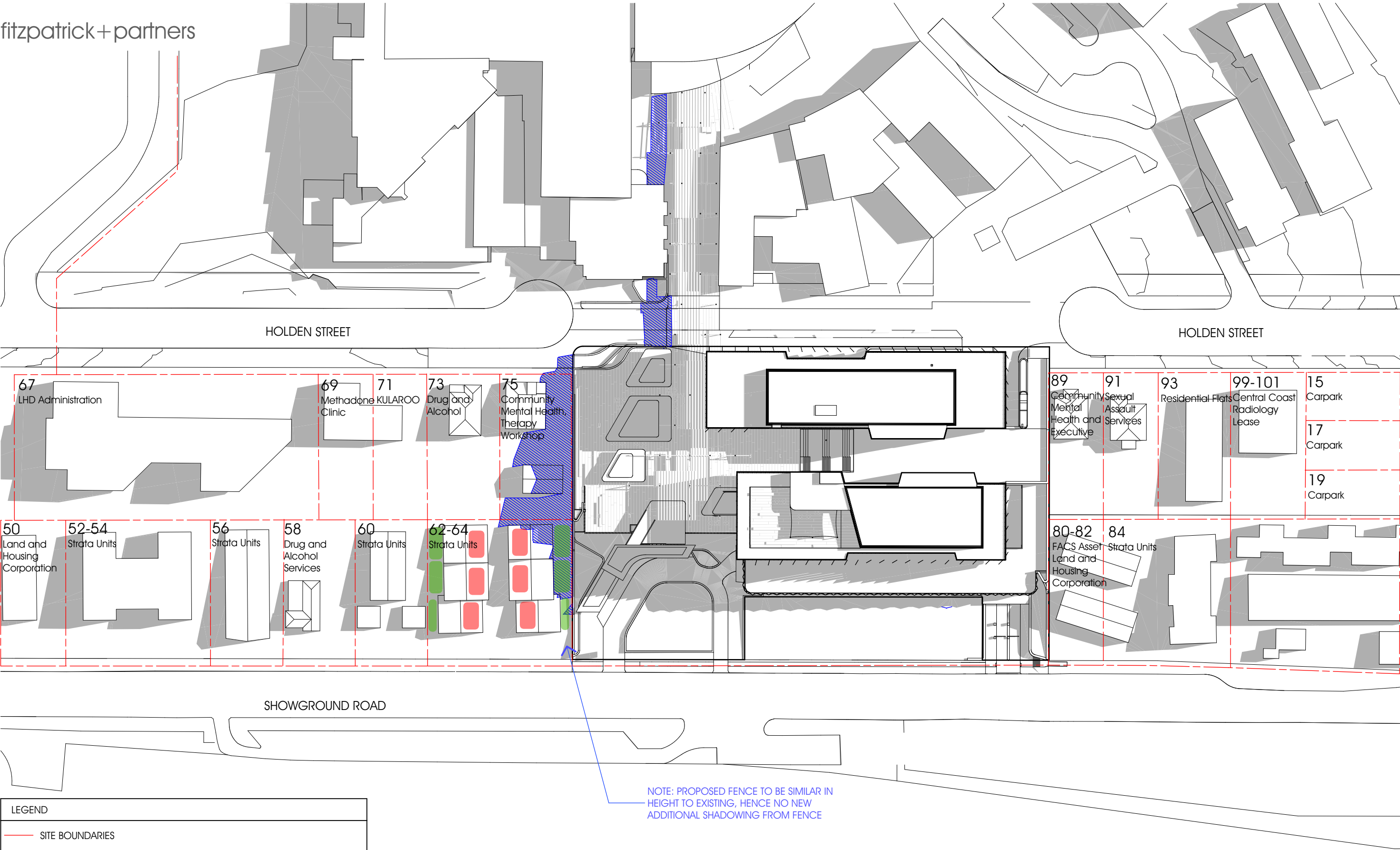
LIVING SPACE TO 62-64 SHOWGROUND ROAD

PRIVATE OPEN SPACE TO 62-64 SHOWGROUND ROAD

NEW ADDITIONAL SHADOWING FROM PROPOSED DEVELOPMENT CAST ONTO NEIGHBOURING SITES, HOLDEN STREET & SHOWGROUND ROAD

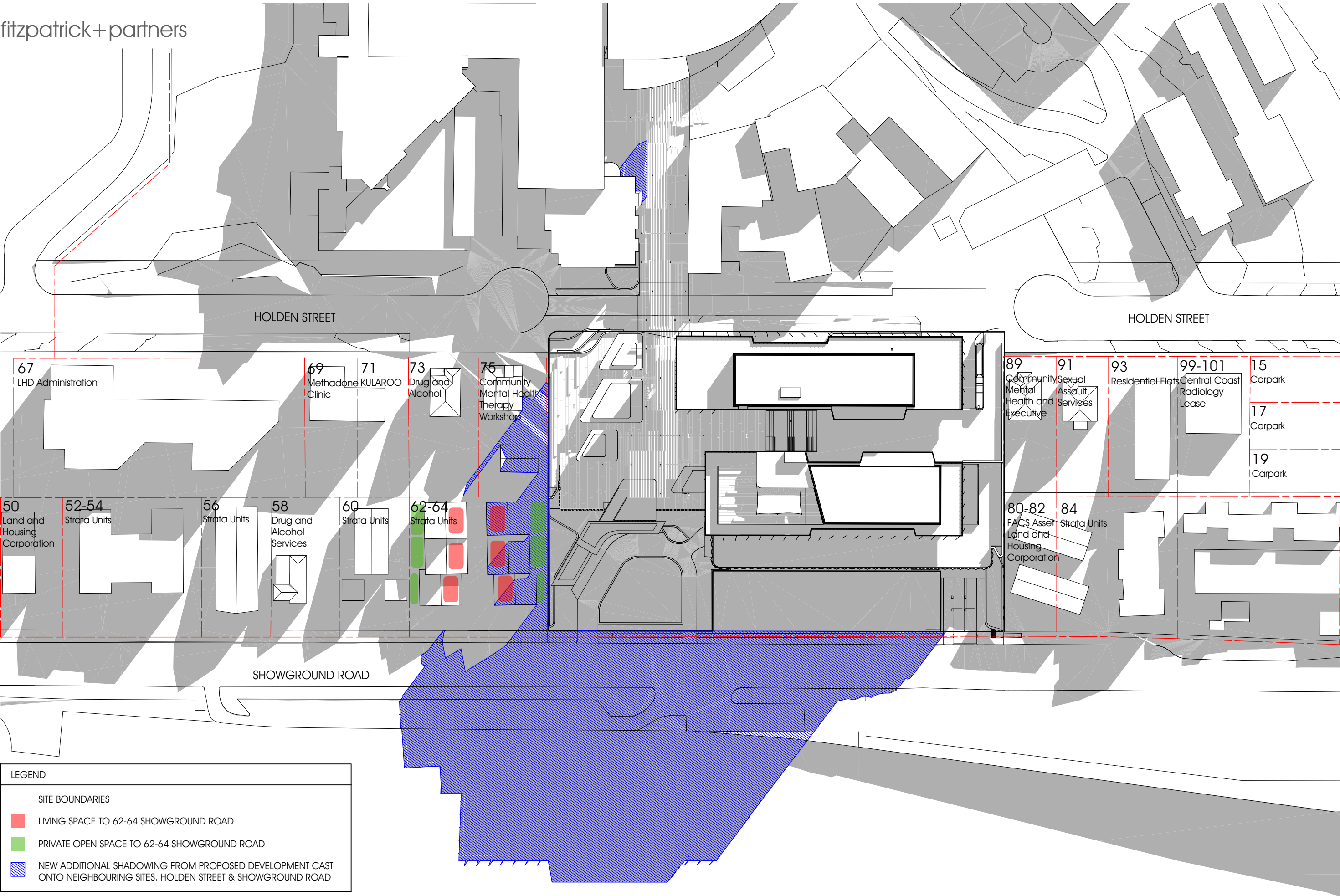
Gosford Hospital Redevelopment

SSDA Submission



Gosford Hospital Redevelopment

SSDA Submission



LEGEND

- SITE BOUNDARIES
- LIVING SPACE TO 62-64 SHOWGROUND ROAD
- PRIVATE OPEN SPACE TO 62-64 SHOWGROUND ROAD
- NEW ADDITIONAL SHADOWING FROM PROPOSED DEVELOPMENT CAST ONTO NEIGHBOURING SITES, HOLDEN STREET & SHOWGROUND ROAD

Gosford Hospital Redevelopment

SSDA Submission

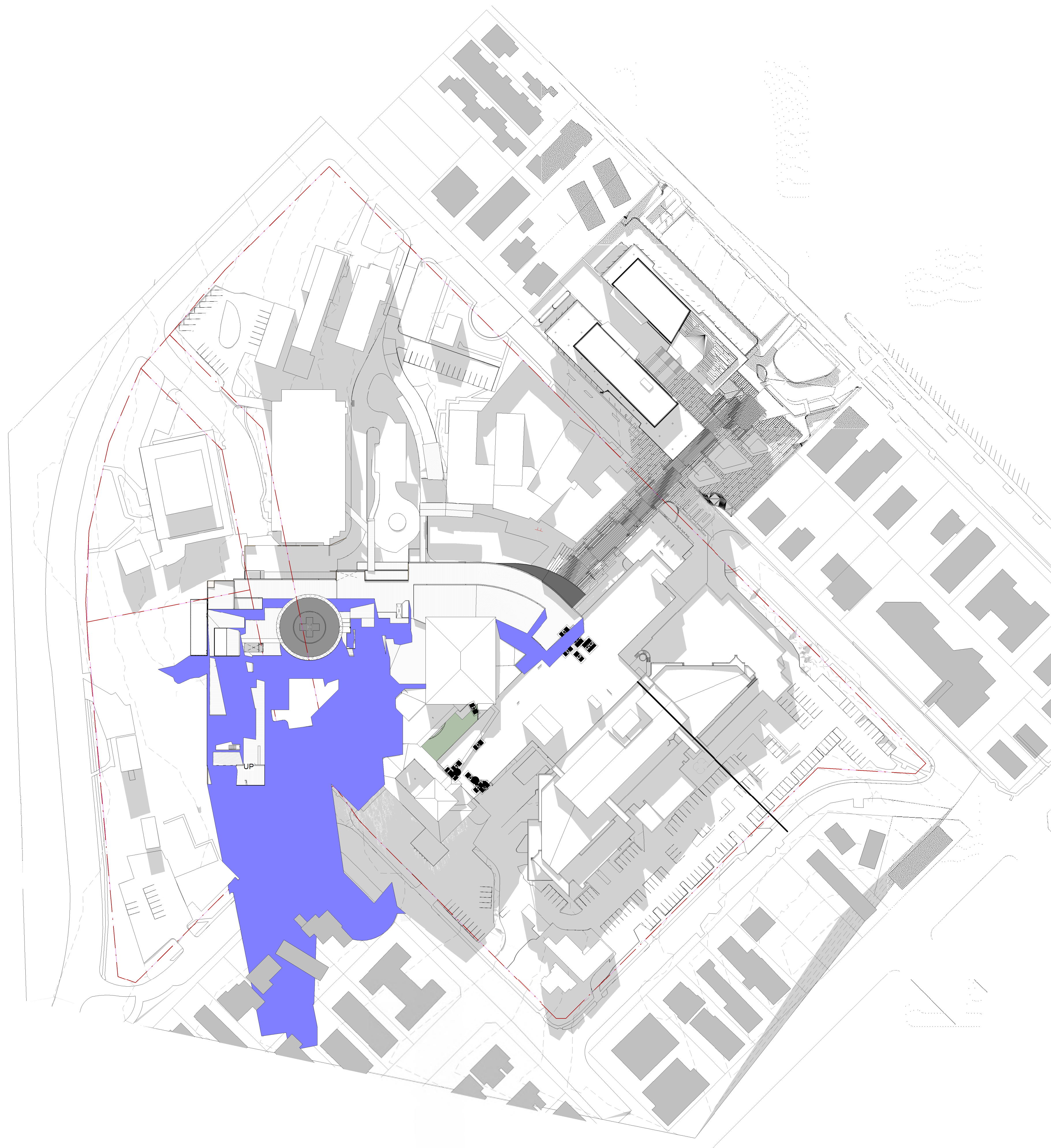
21/10/2015 2:43:42 PM



1 SUN SHADOW 21 JUNE - 9 AM EXISTING
0211 1:1000

LEGEND

- ADDITIONAL SHADOWS
- EXSITING SHADOWS



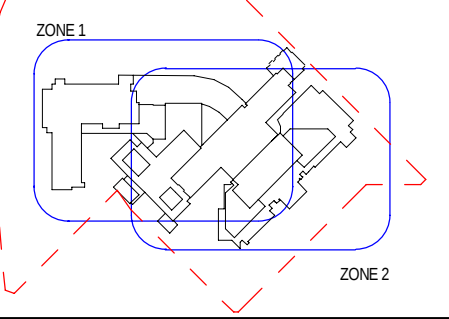
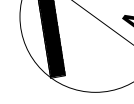
2 SUN SHADOW 21 JUNE - 9 AM PROPOSED
0211 1:1000

NOTES:

14	02/10/15		ISSUED FOR INFORMATION
13	02/10/2015		ISSUED FOR INFORMATION
12	28/08/2015		ISSUED FOR INFORMATION
11	28/08/2015		ISSUED FOR INFORMATION
10	27/06/2015		FINAL 100% SD ISSUE
9	24/04/2015		SD FINAL ISSUE
8	03/04/2015		SD ISSUE
7	03/04/2015		SD ISSUE
6	30/03/2015		SD DRAFT ISSUE
5	17/03/2015		SD ISSUE
4	27/02/2015		100% SCHEMATIC DESIGN ISSUE
3	30/01/2015		100% SCHEMATIC DESIGN ISSUE
2	18/12/2014		PRELIMINARY 100% SD ISSUE
1	21/11/2014		100% SD ISSUE

REV DATE ORIGIN REV APPD AMENDMENT

NO PLAN



PROJECT MANAGER

aurora

CLIENT

NSW Health
GOVERNMENT Infrastructure

JACOBS

30 CHURCH DRIVE
SYDNEY, NSW 2005
AUSTRALIA

TEL: +61 2 9822 2200
FAX: +61 2 9822 2201
WWW.JACOBS.COM

PROJECT

GOSFORD HOSPITAL

LOCATION

HOLDEN STREET
GOSFORD, NSW 2250

TITLE

ARCHITECTURE
SHADOW DIAGRAM-21 JUNE - 9AM

DRAWING STATUS

PRELIMINARY ISSUE

DRAWN

Jacobs

DESIGNED

Jacobs

REVIEWED

CY

APPROVED

VL

SCALE (A3)

As indicated

DRAWING NO.

NB98078-NEWB-AR-DG-7901

DRAWING CHECK

CPAC

DESIGN REVIEW

CY

DATE

02/10/2015

DATE

02/10/2015

DATE

DATE

DATE

DATE

DATE

21/02/2015 2:45:59 PM



1 SUN SHADOW 21 JUNE - 12PM EXISTING
0211 1:1000

LEGEND

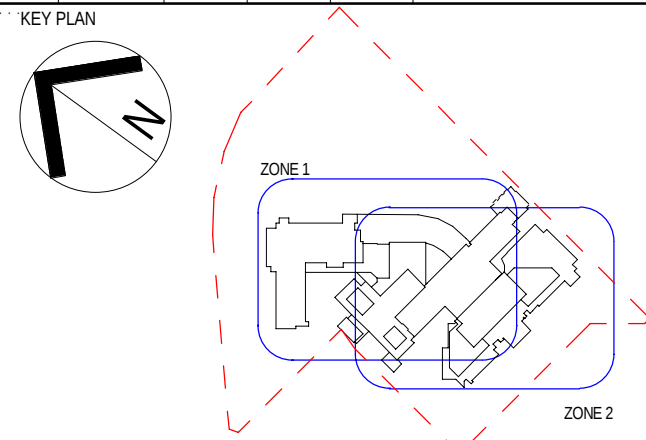
- ADDITIONAL SHADOWS
- EXSITING SHADOWS



2 SUN SHADOW 21 JUNE - 12PM PROPOSED
0211 1:1000

NOTES:

2 021015 ISSUED FOR INFORMATION
1 021015 ISSUED FOR INFORMATION
REV DATE ORIGIN REV APPD AMENDMENT



PROJECT MANAGER
aurora

CLIENT
NSW Health
GOVERNMENT Infrastructure

JACOBS
SOLUTIONS
21 CUMBERLAND STREET, SYDNEY, NSW 2005
AUSTRALIA
TEL: +61 2 9551 2000
FAX: +61 2 9551 2001
WWW.JACOBS.COM

PROJECT
GOSFORD HOSPITAL

HOLDEN STREET
GOSFORD, NSW 2250

TITLE
ARCHITECTURE
SHADOW DIAGRAM-21 JUNE - 12PM

DRAWING STATUS
FINAL ISSUE

DRAWN
Jacobs
DESIGNED
Jacobs
CHECKED
CPIAC
DESIGN REVIEW
CY

REVIEWED
CY
DATE
02/10/2015
APPROVED
VL
DATE
02/10/2015

SCALE (M)
As indicated
DRAWING NO.
NB98078-ECA-DG-DG-7903
REV
2

21/02/2015 2:48:57 PM



1 SUN SHADOW 21 JUNE - 3PM EXISTING
0211 1:1000

LEGEND

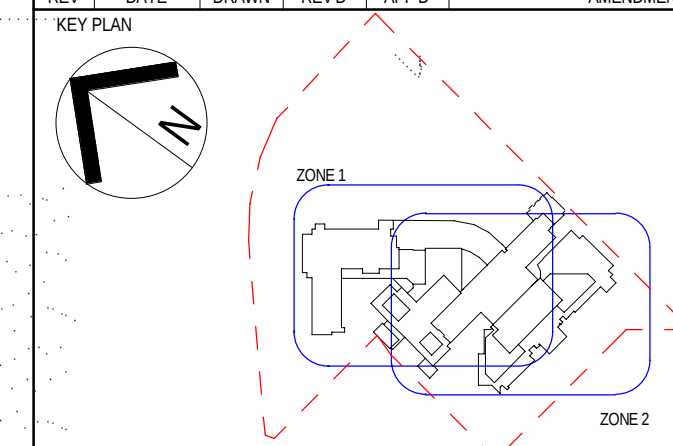
- ADDITIONAL SHADOWS
- EXSITING SHADOWS



2 SUN SHADOW 21 JUNE - 3PM PROPOSED
0211 1:1000

NOTES:

REV	DATE	ORIGIN	REVS	APPRO	ISSUED FOR INFORMATION	ISSUED FOR INFORMATION
1						
2						



PROJECT MANAGER
aurora

CLIENT
NSW Health
GOVERNMENT Infrastructure

JACOBS
SOLUTIONS
21 CUMBERLAND STREET, SYDNEY, NSW 2005
AUSTRALIA
TEL: +61 2 9551 2000
FAX: +61 2 9551 2001
WWW.WWW.JACOBS.COM

PROJECT
GOSFORD HOSPITAL

HOLDEN STREET
GOSFORD, NSW 2250

TITLE
**ARCHITECTURE
SHADOW DIAGRAM-21 JUNE - 3PM**

DRAWING STATUS			
FINAL ISSUE			
DRAWN	JACOBS	DRAWING CHECK	CPIAC
DESIGNED	JACOBS	DESIGN REVIEW	CY
REVIEWED	CY	DATE	02/10/2015
APPROVED	VL	DATE	02/10/2015
SCALE (AS)	As indicated		
DRAWING NO.	ECA-AR-DG-7904		
REV	2		

Attachment 4

Response to OEH submission from Cumberland Ecology

13 October 2015

Richard Bath
Senior Team Leader Planning, Hunter Central Coast Region
Office of Environment and Heritage
Level 4/26 Honeysuckle Drive
Newcastle NSW 2300

**RE: Response to OEH comment - Environmental Impact Statement for
the Gosford Hospital Redevelopment**

Dear Richard,

Cumberland Ecology
PO Box 2474
Carlingford Court 2118
NSW Australia
Telephone (02) 9868 1933
Mobile 0425 333 466
Facsimile (02) 9868 1977
Web: www.cumberlandecology.com.au

I refer to your letter dated 8 September 2015 to the Department of Planning and Environment (your reference: DOC15/303694-6) within which you have provided comments relating to the Environmental Impact Statement (EIS) for the Gosford Hospital Redevelopment (SSD 6913).

Cumberland Ecology has been asked to consider the comments presented in the Office of Environment and Heritage (OEH) letter and to respond. We understand that the comments are largely focussed on the assessment of threatened species within the application of the Framework for Biodiversity (FBA), in particular *Syzygium paniculatum* (Magenta Lilly Pilly).

Each OEH comment has been reproduced in the remainder of this letter in italics and is followed by Cumberland Ecology's response.

Atlas of Wildlife Search Radius

The assessment utilised an Atlas of Wildlife search that was restricted to a five kilometre radius when it is standard practice to conduct a 10 kilometre search. As a result the assessment has the potential to have inadequately considered threatened species during surveys, likelihood of occurrence assessments, assessment of significance, and therefore the impact assessment.

It is noted that there currently is no formal guideline that requires the use of a 10 km search radius rather than a 5 km search radius when conducting an atlas database search. Furthermore, the FBA does not require that an Atlas of Wildlife search is carried out for assessments of major projects and so does not provide guidance in this regard.

Cumberland Ecology has carefully considered OEH's comment with regards to the search area parameter. We note that in recent history, various search radii have been applied across different projects, with larger projects relying on 20 km or even 50 km search radii and smaller developments utilising a 5 km search radius. In this respect, we recognise that context plays an important part in the selection of the database search area.

With regards to the Gosford Hospital Redevelopment, it is our opinion that a 5 km search radius is sufficient to adequately assess the likelihood of occurrence of relevant threatened species. The hospital redevelopment is located on a highly modified site that does not retain undisturbed native vegetation; the site itself is located within an urbanised area that has been intensively studied. The 5 km search radius captures similar habitats within the locality, the forests and hillsides surrounding Gosford and the coastal frontage of Gosford itself. The 5 km search radius also captures areas like Kariong, which has also been intensively studied during investigations for developments.

Due to the extensive flora and fauna assessment work associated with developments in and around Gosford, the Atlas of Wildlife database is sufficiently detailed such that a 5 km search radius will provide a reliable indication of the threatened species that could potentially occur on the hospital site.

Threatened Species Assessment – Magenta Lilly Pilly

In regards to S. paniculatum (Magenta Lilly Pilly), likely due to the inappropriate Wildlife Atlas search, the assessment fails to acknowledge records in remnant vegetation within the locality.

It is acknowledged that the hospital site occurs broadly within the natural distributional range of *Syzygium paniculatum* and that there are records of this species in remnant vegetation within the locality. It is also noted that some of the records in the locality have not been positively confirmed (and there is potential for it to have been confused with such species as *Acmena smithii* or *S. oleosum*). Additionally, some records may have come from flora investigations where old gardens occur (at least one locality record from the Atlas of Wildlife database has been noted as being planted).

We also note that the natural distribution of the species is augmented by use in landscaping and private gardens. It has, and continues to be sold commercially for these purposes and has been widely planted in gardens in the Sydney region.

The assessment report was selective in quoting the habitat requirements of S. paniculatum. It failed to present more relevant information even though it was included in the likelihood of occurrence table... that "on the central coast Magenta Lilly Pilly occurs on gravels, sands, silts and clays in riverside gallery rainforests and remnant littoral rainforest communities".

We acknowledge that *Syzygium paniculatum* naturally occurs on gravels, sands, silts and clays in riverside gallery rainforests and remnant littoral rainforest communities (OEH, 2014). *S. paniculatum* is also reported to occur on sandy soil or stabilised sand dunes in coastal areas and in subtropical rainforest on sandstone-derived soils or stabilised Quaternary sand dunes (OEH, 2012).

Littoral rainforests, riverside gallery rainforests and coastal subtropical rainforests are known to occur within the locality of the hospital site. The site is part of the Erina soil landscape and is situated on a mixture of gravel, sand, silt, clay substrates as well as sandstone-derived substrates.

Notwithstanding the presence of suitable substrates and gallery/subtropical/littoral rainforests in the locality, these habitat types are not present within the hospital site and are unlikely to have historically occurred on the site. Gosford local government area vegetation mapping (Bell, 2004) indicates that the original vegetation that would have once occurred across the hospital site was comprised of one or a combination of wet sclerophyll forest and swamp forest types. Such forest types also belong to the Erina soil landscape and occur on various substrates.

The report states that all the S. paniculatum have been planted but does not detail how this was determined, as the species occurs within surrounding remnant vegetation and the site is habitat and even though in a disturbed state there is the potential that these individuals have naturally colonised the site.

With due consideration of the natural habitat requirements of *Syzygium paniculatum* as discussed in the above response, it is not unreasonable to conclude that this species is unlikely to have naturally occurred on the hospital site, irrespective of the presence of remnant habitat in the locality. The radius used in the Atlas of Wildlife database search spanned a number of different vegetation communities and habitats. These include heathland, woodland, open forest, closed forest and wetland habitats. Of these, only a restricted number are known to be natural habitats for *S. paniculatum*. As discussed in the preceding response, such habitats do not occur on the hospital site.

It is difficult to determine absolutely the provenance of the *S. paniculatum* on the site (i.e. planted or naturally colonised from surrounding areas) without planting records for the site but we note the following:

- *Syzygium paniculatum* is a popular ornamental tree that is available from many nurseries and is commonly used in landscaping;
- *Syzygium paniculatum* occurs on the hospital site in garden beds/landscaped settings; and
- Observations from our botanist who completed the field investigation suggest that the specimens are planted and positioned within the landscape rather than growing in a way that suggests they have propagated naturally.

In regards to Eucalyptus scoparia and Syzygium paniculatum the report states that “both these species are not considered to be locally indigenous to the subject land and therefore their conservation significance is reduced”. For E. scoparia that is correct, however, the Threatened Species Conservation Act 1995 does not differentiate between planted and naturally occurring species. ...OEH is bound to apply the Framework for Biodiversity Assessment (FBA) and current offset policy as they are written. As S. paniculatum, a species credit species, occurs within the site a strict application of the FBA means that an assessment for this species would still be required contrary to the assertion made within the report. ...This policy has a transitional implementation period, as a result the Department of Planning and Environment has discretion in how the new policy is applied to projects where strict application of the FBA may result in perverse outcomes.

Cumberland Ecology acknowledges OEH's point that the *Threatened Species Conservation Act 1995* does not differentiate between planted or natural occurrences of threatened species within their natural distributional range and that under strict application of the FBA, the potential impacts of the hospital redevelopment on this species needs to be assessed and offsets determined.

We consider the following points:

- *Syzygium paniculatum* occurs naturally within coastal subtropical, littoral and riverside gallery rainforests on various substrates including gravels, sands, silts and clays;
- Littoral rainforests, riverside gallery rainforests and coastal subtropical rainforests comprising the species' natural habitat are known to occur within the locality of the hospital site;
- At least 39 individuals (planted or naturally occurring) across approximately 28 records are known from the locality (if a search radius is extended to 10 km);

- Coastal subtropical, littoral and riverside gallery rainforests habitat types are not present within the hospital site and are unlikely to have historically occurred on the site. Gosford local government area vegetation mapping indicates that the original vegetation that would have once occurred across the hospital site was comprised of one or a combination of wet sclerophyll forest and swamp forest types;
- The species is a popular ornamental tree that is available from many nurseries and has been widely planted in gardens in the Sydney region. It is capable of persisting in landscaped or garden situations;
- The hospital site supports three individuals of *S. paniculatum* that occur within either landscaped garden beds or mown lawns. None of the occurrences are located in natural vegetation that would constitute the species' natural habitat;
- The hospital redevelopment has a footprint of approximately 3.2 ha and will involve the removal of approximately 1.2 ha of non-native vegetation (urban native and exotic, and remnant canopy over planted understorey), none of which comprises natural habitat for the species;
- Of the three occurrences of *S. paniculatum*, one individual is likely to require removal to accommodate the hospital redevelopment. Thus, the development will result in the removal of one individual from a local population of three individuals (the meaning of 'local population' as taken from the Assessment of Significance guidelines, DECC (NSW), 2007);
- The species has a generalised pollination strategy and will readily self-pollinate as well as outcross. Pollinators and seed dispersers include nectar and pollen-feeding vertebrates and invertebrates, such as flying-foxes, possums, honeyeaters, lorikeets, introduced and native bees, beetles, moths and butterflies (OEH, 2012). This means that retained plants on the hospital site have good prospects for natural, viable seed production and that propagules can be obtained from them.

Based on the above information, it is unlikely that the proposed hospital redevelopment will place the local occurrence of the species at risk of extinction. The proposed hospital redevelopment is also unlikely to place the population in the wider locality at risk of extinction. The proposed hospital redevelopment is unlikely to interfere with important life cycle processes such as pollination and seed dispersal, and is unlikely to fragment or isolate important habitat for the species.

If the FBA was to be strictly applied to the proposed Gosford Hospital Redevelopment, then a formal offset for the loss of one *S. paniculatum* would be needed. It is our opinion that a formal offset would be an unreasonable outcome, considering the context and scale of the proposed redevelopment and its minimal impact on the persistence of the local population and more generally, the species in the wider locality.

We also note the comment in your letter that the offset policy is currently in its transitional implementation period and that the Gosford Hospital Redevelopment may be afforded some flexibility with regard to offsetting. As *S. paniculatum* is capable of persisting as plantings in garden beds and landscaping, we suggest that the local population can be maintained on site through considered plantings from local provenance to replace the predicted loss of one tree.

We respectfully request that OEH considers recommending to the Department of Planning and Environment that transitional flexibility is applied in this case to allow the loss of *S. paniculatum* from the site to be replaced through replanting.

Conclusion

The proposed Gosford Hospital Redevelopment is situated in an urbanised landscape and no longer supports undisturbed remnant native vegetation. The historical occurrence of intact native remnant vegetation would have likely comprised wet sclerophyll forests and/or swamp forests.

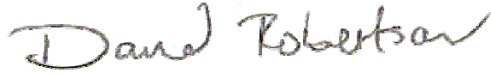
The hospital site currently contains three occurrences of *S. paniculatum*, of which one individual will be removed for the redevelopment works. The remaining two individuals will not be removed for the redevelopment works. *Syzygium paniculatum* naturally occurs in gallery, subtropical and littoral rainforests, which are not present and are unlikely to have been present on the site in the past.

Due to their location within landscaped garden beds and mown lawns, the lack of rainforest habitats on the site grounds and their popular use in gardens and landscaping, we retain our view that the occurrences of *S. paniculatum* on the site is likely to have been planted.

Irrespective of whether *S. paniculatum* was planted or has naturally colonised the site, it is unlikely that the proposed hospital redevelopment will place the local occurrence of the species at risk of extinction. The proposed hospital redevelopment is also unlikely to place the population in the wider locality at risk of extinction. The proposed hospital redevelopment is unlikely to interfere with important life cycle processes such as pollination and seed dispersal, and is unlikely to fragment or isolate important habitat for the species.

When the urban context and scale of the proposed redevelopment, the likely provenance of the occurrences of *S. paniculatum* on the site and the likely persistence of the species in the locality are considered, it is our opinion that a formal offset under strict application of the FBA would be an unreasonable outcome for the project. As the current offset policy is still in its transitional implementation period, we respectfully request that OEH considers recommending to the Department of Planning and Environment that transitional flexibility is applied in this case to allow the loss of one individual of *S. paniculatum* from the site to be replaced through replanting.

Yours sincerely,



Dr David Robertson

Director

david.robertson@cumberlandecology.com.au

References Cited:

Bell, S. A. J. (2004). *The natural vegetation of the Gosford local government area, Central Coast, New South Wales*. Eastcoast Flora Survey.

DECC (NSW) (2007). *Threatened Species Assessment Guidelines: The Assessment of Significance*. Department of Environment and Climate Change (NSW), Sydney South, NSW.

OEH (2012). *National Recovery Plan Magenta Lilly Pilly Syzygium paniculatum*. Office of Environment and Heritage, Sydney.

OEH (2014). *Magenta Lilly Pilly - profile*. NSW Office of Environment and Heritage, Hurstville.

Attachment 5

Response to Traffic and Parking Issues and TfNSW Submission from Parking and Traffic Consultants

9 October 2015

Jeff Apitz
Project Director
Health Infrastructure
Level 8, 77 Pacific Highway
North Sydney
NSW 2060

Dear Jeff

1. Gosford Hospital Redevelopment (SSD6913) - Response to Transport for NSW, Gosford City Council and Resident Comments

I am writing to present our responses to each of the traffic engineering related matters identified in the following correspondence:

- Transport for NSW - Letter from Simon Hunter, dated 28 September 2015
- Gosford City Council - Letter from Paul Anderson, dated 14 September 2015
- Public Comments

For ease of reference, I have presented our response in the above order, and adopted the headings presented in each letter.

2. Transport for NSW

Traffic Distribution

The overall distribution of vehicle trips was established on the basis of online and intercept surveys undertaken at the Hospital, which included postcode data relating to staff, patients and visitors. Having established the regional distribution, we applied this to the road network serving Gosford, as presented in Figure 8 within the Traffic and Accessibility Report (the report) (Pg 23).

At the local level, the trip distribution within the network model was based on the Intersection and Origin / Destination surveys. This provides the most reliable basis for determining the distribution of traffic activity and was deemed to be an acceptable method by representatives of RMS and Gosford City Council (GCC).

Details of the distribution of post development traffic are presented in the attached letter prepared by Jacobs, who prepared the LINSIG model of the local road network. Subsequent agreement from RMS is not required as the previously agreed Trip Distribution remains unchanged.

Traffic Modelling

- We are not in receipt of any previous modelling undertaken at the intersection of Showground Road and Racecourse Road. We understand that Health Infrastructure NSW (HI) has requested, on a number of occasions, any traffic survey data and modelling undertaken in this area, both from RMS and Gosford City Council. No information has been provided to PTC or HI to date.
- The report has been updated to reflect the current results in both Tables 2 and 14.
- Overall intersection performance is based on the average delay of all vehicles passing through the intersection. Generally, the major road will involve the highest traffic volume and the lowest average delay (as this road is typically given the maximum green time, while providing reasonable delays on the more minor side roads). When new trips are added to the major road, it increases the overall traffic volume through the intersection, but does so by adding vehicles with the lowest average delay. In certain circumstances, this can reduce the overall average delay of the intersection. If the average delay is very close to the division between the grades of Level of Service, a slight reduction can lead to a reduction in Level of Service.
- The intersection of Donnison Street and Showground Road was modelled using SIDRA Intersection, given the distance from the bounds of the network model. The results for the existing situation are described on page 26 of the report, while the future scenario is described on page 52. The results indicate that the roundabout is currently operating near capacity and that a slight increase traffic activity results in a Level of Service F, with upgrades required. This intersection is identified as requiring a whole of Government approach, given that the adjacent rail bridge will need to be widened to accommodate the suitable number of traffic lanes.
- The results of the modelling for the intersection of Racecourse Road and Showground Road are presented in Attachment 3 of the report. The modelling was provided by RMS as this intersection is the subject of future upgrade works being proposed by RMS. The model was updated by RMS' traffic consultant to include the post Hospital Redevelopment traffic activity.
- The upgrades proposed on Showground Road do not result in the loss of any trafficable lanes and only the relocation of an existing pedestrian crossing. There is no reason to believe that these works are sufficient to produce a redistribution of traffic to other routes.
- It should be noted that the most recent version of the traffic model, together with existing and future scenarios was presented to RMS during the preparation of the SSDA. Aside from some minor clarifications relating to validation techniques, the modelling was accepted by RMS at that time. I have attached draft minutes (taken during a presentation to RMS) issued to RMS for finalisation.
- It is understood that road network mitigation measures are currently being discussed as part of the TfNSW Interagency Gosford Transport Working Group (the Working Group).

Parking Assessment

Much of the existing parking provision within the Hospital involves a payment / permit scheme, or lease arrangements. The only areas of completely free parking being displaced by the project are the emergency drop-off area and the on-street parking along sections of Holden Street and Beane Street West being truncated/closed.

- Health Infrastructure are in discussions with GCC in relation to the establishment of a Resident Parking Scheme, which will increase demand for parking within the proposed car park, and may have a reduction impact on car usage associated with the Hospital.
- The loss of on-street parking has been included within the demand calculations that informed the total parking provision within the proposed car park.

Classification of Showground Road

The report has been updated to include the current Greater Sydney Road Classification Map and the text has been amended to remove the reference to any proposal to reclassify Showground Road.

Proposed Works and Parking Arrangements on Showground Road

- The landscaping design will be undertaken by the project Landscape Architect.
- The proposed traffic management arrangements on Showground Road will be subject to detailed design prior to construction and will be designed to accommodate access to / from the Sydney Trains small staff parking area, the commuter parking area and infrequent heavy vehicle access to the Sydney Trains assets along Showground Road.
- During the development of the car park access design all access / egress options were assessed having regard for the Sydney Rail access driveway. Based on the projected traffic volumes and safety, it was determined that the proposed arrangement would provide the most suitable outcome for the majority of road users.
- The proposed car park access arrangement will require the construction of a central median island in order to accommodate a right turn lane serving the car park entry and a pedestrian refuge. This will prevent the right turn movement into the Sydney Trains car park. Egress will remain unaffected as this is currently provided further to the south, outside to influence of the proposed works. The access arrangement will incorporate a pedestrian crossing with the central island providing a safety refuge, which is not provided at the existing crossing.
- Noted, however no reference to an RMS owned commuter car park is made within the report.
- The detailed design of the car park access and associated traffic facilities will need to be undertaken prior to the 109R Certification stage. It is common that Road Safety Audits are undertaken prior to the construction of new road facilities.

Impacts to Bus Services and Infrastructure during Construction and Operation

The closure of Holden Street is essential to the Hospital Redevelopment and involves the relocation of the existing Hospital Main Entry to a new pedestrian drop off / pick up area in the HWP on the Showground Road frontage. In this regard, bus routes along Holden Street will no longer be required and as a consequence the bus stop is proposed to be relocated to Showground Road adjacent to the new Hospital pedestrian entry area. The following rerouting of affected routes are proposed:

Route 41 – Following discussion with the Service Planner at Transport for NSW, it is apparent there are a number of route options available for Route 41, which currently follows an anticlockwise route as shown in the following figure.

It is noted that Route 41 is no longer free and this has been adjusted in the Report.

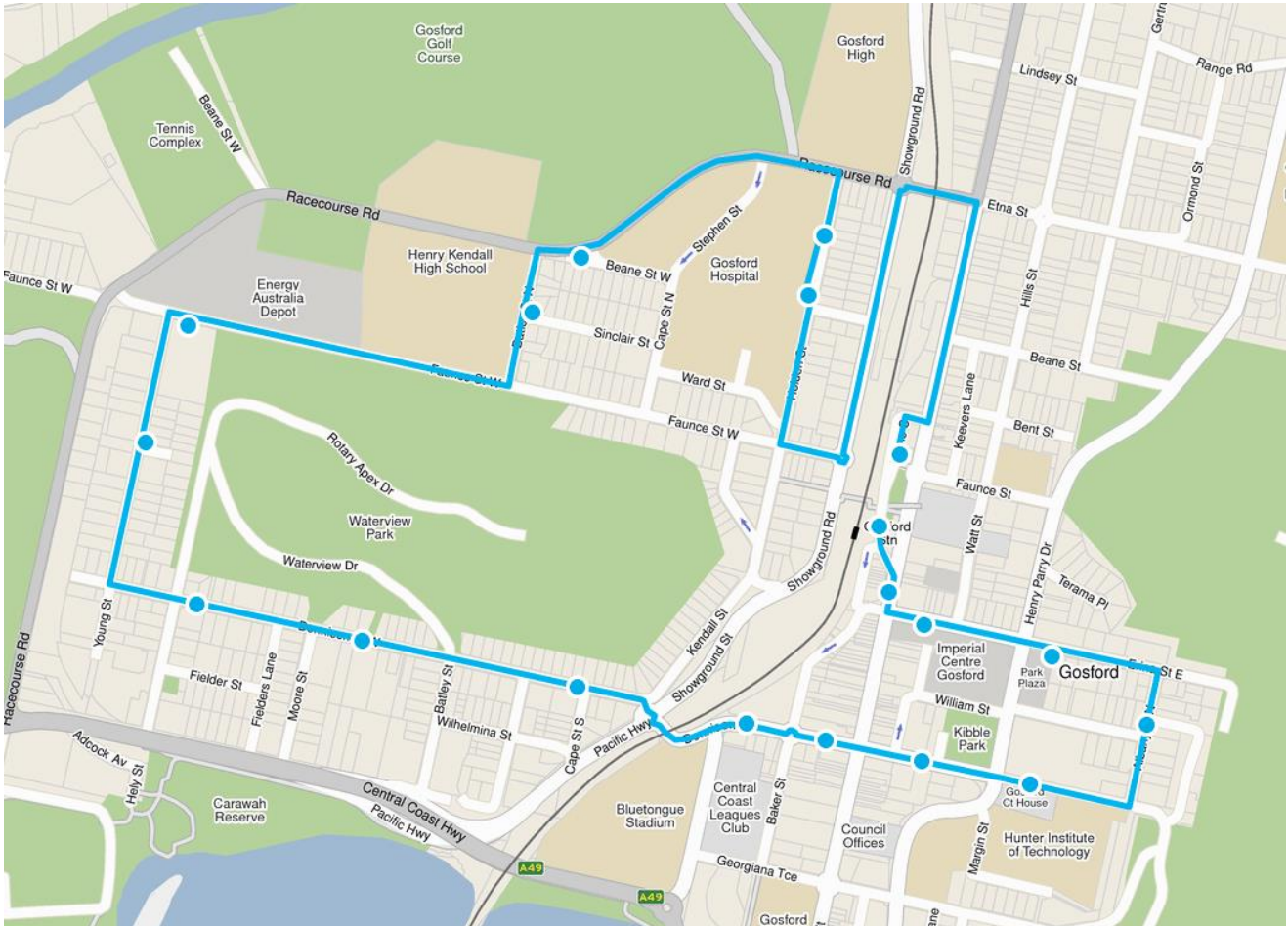


Figure 1 - Existing Bus Route 41

It is important to retain the anti-clockwise direction in order to retain the existing bus stops, which are only located on the corresponding side of the road (i.e. they are single stops, not pairs).

The most practical route option involves the use of the Pacific Highway to the south of Gosford Station, the Donnison Street bridge and northbound along Showground Road (Figure 2). This has the benefit of placing the bus on the Hospital side of Showground Road at the proposed bus stop.

[illegible]

suite 102, 506 miller street
cammeray nsw 2062 australia
pci@parkingconsultants.com
www.parkingconsultants.com

Route 70 currently commences / terminates on Holden Street to the north of Beane Street West. In this regard, the route can be simply rerouted to commence and terminate at the proposed Showground Road bus stop connecting with Racecourse Road to the north.

The closure of Holden Street and the removal of the existing bus stop will only occur following the installation of the proposed bus stop on Showground Road, therefore the change to the routes will occur sometime during the construction period. It is not intended that construction activity will impact at all on existing services.

Construction Traffic and Pedestrian Management

A preliminary Construction Management Plan has been submitted by HI which includes a description of the proposed outline Traffic and Pedestrian Management Plan (Section 7.8). Typically a more detailed CTMP is prepared once SSD Consent has been issued and following the awarding of the main building contract. This allows the main contractor to establish details such as site compounds and access, material volumes and handling plans, crane locations, contact details etc., which all form part of the CTMP. It is not possible to provide this level of detail prior to the approval of the SSDA. The requirement for a CTMP can be imposed on the project by way of a Condition of Consent. The Consent should refer to the CTMP being required prior to the issue of a 109R Certificate, which will be issued by the Crown Certifier.

Bicycle Network Access

During the initial stages of the project, surveys were conducted to ascertain the mode split associated with people accessing the Hospital. It was found that cycling represents a low proportion (1.2% of staff) due to a number of factors, including the local geography and the lack of cycle facilities on the road network.

HI is working with GCC in relation to the Travel Plans, which will determine the targets for mode share, with a view to increasing active transport. The proposed HWP includes the provision of End-of-Trip facilities (within Level 7), and while the cycle parking provision is not yet determined, this will form part of the Travel Plan process currently being undertaken by HI and GCC. Generally, the Hospital Campus provides many opportunities for new bike parking facilities as growth in this form of transport increases.

3. Gosford City Council

Road Works

Council has summarised the road works required in the vicinity of the Hospital and confirmed that physical alterations to the road network will require formal approval under Section 138 of the Roads Act. It is expected that this would be a requirement through the inclusion of a Condition of the Consent.

Traffic / Parking / Pedestrian Movements

Council acknowledges that the upgrade of the rail bridges at Etna Street and Donnison Street will require the co-ordination of multiple authorities. In this regard, a TfNSW chaired Interagency Gosford Transport Working Group (the Working Group) has been established.

The proposed car park will provide an additional 803 parking spaces for the purposes of use by Hospital staff, visitors, the HWP and displacement of existing parking being removed as part of the project. This provision will certainly assist in removing some parking activity from the road network, while HI is working with Council in relation to a Resident Parking Scheme to improve the management of the existing supply of

on-street parking. This will inform the type of parking restrictions and whether a permit system is appropriate for the area.

In relation to the potential change in mode shift arising from the proposal, HI will be preparing a Work Place Travel Plan, which could be required as a Condition of the Consent. We are aware of the Optus case study at Macquarie Park, which we understand is operating successfully after a number of years. Any Travel Plan associated with the Hospital will need to take into consideration the particular regional characteristics of Gosford and the Central Coast, which differ slightly to Macquarie Park. The Liverpool Hospital Travel Plan will also be used as a source of relevant and recent information.

We note that the two railway bridges are identified as pinch-points within our assessment and in response, the Working Group has been established to communicate across Government with regard to the current traffic situation, the future growth, the resolution of existing issues (e.g. RMS is currently updating the Gosford City Centre TMAP), and set priorities and timeframes for the agreed program of solutions.

The intersection of Racecourse Road and Faunce Street West were not included within the network model as it is largely influenced by the school related traffic during the peak periods, rather than Hospital related traffic.

The upgrades to the intersection of Hospital Road and Racecourse Road will be subject to detailed design and will need to incorporate existing access to nearby properties. The modelling does not identify that there will be any specific issues relating to the Golf Course, or School access driveways. It is noted that the inbound movements (both left and right turns from Racecourse Road) are currently permitted and that only the right turn out from Hospital Road passes the Golf Course and School driveways.

The proposal includes new lifts on the southern edge of the car park structure, which essentially replace the current walk up Beane Street West. The lifts will serve all levels of the car park, with direct and covered connections, therefore we do not believe that parkers will park at the higher level (Holden Street) rather than within the car park.

The matter of Road Classification should be addressed to RMS. It is noted that the classification of Showground Road was not amended during the previous Road Hierarchy Review.

The SSDA does not propose to provide footpaths along Racecourse Road, as the intent of the project is to focus pedestrian activity to the Showground Road / Holden Street area associated with the HWP. The project does not involve any increase in pedestrian demand / desire lines along Racecourse Road. Following review of the GCC response, HI will however work with Council to install a 1.2m wide footpath along Racecourse Road (between Hospital Road and Holden Street) within the road reserve on the proviso that Council gains all necessary approvals and undertakes civil works and services diversions prior to the installation of the footpath.

Public Comments

In reviewing the submissions from the public, the two following issues were raised.

An objection to the closure of Holden Street and Beane Street West as these roads provide an alternative to Racecourse Road during busy periods.

The closure of Beane Street West and the closure / truncation of Holden Street are essential to the

improvement in safe pedestrian access in and around the Hospital Precinct. These closures are also needed to allow the implementation of the first stage of HI's vision to create a pedestrian friendly health campus.

The relocation of parking and associated primary access to Showground Road will remove the current traffic activity from Holden Street. Through the change in land-uses associate with the project and the HWP, the role of these roads will change and accessibility for pedestrian will become a priority, rather than providing alternative routes to the higher order roads within the network. It is acknowledged that existing traffic conditions combined with the Hospital development will require intersection upgrades in order to improve traffic conditions, and these are detailed within the Report, and will also be the subject of agreement through the Working Group. The emphasis being, to improve the broader road network to enable the change in use of the precinct roads to better serve their purpose.

An objection to the new bus stop and proposed works on Showground Road as this would potentially impact on the capacity of Showground Road.

The relocation of bus stops will introduce one new service (route 70) along Showground Road, as Route 41 already runs along Showground Road. The Bus Stops will be designed within the existing parking lanes so that the adjacent traffic lanes are not disrupted.

The road network modelling indicates that the conversion of the existing Etna Street roundabout will increase the capacity of the road network through increase road space, and also the ability to coordinate the other nearby signal controlled intersections, which cannot be achieved at present.

Yours faithfully



Andrew Morse
Senior Traffic Engineer

File Note –Traffic and Accessibility Assessment Workshop

PROJECT	Gosford Hospital Redevelopment (including Health & Well Being Precinct)
DATE/TIME	Wednesday, 15 July 2015. 3 – 5 pm
VENUE	Teleconference

Attendees:

Name	Initials	Position and Organisation
Kellee McGilvray	KG	Development Assessment Officer Network & Safety Hunter, RMS
Andrew Dorrian	AD	Senior Traffic Planner, RMS
Christophe Steinbach	CS	Leader Network & Corridor Planning – Network Optimisation Planning (Outer MET), RMS
Craig Leckie	CL	Central Coast Network Manager
Matthew Prentergast	MP	Manager Sustainable Corporate & City Planning, GCC
Ed Sukesh	ED	Manager Construction Planning and Management, GCC
Steve Green	SG	Strategic Transport Planner, GCC
Rob Day	RD	Traffic Engineer, GCC
Edmund Cheung	EC	Senior Traffic Engineer, Jacobs
Andrew Morse	AM	Senior Traffic Engineer, Parking & Traffic Consultants
Jeff Apitz	JA	Project Director, Health Infrastructure NSW (“HI”)

Distribution: As above, plus

Name	Initials	Position and Organisation
Anna Zycki	AZ	Regional Manager, Hunter and Central Coast, RMS
Judy Jaeger	JJ	Director Community Growth, GCC
Troy Harvey	TH	Senior Project Director, Health Infrastructure NSW

Item	Remarks / Action	Responsibility
1.	Traffic Modelling Study, 19 June 2015 prepared by Parking & Traffic Consultants was discussed.	-
2.	RMS and GCC accepted the Study, including input traffic survey data and results, in principle.	-
3.	CL reserved the right to make additional comments, as he had only received the Traffic and Accessibility Assessment, including the Traffic Modelling Study, on 15 July 2015.	CL
4.	CL questioned Saturation Flow assumptions. EC / AM confirmed supported saturation flows used in the LinSig model as all data had been calibrated and validated to RMS standards. KM advised that the RMS team would confer and advise if any further work on saturation flows would be required.	- KM

Item	Remarks / Action	Responsibility
5.	KG requested an electronic copy of the LinSig model. JA to provide by 22 Jul.	JA
6.	EC confirmed that timetabled bus services have been included in the LinSig model.	-
7.	RD made comment that the reference in the Reports to the Racecourse / Pacific Highway intersection was misleading, and should state Showground Road / Mann Street. ED / AM / JA did not see the problem, as sufficient maps showing intersection locations are included in the Reports, and using Google Maps for example, the intersection description is easily found. Any reference to the Racecourse / Pacific Highway intersection does not mean the Racecourse / Central Coast Highway intersection. EC agreed to update report if required.	EC
8.	Development within the Gosford City Centre west to the Racecourse was discussed. SG to prepare a briefing paper outlining development growth projections, growth rates, timings etc to be issued to RMS and HI.	SG
9.	KG questions SIDRA results for the Central Coast Highway / Racecourse Road intersection. JA advised that the model had been prepared by Northern Transport Planning and Engineering (NTPE) in late 2014 for a DA at that intersection. KG accepted NTPE's model and results following discussion.	-
10.	Traffic and Accessibility Assessment ("TA&A"), 19 June 2015 prepared by Parking & Traffic Consultants was discussed.	-
11.	Proposed bus routes were discussed, and accepted in principle by GCC. JA advised that following SSD Consent, HI would engage with GCC, TfNSW, the Central Coast Local Health District ("CCLHD") and private bus operators to confirm bus routes and bus stop locations consistent with the TA&A.	JA
12.	RD requested that HI consider the following: 1. 40 km Health Precinct speed limit 2. Development of a Gosford Hospital Staff Travel Plan to encourage the use of public transport, non-car based travel, shared car parking spaces, carpooling etc. Plans from Liverpool Hospital and Optus (Macquarie Park) were sighted as two good examples. JA confirmed that HI supports both of these requests in principle, and would investigate and report following SSD Consent.	JA
13.	AD questioned staff take up of parking spaces within the new Carpark. AM advised that the Car Parking study indicated that allocated staff parking within the Hospital Campus had a utilisation rate on average in excess of 95%, and due to the proximity of the new carpark relative to the Hospital main entrance, the ease of moving from the new carpark to the hospital main entrance, and Health's staff parking policy estimates for staff parking take up in the new carpark are appropriate.	-
14.	JA stated that Health's car parking policy is for paid carparking, and that this policy may cause friction with the current, free, long turn parking in the Gosford City Centre and in close proximity to the Hospital. JA suggest the development of a coordinated carparking strategy covering all onstreet and off street could be beneficial to GCC, HI, etc.	-

Item	Remarks / Action	Responsibility
15.	AD asked if the size of the new carpark could accommodate cars currently parked on Racecourse Road abutting the Hospital, should the RMS/GCC in the future turn Racecourse Road into a four-lane road. JA advised that the new carpark had approximately 50 surplus carparking spaces, and with the implementation of Gosford Hospital Staff Travel Plan the new carpark should have sufficient capacity to absorb these displaced cars.	-
16.	Key items contained in AZ's email of 1 July 2015 were discussed as follows:	-
17.1	<i>Critical road network issues from modelling – is all development and existing road proposals considered?</i> See above <i>Timing of hospital v. other developments in CBD</i> JA confirmed that the timings associated with the Gosford Hospital Redevelopment (including the Health & Wellbeing Precinct) are included in the TA&A and the SSDA. GCC to advise on "other developments in CBD" timings. <i>Agree critical intersections requiring upgrade relevant to hospital project</i> JA advised that HI proposed intersection upgrades and roadworks directly relevant to the hospital project were identified in the TA&A and SSDA. All parties agreed that Racecourse Road / Showground Road, Etna Street Bridge, and Racecourse Road / Pacific Highway / Mann Street where critical regional intersections, and would require a continued "whole of government" approach. Upgrade process and timings to be confirmed by TfNSW meeting. <i>Consider if any alternate approaches to hospital access given potential for time delays in getting road works complete.</i> Approaches were discussed and it was agreed that there were no alternate approaches to the Hospital.	- - GCC - TfNSW -
17.2	<i>"In the first instance this meeting would focus on only which intersections require upgrade for 2019,"</i> JA advised that HI's SSDA included roadworks proposed to 2019. KG advised that the Etna Street Intersection must be rectified before the Hospital opens. JA advised that this was a matter for the higher level TfNSW convened meeting, and did not understand why these works needed to be linked to the hospital redevelopment completion at 2019. CL made comments that RMS (in the RTA or even DMR days) had been investigating intersection upgrade options for Racecourse / Showground Road intersection with Etna Street Bridge and adjoining Mann Street / Racecourse Rd intersection.	

Item	Remarks / Action	Responsibility
17.3	<i>then to 2027. Apportionment in relation to underlying growth rates, and how a joint submission might be Apportionment in relation to underlying growth rates, and how a joint submission might be frames would come back to the higher level meeting once we better understand what work is critical for the hospital opening.</i> These matters were not discussed as the teleconference concluded at 5.00 pm.	TfNSW

Attachment 6

Amendments to Council's Recommended Conditions of Consent

Cdn ref.	No change / amend / delete?	Amended Condition (if relevant) - changes in red	Comment (where relevant)
1	Amend	Prior to the commencement of any relevant works	Conditions to be appropriate with regard to construction staging.
1.1	Amend	Formal closure of public roads and purchase from Council of Holden Street between Racecourse Road & Ward Street and Beane Street West between Showground Road and Holden Street, is to be undertaken prior to commencement of any works in these road reserves.	N/A
1.2a	Amend	Intersection of Racecourse Road and Hospital Road generally in accordance with the concept indicated in Figure 13 – <i>Racecourse Road / Hospital road Intersection Improvements</i> of the SSD Civil Engineering Report prepared by Taylor Thompson Whitting (NSW) Pty Ltd Reference 141191 dated 25 June 2015 (Appendix 13 of the Environmental Impact Statement). These works shall include full-width road pavement, including kerb and guttering, subsoil drainage, footpath formation, drainage on both sides of the road in Racecourse Road line marking and signage, and a single pedestrian refuge only. Suitable access to the Gosford Golf Club is to be provided in the design. Pedestrian refuges are to be provided in the traffic island on the eastern side of the intersection in Racecourse Road, and within the entry area of Hospital Road to facilitate pedestrian movements around the intersection. The final design is to be prepared in consultation with Gosford City Council, and Roads and Maritime Services.	N/A
1.2b	Amend	Footway formation with a minimum width of 2.0m graded at +2% from the top of kerb towards the property boundary, across the frontage of the site in Racecourse Road between Holden Street and Hospital Road.	Slope is an issue along this section of the road verge. There are significant services in this road verge as well. Alignment and graded footway formation grade is to be agreed between

			Council and HI.
1.2c	Amend	1.2m wide reinforced (SL72 steel fabric, 100mm thick) concrete footpath in an approved agreed location across the frontage of the site in Racecourse Road between Holden Street and Hospital Road.	N/A
1.2d	Amend	The existing stormwater pipeline over Racecourse Road is to be cleaned and a CCTV undertaken. The CCTV video is to be submitted to Council's drainage assets unit to determine if this pipeline is to be reconstructed to the extent as indicated in the SSDA only. If required to be reconstructed details are to be included on the engineering plans.	N/A
1.2e	Amend	Full-width Road works and traffic control treatment in Showground Road generally in accordance with Figure 14 – <i>Showground Road Health and Wellbeing Precinct Access Improvements</i> of the SSD Civil engineering Report prepared by Taylor Thompson Whitting (NSW) Pty Ltd Reference 141191 dated 25 June 2015 (Appendix 13 of the Environmental Impact Statement). These works shall include kerb and guttering, subsoil drainage, footpath formation, full road pavement modifications, line marking and signage, and a single pedestrian crossing and refuge only. The works shall also include the undergrounding of overhead power line and the installation of new Street Lighting and street trees in the western road verge of Showground Road directly abutting the Health and Wellbeing Precinct. The final design is to be prepared in consultation with Gosford City Council.	N/A
1.2f	Amend	Alterations to the School Zone infrastructure within Showground Road to be prepared in consultation with NSW Department of Education and Gosford City Council.	N/A
1.2g	No change	N/A	N/A
1.2h	No change	N/A	N/A
1.2i	No change	N/A	N/A
1.2j	No change	N/A	N/A
1.2k	Amend	Streetscape improvements on the eastern side of Showground Road to improve connectivity to Gosford Railway Station shall be detailed based on the SSDA	N/A

		and prepared in consultation with Gosford City Council.	
1.2l	No change	N/A	N/A
1.2m	Amend	All redundant dish crossings and/or damaged kerb and gutter along the frontages of the development are to be removed and replaced with new kerb and gutter, as agreed	N/A
1.2n	Amend	All redundant vehicular crossings along the frontages of the development are to be removed and the footway formation reinstated with turf and a 1.2m wide reinforced (SL72 steel fabric, 100mm thick) concrete footpath in an approved location.	N/A
1.2o	Amend	Replacement of any existing footpath that is affected damaged by the proposed works with 1.2m wide reinforced (SL72 steel fabric, 100mm thick) concrete footpath, or to match existing.	N/A
1.2p	No change	N/A	N/A
1.2q	No change	N/A	N/A
1.2r	Amend	Alterations to street signage and line marking. The signage and line marking plan shall be submitted to the Council Local Traffic Committee for consideration.	N/A
1.2s	Amend	Pram ramps at road intersections where these do not exist or where adjustments intersections require alterations to the existing pram ramps on Hospital Road and Holden Street. The engineering plans must be approved by Council prior to the commencement of applicable works identified in item 1.2 above	N/A
1.3	No change	N/A	N/A
1.4	Amend	A dilapidation report must be submitted to Council prior to the commencement of applicable works and/or approval of engineering plans under the Roads Act. The report must document and provide photographs that clearly depict any existing damage to the road, kerb, gutter, footpath, driveways, street trees, street signs or any other Council assets in the vicinity of the development.	N/A

1.5	Amend	A security deposit of \$100,000 must be paid into Council's trust fund prior to the commencement of any works. The payment of the security deposit is required to cover the cost of repairing damage to Council's assets that may be caused as a direct result of the development. The security deposit will be refunded upon the completion issuance of the Crown Building Completion Certificate (by the Crown Certifying Authority) for of the project if no damage was caused to Council's assets or when requested repairs to Council's assets have been completed , as a result of the development.	N/A
1.6	To be confirmed	To be confirmed	HI is undertaking negotiations with Council regarding Section 307 contributions and will advise the DPE of the outcome of these negotiations prior to approval of the SSDA.
1.7	Amend	Development constructed near or over the sewer main and/or adjacent to Council's water main must comply with Council's guidelines for "Building Over or Near Council Sewer and Water Mains". Engineering details prepared and certified by a practising structural engineer must be submitted to the Water Authority (Council) prior to the commencement of any works in the vicinity of Water Authority sewer or water mains . The developer shall be responsible for the full cost of design of any relocation of Council's sewer mains affected by the proposed development. The developer may apply to Council for the disuse of any sewer mains not required if applicable. The developer may be responsible for the full cost of relocation of Council's water mains from within the development site. The submission of contractor's documentation and sewer inspection fees may apply. The applicant is to contact Council's Water and Sewer Quality Inspector a minimum one week prior to commencement of any work involving building over / adjacent to sewer mains.	N/A
1.8a	No change	N/A	N/A
1.8b	No change	N/A	N/A

1.8c	No change	N/A	N/A
1.8d	No change	N/A	N/A
1.8e	No change	N/A	N/A
1.8f	No change	N/A	N/A
1.8g	No change	N/A	N/A
1.8h	Amend	All internal pedestrian paths included as part of the development shall comply with disabled access standards.	N/A
1.9	Amend	The submission to and approval by Council prior to the commencement of any major excavation works, of details for the disposal of any spoil gained from the site and /or details of the source of fill, heavy construction materials and proposed routes to and from the site. Details shall be provided prior to the commencement of works and at latter stages of construction if details change.	N/A
1.10	Amend	The Principal Crown Certifying Authority must ensure that all parties/trades working on the site are fully aware of their responsibilities with respect to tree protection conditions.	N/A
1.11	No change	N/A	N/A
1.12	Delete	N/A	Detailed justification for an exemption from payment of development contributions was included in Section 8.12 of the EIS. HI's position on this matter remains unchanged.
2	No change	N/A	N/A

2.1	Amend	The works within the road reserve that required approval under the Roads Act shall be constructed in accordance with Council's 'Civil Construction Specification', 'GCC Design Specification for Survey, Road and Drainage Works' and Policy 'D6.46 Erosion Sedimentation Control'.	N/A
2.2	No change	N/A	N/A
3	No change	N/A	N/A
3.1	Amend (note 1)	Works within the road reserve that required approval under the Roads Act are to be completed in accordance with Council's 'Civil Construction Specification', 'GCC Design Specification for Survey, Road and Drainage Works' and Policy 'D6.46 Erosion Sedimentation Control', and documentary evidence for the acceptance of such works obtained from the Roads Authority prior to the occupation of the development. Note 1: A maintenance bond shall be paid on completion of the works in Council road reserves in accordance with Section 1.07 Maintenance of the 'Civil Construction Specification'.	N/A
3.2	Amend	Any damage not shown in the dilapidation report submitted to Council before site works had commenced, will be assumed to have been caused as a result of the site works undertaken and must be rectified at the applicant's expense, prior to the occupation of the applicable, adjacent occupiable element of the development.	N/A
3.3	Amend	Prior to the occupation of the applicable, adjacent occupiable element of the development, the internal engineering works within private property that formed part of the approved construction plans shall be completed in accordance with the approved plans and any associated documentation.	N/A
3.4	Amend	Council's 'Civil Construction Specification', 'GCC Design Specification for Survey, Road and Drainage Works' and Policy 'D6.46 Erosion Sedimentation Control', prior to the occupation of the applicable, adjacent occupiable element of the development.	N/A
3.5a	No change	N/A	N/A

3.5b	Amend	To create an easement to drain water 3.0m wide over the existing pipeline within the closed road associated with Holden Street from the intersection of Holden Street and Ward Street to the existing drainage easement/pipeline within Lot 25 DP774976, including the addition of Health Administration Corporation a beneficiary of easements as applicable.	N/A
3.5c	Amend	To create rights of access, rights of carriageway and easements for services as indicated on the approved plans in accordance with Authority requirements.	N/A
3.6	Amend	An instrument under the Conveyancing Act 1919 must establish create prior to, or with subdivision the following positive covenants in connection to 3.5 ; with the Council having the benefit of these covenants and having sole authority to release and modify. The covenant must be prepared by Council's Solicitor at the owner's cost prior to or with the registration of the plan of subdivision.	N/A
3.6a	Amend	To ensure on any lot containing an on-site stormwater detention system and/or a nutrient/pollution facility that: (i) The facility will remain in place and fully operational. (ii) The facility is maintained in accordance with the operational and maintenance plan so that it operates in a safe and efficient manner (iii) Council's officers are permitted to enter the land to inspect and repair the facility at the owners cost. (iv) Council is indemnified against all claims of compensation caused by the facility within the development.	N/A
3.7	No change	N/A	N/A
4	No change	N/A	N/A
4.1	Amend	Maintenance of the on-site stormwater detention facilities in accordance with the facilities operation & maintenance plan.	N/A
4.2	Amend	Maintenance of the nutrient/pollution control facilities in accordance with the facilities operation & maintenance plan.	N/A
4.3	No change	N/A	N/A

5	No change	N/A	N/A
5.1	No change	N/A	N/A
5.2	No change	N/A	N/A
5.3	Delete	N/A	This condition is a note regarding applications for 307 certificates and not necessarily a condition.

Attachment 7

Amended Landscape Plan prepared by Spackman Mossop Michaels

Attachment 8

Response to Drainage Issues prepared by Taylor Thomson Whitting



TaylorThomsonWhitting

23 October 2015

141191

Assessment Unit/DA48153
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Attention: Director - Infrastructure Assessments

GOSFORD HOSPITAL REDEVELOPMENT

Response to Council's Comments on Drainage

Dear Director,

In addition to our Integrated Water Management Plan, the following responses are provided to Council's comment under the heading **5) Drainage** as outlined in the Council's letter dated 14 September 2015.

Proposed Site Drainage Measures

Council comment:

The site is located on top of a hill and drains to various storm water sub-catchments. With previous development within the hospital site, onsite detention has been required to ensure that stormwater flows within the various storm water sub-catchments were not increased.

The part of the site associated with the proposed development generally drains toward Racecourse Road (for the new hospital building & refurbishment) and Showground Road (for the Health & Wellbeing Precinct).

The Integrated Water Plan submitted with the application proposes a range of measures to manage on-site detention, rainwater retention and re-use, storm water management and nutrient controls.

The measures proposed are deemed to be satisfactory and, provided they are implemented, will appropriately deal with the provision of OSD, nutrient/pollution controls, & retention of storm water for reuse within the development.

Response: TTW agrees with Council's assessment. Integrated Water Management Plan stormwater measures are to be implemented as part of the redevelopment.

Holden Street/ Beane Street West Stormwater Diversion

Council comment:

In Holden Street, there is an existing drainage line that captures & conveys stormwater from the catchment near Ward Street and discharges this to the existing drainage system and easement through Lot 25 DP774976 (i.e. No. 67 Holden Street) to Showground Road. On the basis that Holden Street will be closed and become part of the hospital site, a drainage easement will need to be created within the closed section of Holden Street and Ward Street to the existing drainage easement within Lot 25 DP774976.

Response: TTW agrees with Council's assessment. Recommended drainage easement should be provided to Council as part of the Holden Street closure.

Structural

Civil

Traffic

Facade

Engineers

TTW Group

Directors

RT Green BE Hons MEngSc FIE Aust
D Carolan BE Hons MEngSc MIEAust
R Mackellar BE Hons MIEAust
B Young BE Hons MIEAust
M Eddy BE Hons MIEAust
R McDougall BE MIEAust

Technical Directors

P Yannoulatos BE Hons Dip LGE MIEAust
D Genner BE Hons MIEAust
S Brain BE Hons MIEAust
D Jeffree BE MIEAust
N Burdon BE Hons ME MIEAust MIPENZ
H Nguyen BScEng MIEAust
R Pratikna BE MConstMgt MIEAust
K Berry BE Hons MIEAust CPEng MIPENZ MICE

Associate Directors

S Schuetze BE Hons MIEAust
M Rogers BSc Hons MIEAust
D Taylor BE Hons MIEAust
J Tropiano BE MIEAust
J Haling BE Hons MIEAust
D Mayne MEng Hons MIEAust
G Fowle BE Hons MIEAust
W Alexander BE Hons MIEAust
R Milsted MEng Hons MIEAust
N Hallam BE Hons BCom MIEAust
S Nixon BE Hons MIEAust

Associates

N Biason BE MIEAust
M King BE Hons MIEAust
J Miles BE Hons
G Bills BE Hons MIEAust
G Petschack JP
M Raddatz

Manager Facade

N McClelland BSc BE Hons MBA MIEAust

Holden Street/ Beane Street West Stormwater Diversion

Council comment:

It is proposed to divert the stormwater drainage system in Holden Street in the vicinity of the Holden Street/ Beane Street West intersection and within Beane Street West and divert this through an alternate route to within the multideck car park of the Health and Wellbeing building. This will need to be appropriately engineered, however, it is also noted that on the basis that this area of Holden Street will be closed and consolidated into the hospital land, this would no longer be discharging to public (Council) stormwater as no public roads would be within the catchment of this new pipeline.

Response: TTW agrees with Council's assessment. Detailed engineering design and construction of the diversion are to be part of the Health and Wellbeing Precinct works.

Existing Pipe Racecourse Road

Council comment:

The existing stormwater pipeline over Racecourse Road is proposed to be cleaned and inspected and if required to be reconstructed. This would need to be confirmed through Council's Assets Unit prior to the drafting of engineering plans for the works required under the Roads Act.

Response: TTW agrees with Council's assessment. Inspection of the existing stormwater pipe to be conducted and reviewed in coordination with Council's Assets Unit and any works proposed within the road reserve are to comply with Roads Act requirements.

Overland Flow Flooding – Showground Road

Council comment:

Council's Assets Unit have also indicated that the entrance to the hospital at the low point in Showground Road between Beane St & Faunce St West could potentially be impacted by overland flow flooding – refer to the Gosford CBD Overland Flow Study, September 2013. However reference to the plans associated with this development do not indicate that the proposed access arrangements on Showground Road near the Beane Street intersection as being affected by flooding and that the problem is further to the south.

Response: TTW agrees with Council's assessment that potential overland flow flooding area is located south of the proposed Health and Wellbeing Precinct Stage 1 site. Additionally, Council's Assets Unit indicated in a meeting held on 31st March 2015 that the Gosford CBD Overland Flow Study, September 2013 may have underestimated the size of a culvert under the rail corridor draining Showground Road in this area resulting in a potential overestimation of the overland flow flood impact to Showground Road at this location.

Should you require anything further please contact the undersigned.

For and on Behalf of

TAYLOR THOMSON WHITTING (NSW) PTY LTD



HEATHER SPENCER

Senior Civil Engineer