

Modification Report No.2

New Shellharbour Hospital SSD-57064458



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GeoLINK Consulting Pty Ltd

PO Box 119
Lennox Head NSW 2478
T 02 6687 7666

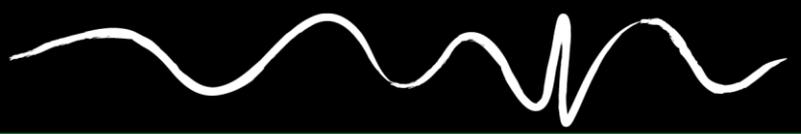
PO Box 1446
Coffs Harbour NSW 2450
T 02 6651 7666

PO Box 1267
Armidale NSW 2350
T 02 6772 0454

info@geolink.net.au

Prepared for: BESIX Watpac and NSW Health
Infrastructure
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Certification	Name	Signature	Date
Prepared by	Jacob Sickinger Senior Environmental Planner		19/11/2025
Reviewed by	Simon Waterworth Director/ Town Planner		19/11/2025

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Table of Contents

1.	Introduction	1
1.1	Purpose of this Report	1
1.2	Existing Consent and Proposed Modification Context	1
1.3	Cadastral Description	1
1.4	Land Ownership	1
1.5	Site Context	2
1.6	Site Analysis	2
2.	Strategic Context	3
3.	Description of Modifications	4
3.1	Proposed Changes	4
3.1.1	Addition of Rooftop Helicopter Landing Surface (HLS) and Hospital Building Envelope Changes	4
3.1.2	Site Planning and Landscape Elements	7
3.1.3	Multi-deck Carpark Changes	10
3.2	Schedule of Plan Revisions	11
3.3	Updated Project Description	11
3.4	Construction Staging	11
3.5	Estimated Development Cost	11
4.	Statutory Planning Context	12
4.1	Consistency with Existing Approvals	12
4.1.1	Consistency with SSD-57064458 Conditions of Consent	12
4.2	Section 4.55 of EP&A Act - Modification of Consents	12
4.3	State Environmental Planning Policies	15
4.4	Local Planning Controls	15
4.4.1	Shellharbour Environmental Plan 2013	15
4.5	Environmental Protection and Biodiversity Conservation Act 1999 (Cth)	16
5.	Engagement	17
5.1.1	Aviation Related Consultation	17
6.	Assessment of Impacts	18
6.1	Built Form, Urban Design, and Landscaping	18
6.2	Environmental Amenity and Visual Impact	20
6.2.1	Environmental Amenity	20
6.2.2	Wind and Rotorwash	20
6.2.3	Visual Impact	23
6.3	Aviation	25
6.3.1	Key Issues and Assessment	25
6.3.2	Conclusion	27



<u>6.4</u>	<u>Acoustic Assessment</u>	<u>27</u>
6.4.1	Helicopter Impacts – Surrounding Neighbours	27
6.4.2	Hospital Building Envelope	28
6.4.3	Safe Assessment Unit	28
6.4.4	Noise from Engineering Services/ Plant	29
6.4.5	Construction Noise and Vibration	29
6.4.6	Summary of Mitigation Measures	29
<u>6.5</u>	<u>Car Parking Refinements</u>	<u>29</u>
<u>6.6</u>	<u>BCA Capability</u>	<u>29</u>
<u>6.7</u>	<u>Social Impact</u>	<u>30</u>
<u>6.8</u>	<u>Soils, Sediment and Erosion Control, and Dust</u>	<u>30</u>
<u>6.9</u>	<u>Structural Design</u>	<u>31</u>
<u>6.10</u>	<u>Ecologically Sustainable Development (ESD)</u>	<u>31</u>
<u>6.11</u>	<u>Cumulative Impacts</u>	<u>31</u>
<u>7.</u>	<u>Conclusion & Justification of Modified Project</u>	<u>32</u>



Tables

<u>Table 4.1</u>	<u>Assessment Matters under Section 4.15(1) of the EP&A Act</u>	14
------------------	---------------------------------------------------------------------	----

Plates

<u>Plate 1.1</u>	<u>Construction Progress of the NSH</u>	2
<u>Plate 3.1</u>	<u>Approved Roof Plan</u>	5
<u>Plate 3.2</u>	<u>Modified Roof Plan</u>	5
<u>Plate 3.3</u>	<u>Approved Hospital East and West Elevations</u>	6
<u>Plate 3.4</u>	<u>Modified Hospital East and West Elevations</u>	6
<u>Plate 3.5</u>	<u>Approved Site Plan</u>	8
<u>Plate 3.6</u>	<u>Proposed Modified Site Plan</u>	8
<u>Plate 3.7</u>	<u>Approved Landscape Masterplan</u>	9
<u>Plate 3.8</u>	<u>Modified Landscape Masterplan</u>	9
<u>Plate 3.9</u>	<u>Approved Multi-deck Carpark East and West Elevations</u>	10
<u>Plate 3.10</u>	<u>Modified Multi-deck Carpark East and West Elevations</u>	10
<u>Plate 6.1</u>	<u>Photomontage of current approved hospital form - north aerial view (source COX)</u>	19
<u>Plate 6.2</u>	<u>Photomontage of modified hospital form - north aerial view (source COX)</u>	19
<u>Plate 6.3</u>	<u>Photomontage of current approved form - view from Dunmore Road (source COX)</u>	19
<u>Plate 6.4</u>	<u>Photomontage of modified built form - view from Dunmore Road (source COX)</u>	19
<u>Plate 6.5</u>	<u>V16 - Bonville Parkway Viewpoint</u>	24
<u>Plate 6.6</u>	<u>V9 - Verge at the Corner of Dunmore and Buckleys Road</u>	24
<u>Plate 6.7</u>	<u>V11 - Dunmore Road Viewpoint</u>	24
<u>Plate 6.8</u>	<u>Approach and Departure Paths for the NSH HLS</u>	26

Appendices

<u>Appendix A Architectural Plans – Mod 2</u>	
<u>Appendix B Landscape Plans – Mod 2</u>	
<u>Appendix C Architectural Design Statement</u>	
<u>Appendix D Engagement and Project Update Newsletter</u>	
<u>Appendix E Aviation Assessment</u>	
<u>Appendix F Acoustic Assessment</u>	
<u>Appendix G Wind and Rotorwash Assessment</u>	
<u>Appendix H Structural Design Statement</u>	
<u>Appendix I BCA Capability Statement</u>	
<u>Appendix J Estimated Development Cost (Provided as Commercial-in-Confidence)</u>	
<u>Appendix K Modified Plan Register</u>	



Statement of Validity

Submission of Environmental Assessment (Modification Report)

Prepared under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act)

Modification Report prepared by:

Name Jacob Sickinger
Qualifications *BUrbanEnvPlan (Hons 1)*, RP+(EIA)
Senior Environmental Planner

Address GeoLINK
PO Box 1446
COFFS HARBOUR NSW 2450

In respect of

Applicant and Land Details

Proponent NSW Health Infrastructure - ABN 89 600 377 397
Subject Site 86 Dunmore Road, Dunmore NSW
Lot and DP Lot 10 DP 1281639
Proposal Summary New Shellharbour Hospital – Modification to Consent and Approved Plans

Environmental Assessment

Modification Report pursuant to Part 4, Section 4.55(1A) of the EP&A Act.

Declaration

I certify that the content of this Modification Report has been prepared in accordance with the requirements of the *Environmental Planning and Assessment Act 1979* and the Regulation 2021, including having due regard for the *State Significant Development Guidelines – Preparing a Modification Report* (DPE 2022).

The Modification Report contains the necessary information that is relevant to the environmental assessment of the proposal, and, to the best of my knowledge, the information contained in this report is not false or misleading.

Signature



Name Jacob Sickinger
REAP (Registered Planner Plus (EIA)) #41561



Executive Summary

Purpose of Report

This report supports a request for a second modification, pursuant to Section 4.55(1A) of Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), to State Significant Development (SSD) consent SSD-57064458 for the New Shellharbour Hospital (NSH) (the Project). This report has been prepared for BESIX Watpac, with Health Infrastructure (HI) being the applicant, in support of the modification request to the Department of Planning, Housing and Infrastructure (DPHI). It identifies the proposed modifications to SSD- 57064458 and assesses the potential associated impacts from the modifications pursuant to section 4.15(1) and Section 4.55(1A) of the EP&A Act.

The Project Site

The approved development is for a new greenfield hospital for the Shellharbour region, known as the New Shellharbour Hospital (NSH) and will be situated at 86 Dunmore Road, Dunmore (Lot 10 DP1281639).

The Project site (Lot 10 DP1281639) is zoned R2 Low Density Residential pursuant to Shellharbour Local Environmental Plan (LEP) 2013. Ancillary external road works within the road reserves of Dunmore Road and Shellharbour Road are on land zoned R2 Low Density Residential and SP2 Classified Road pursuant to the Shellharbour LEP 2013.

The site is located in the north-east suburb of Dunmore, immediately east of the Princes Highway and south coast railway line. It is located near existing and emerging residential land, with single dwellings present on the opposite side of Dunmore Road, and the northern adjoining land earmarked for residential development. There are also semi-rural interfaces, with rural land and extractive industries present to the west across the highway and rail corridor. This context is largely unchanged since the approval of the Project; however, hospital construction is well underway.

The Approved Development

Development consent (SSD-57064458) was granted for *construction and operation of a new seven storey hospital, including landscaping, internal roads and access, at-grade and multi-level car parking, utility/ service connections and supporting infrastructure* under delegation of the Minister for Planning and Public Spaces on 12 August 2024.

Modification 1 was approved on 4 July 2025 for design, carparking and landscaping changes, with a new consolidated consent being issued.

All documents relating to the approval can be found on the project website at <https://www.planningportal.nsw.gov.au/major-projects/projects/new-shellharbour-hospital>

Proposed Modification to SSD-57064458

In summary, this application to modify the approved SSD-57064458 proposes alterations, additions and refinements to the hospital development, including:

- Addition of a rooftop helipad (or Helicopter Landing Surface (HLS)) to the roof of the Hospital, with supporting lift shaft, stair extensions and a lift lobby to support the facility. The rooftop helipad will now be delivered as part of the NSH, providing Illawarra residents with faster access to emergency and critical care when the hospital opens.
- Include the provision of a Safe Assessment Unit (SAU) associated with the emergency department.



- Modify minor details of the multideck car park, distribution of external on-grade parking, and landscape details, including pathways.
- Modify details of privacy fins to Mental Health inpatient rooms (with reduced length) to achieve a balance between privacy and outlook for the benefit of inpatients.

Section 3 of this report provides further description of the proposed modifications. Refer to **Appendix A** and **Appendix B** for the set of modified architectural and landscape plans.

Assessment Summary and Conclusion

The proposed modifications are a result of design progression and the inclusion of additional health services, including the HLS and SAU.

The modifications do not constitute a transformation of the development, and the Project remains substantially the same, being a hospital. The modifications are well integrated into the design and relatively minor in the context of the overall Project and approved built form. The development as modified is generally consistent with the current approval and remains appropriate for the site context.

In summary, modifications complement the overall Project, with the modified scheme maintaining the overarching design quality. It also offers several significant improvements to the scheme, including important clinical services and helicopter transfer capacity.

Potential impacts of the modifications are assessed as being minor on balance. The proposed modifications warrant approval by the Minister for Planning or a delegate.



1. Introduction

1.1 Purpose of this Report

On behalf of BESIX Watpac (the construction contractor) and NSW Health Infrastructure (HI) as the applicant, GeoLINK has been engaged to prepare a Modification Report under Section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) for a modification to the State Significant Development (SSD) consent for the NSH (SSD-57064458).

The purpose of this Modification Report is to describe the proposed modifications and provide an assessment of the relevant matters contained within Sections 4.55(1A) and 4.15(1) of the EP&A Act. The assessment of the proposed modifications includes assessment against the relevant planning provisions applying to the site and any potential environmental impacts and key issues related to the modifications. This report has had regard for the *State Significant Development Guidelines – Preparing a Modification Report* (DPE 2022).

1.2 Existing Consent and Proposed Modification Context

The NSH Project consists of:

- Construction and operation of a new Level 4 hospital to provide the health services required to meet the needs of the Shellharbour and Illawarra region (in conjunction with the other hospitals and community health facilities across the region). The main hospital building is proposed to be up to seven storeys in height, including rooftop plant and lift overrun. The form is integrated into the topography and would step down with the slope of the land, reducing the perceived height when viewed from Dunmore Road.
- Construction of supporting infrastructure required for the NSH, including green space/ landscaping and other amenities, internal roads and access, at-grade and multi-deck car parking, external road upgrades and connections, utility/ services connections, and other supporting infrastructure.

The proposed modifications to the approval are described in **Section 3**.

Given the nature and scope of the proposed modifications, the overall Project Description is to be updated (including the development description in Schedule 1 of Development Consent SSD-57064458) as outlined in **Section 3.3**.

1.3 Cadastral Description

The Site is a single lot located at 86 Dunmore Road, Dunmore NSW. It is legally described as Lot 10 DP1281639 and has an area of 10.56 hectares. Part of the Dunmore Road reserve also forms part of the Site where road upgrades/ access points to the Project Site are proposed (this is not affected by the modification).

1.4 Land Ownership

The Site is owned by the Health Administration Corporation (HAC) and this Modification Application is made by HAC's Health Infrastructure (HI) division.



1.5 Site Context

The Site context remains generally consistent with the description and figures provided originally in the Environmental Impact Statement (EIS) submitted with the SSD application.

1.6 Site Analysis

Although works have progressed on the site (refer to **Plate 1.1**) and this has resulted in landform changes, the overall general site characteristics, constraints, and surrounding environmental context have otherwise not materially changed since approval.



Plate 1.1 Construction Progress of the NSH



2. Strategic Context

The Project's strategic context and justification, including the delivery of improved and vital health services for the Illawarra Shoalhaven Local Health District (ISLHD), and consistency with State and strategic plans/ policies, have not changed since preparation of the EIS.

The modified Project remains consistent with the strategic planning framework. The modified development continues to be consistent with the objectives of the zone (by providing quality and accessible health care services for the community, and to meet the needs of residents) and the permissibility of a health services facility. The design response and development outcomes would continue to be acceptable and aligned with the aims and objectives of key relevant strategic policies as outlined in the EIS.



3. Description of Modifications

3.1 Proposed Changes

In summary, this application to modify the approved SSD-57064458 proposes alterations, additions and refinements to the hospital development, including:

- Addition of a Helicopter Landing Surface (HLS) to the roof of the Hospital, with supporting lift shaft and stair extensions and a lift lobby to support the facility. This inclusion will provide Illawarra residents with faster access to emergency and critical care when the hospital opens.
- Include the provision of a Safe Assessment Unit (SAU) associated with the emergency department.
- Modify minor details of the multideck car park, external on-grade parking, and landscape details, including pathways.
- Modify details of privacy fins to Mental Health inpatient rooms (with reduced length) to achieve a balance between privacy and outlook for the benefit of inpatients.

Cox Architects have provided a list of the changes and the reasons/ benefit for these in their architectural design statement at **Appendix C**. The scope of proposed amendments is outlined below.

3.1.1 Addition of Rooftop Helicopter Landing Surface (HLS) and Hospital Building Envelope Changes

Inclusion of a rooftop helipad (also referred to as a rooftop HLS) will enable the rapid transfer of patients requiring urgent treatment and strengthen the region's emergency response capability. The modification seeks approval for both the construction and operation of the permanent rooftop HLS, which was not included in the original SSD consent.

The modifications for the helipad comprise:

- Inclusion of a rooftop HLS, including HLS deck, walkway and protective (fall from height) safety nets on the eastern wing.
- Relocation and reorientation of rooftop services, plant and fixtures to accommodate HLS approach and departure paths.
- An increase in the elevation of the lift overrun in order to provide vertical transport services for patient transfers and other personnel (and equipment) movements
- A lift foyer/ lobby to facilitate the transfer of patients to and from the gaining or losing hospital department.
- Emergency egress from the HLS deck.
- Changes to the hospital's fresh air intake system to ensure that helicopter exhaust fumes are not ingested into the main building.
- Protective awnings, where deemed necessary, to prevent helicopter main rotor downwash and outwash from causing damage or injury.
- Lighting/ electrical and firefighting services to support safe helicopter operations.
- Tanks and drainage systems for storing liquids (spills, etc) emanating from the HLS.
- Operation of the HLS.

Changes to the hospital building envelope design elements also include:

- Due to the addition of a modest additional storey (primarily for the helipad lift and lobby) the maximum building height has increased from RL 40.040 m AHD to RL 45.800 m AHD (or an effective height 40.800 m when measured from existing ground level (5.00 m AHD taken as lowest

adjacent ground level)). This is measured to the top parapet of the lift overrun but excludes windsock, aerials and light mountings.

- Minor increase in total gross floor area (GFA) from 38,650 m² to 38,819m², to accommodate the changes, primarily resulting from the modest additional floor areas of the SAU and HLS lift lobby additions.
- Modify details of privacy fins to Mental Health inpatient rooms (with reduced length) to achieve a balance between privacy and outlook for the benefit of inpatients.

A comparison of the approved hospital roof plan, and the east and west elevations of the hospital and multi-deck carpark is provided in the Plates below. Refer to the full set of modified architectural plans at **Appendix A** and landscape plans at **Appendix B**.

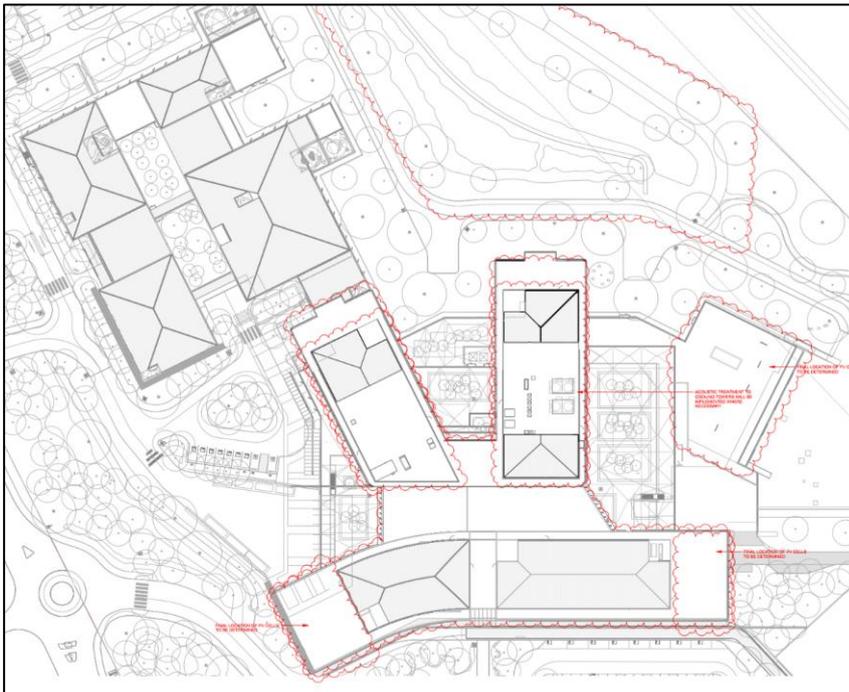


Plate 3.1 Approved Roof Plan

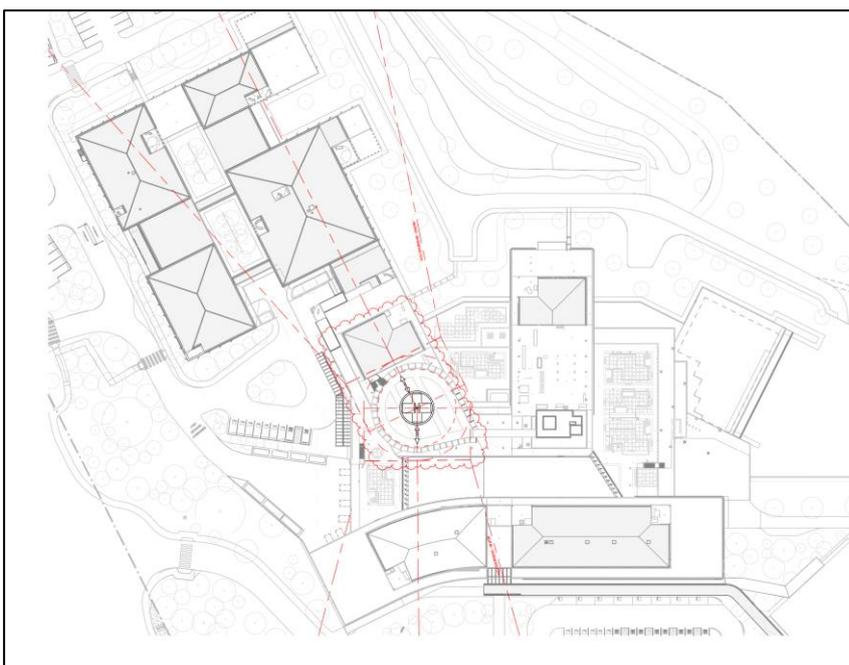


Plate 3.2 Modified Roof Plan



Plate 3.3 Approved Hospital East and West Elevations

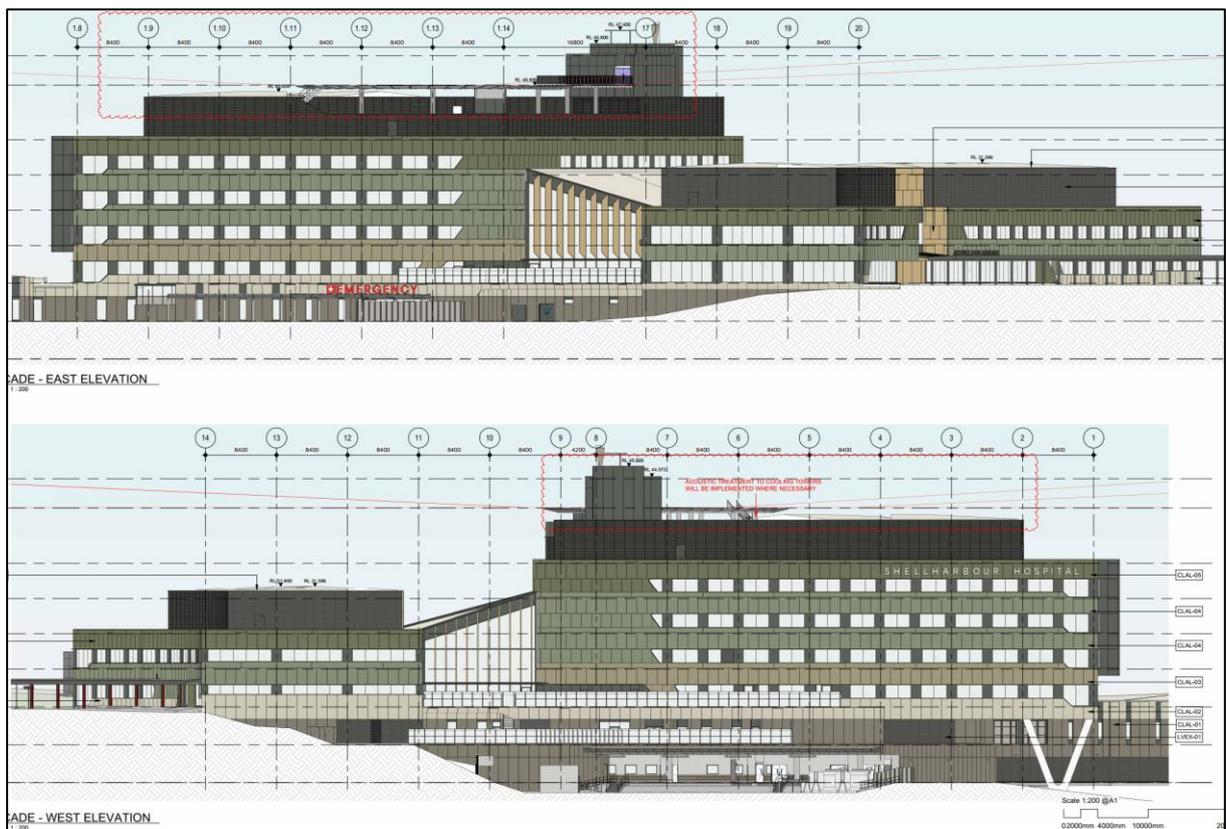


Plate 3.4 Modified Hospital East and West Elevations



3.1.2 Site Planning and Landscape Elements

Minor changes to site planning and ancillary site infrastructure (e.g. pathways and parking) and landscaping includes design refinements to the scheme as follows:

- Minor changes to accessible parking spaces in the southern open carpark, including an increase from 4 accessible spaces to now providing 6;
- Minor changes to allocation of car spaces and improved distribution in each of the open/ at-grade areas, yet maintaining the site total of 1000 spaces between open/ at-grade and multideck carparks.
- Change to alignment of the pedestrian path along Dunmore boundary to achieve continuous accessible gradients between Dunmore Road and the Mental Health entry, and to align the path on the southern sides of the entry roadway; and from the pedestrian pathway from the Dunmore Road bus stop to the entry road crossing.
- Minor associated changes to the pathway outside the Mental Health public entry
- Updates to the pedestrian pathway linking the multideck carpark with the open staff carpark to the west of the site.
- Minor updates to the open landscape and swale/ detention basin, including:
 - Geera Garden: Surface levels have been raised due to placement of fill, improving public accessibility to the upper site area.
 - Northern Carpark: the path from the carpark building into the open carpark has been realigned. Adjacent planter beds have been adjusted to suit this revision.
 - Detention Basin: As part of the approved Modification 1 the detention basin changed to a more rationalised shape. This simplifies the efficiency of the form while maintaining the capacity, function and performance criteria. As part of Modification 2, minor refinements and consistency updates between architectural and landscaping plans have occurred. There is no change to function or performance.
 - Pathways to the Mental Health / Emergency entry have also been realigned to achieve continuous accessible gradients to the Dunmore Road frontage.
- Inclusion of the pathway between the open carpark area to the west and the service road, enabling a future pedestrian connection to the railway.
- Refinement to the pathway through the open car parking to the northeast.
- Inclusion of a minor open step connection from motorcycle parking adjacent to the multideck car park and the circulation road.

A comparison of the approved and modified site plan is provided at **Plate 3.5** and **Plate 3.6**, with landscape masterplan comparisons at **Plate 3.7** and **Plate 3.8**.

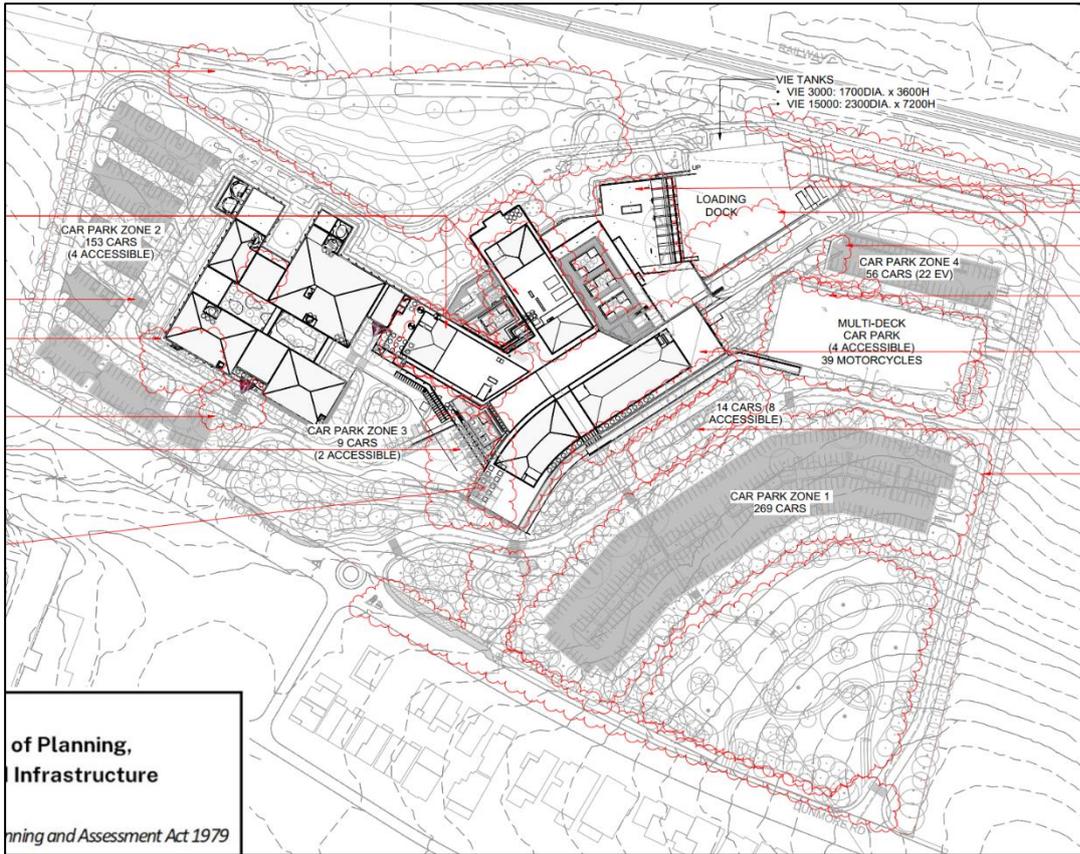


Plate 3.5 Approved Site Plan

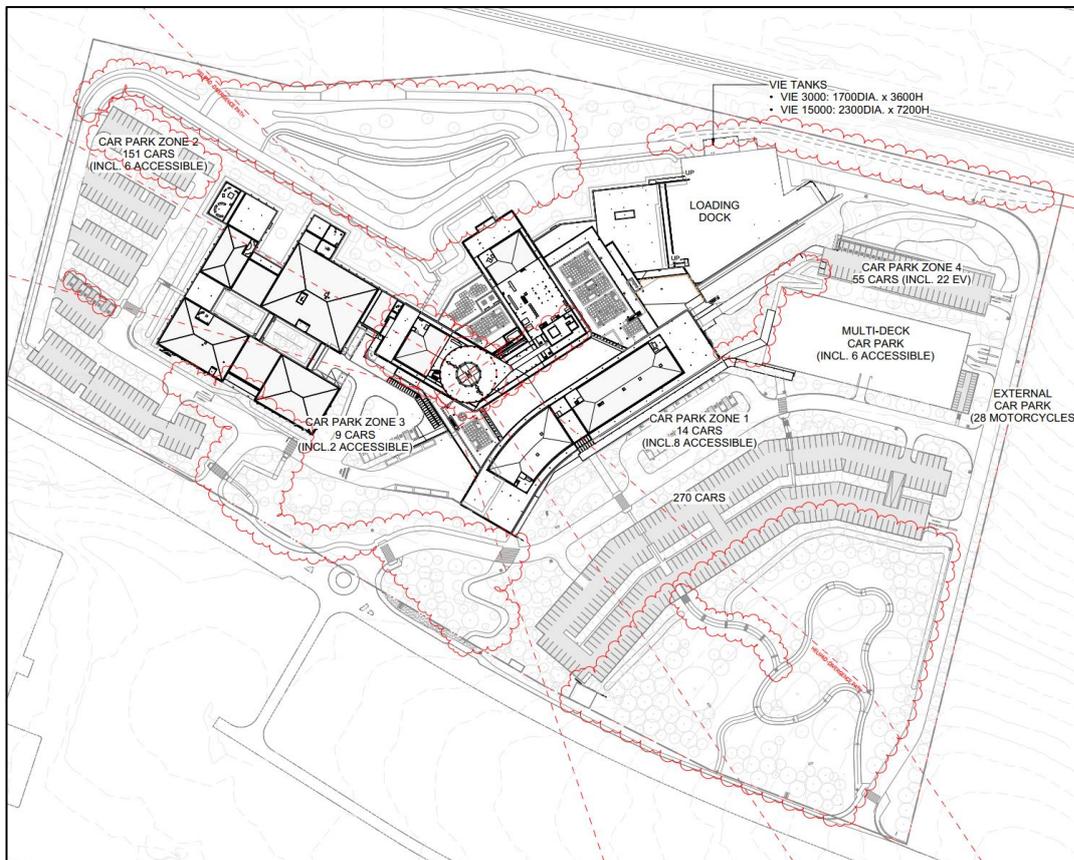


Plate 3.6 Proposed Modified Site Plan



Plate 3.7 Approved Landscape Masterplan



Plate 3.8 Modified Landscape Masterplan



3.1.3 Multi-deck Carpark Changes

Minor changes to the multi-deck carpark have been included to simplify the configuration to:

- Minor reconfigurations and enable construction in staggered flat plates, with lift access to all floor plates (the revision therefore includes a lift overrun, within the building height increased from RL 32.15m AHD to a new maximum RL of 33.950m AHD).
- Preserve capacity for future expansion, if required to suit the hospitals services.
- Include an updated façade treatment, using similar colour tones.

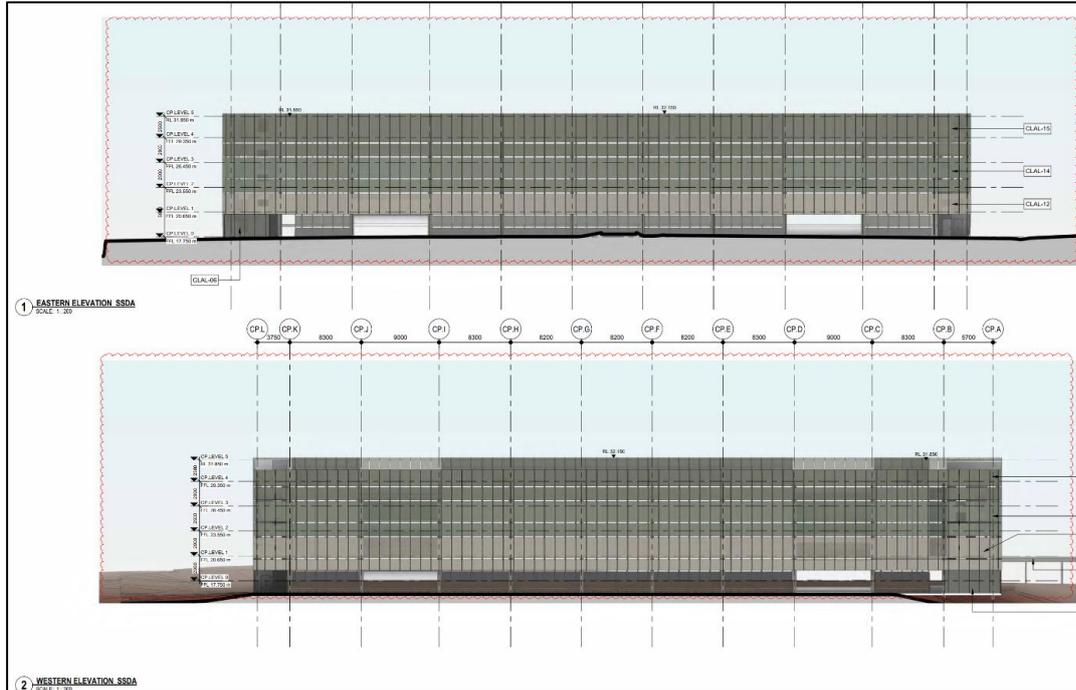


Plate 3.9 Approved Multi-deck Carpark East and West Elevations

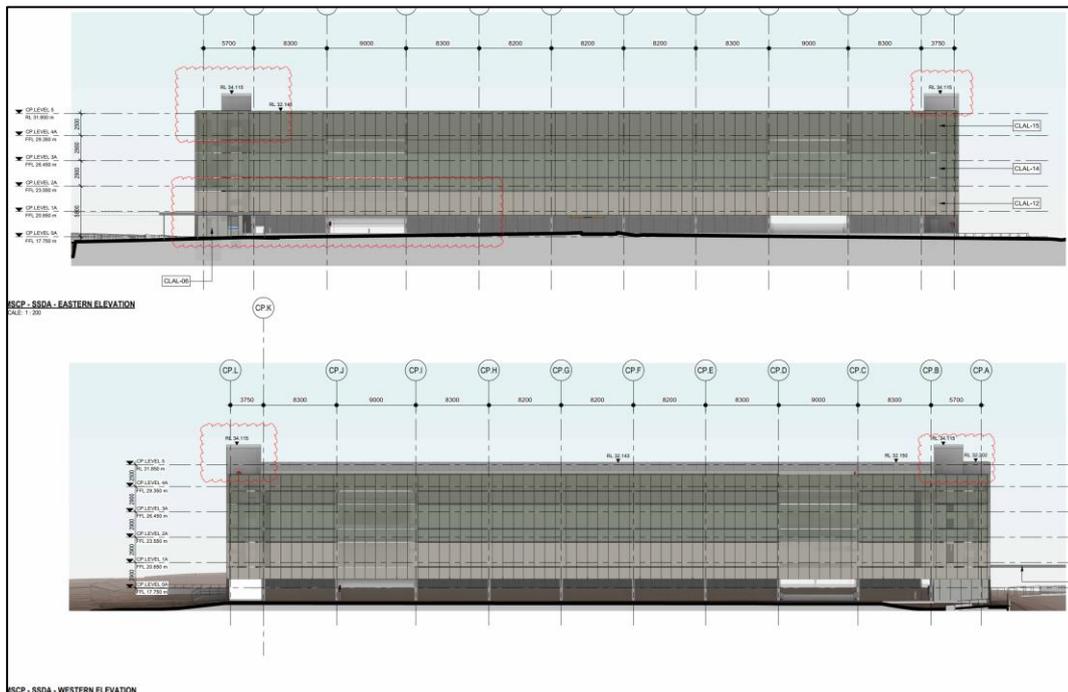


Plate 3.10 Modified Multi-deck Carpark East and West Elevations



3.2 Schedule of Plan Revisions

A set of the relevant amended plans showing the above-described proposed modifications is included with this Modification Report at **Appendix A** (architectural) and **Appendix B** (Landscape), along with a list of the modified plans that would supersede the corresponding currently approved plans.

Appendix K provides an updated register/ list of the modified plans (including numbers and title) that would supersede the currently approved plans.

3.3 Updated Project Description

Given the nature and scope of the proposed modifications, the overall Project Description is to be updated (including the development description in Schedule 1 of Development Consent SSD-57064458). The following outlines the existing and a suggested modified description for the consent.

The existing development description at Schedule 1 of the Development Consent reads:

- *Construction and operation of a new seven storey hospital, including landscaping, internal roads and access, at-grade and multi-level car parking, utility/service connections and supporting infrastructure.*

The following is a suggested modified Development Description for inclusion at Schedule 1 of the modified Development Consent:

- Construction and operation of a new eight storey hospital, including rooftop helicopter landing surface, landscaping, internal roads and access, at-grade and multi-level car parking, utility/service connections and supporting infrastructure.

3.4 Construction Staging

An updated staging plan (as per existing conditions of consent) will be provided post approval of the modification to account for the inclusion of the helipad, SAU, and relevant design/ built form changes.

3.5 Estimated Development Cost

MBM has provided an independent and objective calculation of the Estimated Development Cost of the modified development proposal, involving the construction of a new Safe Assessment Unit, helipad, and lift lobby, including a bridge link connection, and the extension of the lift shafts to service one additional floor.

The Estimated Development Cost report has been provided to the Department as commercial-in-confidence.



4. Statutory Planning Context

4.1 Consistency with Existing Approvals

The proposed modifications occur within the R2 Low Density Residential Zone under the Shellharbour LEP 2013. The proposed modifications remain permissible with consent and consistent with the objectives of the zone.

4.1.1 Consistency with SSD-57064458 Conditions of Consent

The proposed modifications are not inconsistent, nor do they conflict, with any conditions of the SSD-57064458 consent.

Condition A2(d) (the list of approved plans) will require updating to reflect the modified set of plans. The modified plan register for this purpose is provided in **Appendix K**.

As outlined in **Section 6.2.2.2**, an additional condition of consent should be applied to the modified consent requiring preparation of a helicopter wind management plan. The plan is to respond to the relevant recommendations of the *Shellharbour Hospital – Helicopter operations and general wind advice* prepared by CPP Wind Engineering Consultants (dated 23 September 2025).

4.2 Section 4.55 of EP&A Act - Modification of Consents

Modification of development consent SSD-57064458 is sought pursuant to Section 4.55(1A) of the EP&A Act. The following sections address the relevant statutory context and compliance matters applicable to the Modified Project.

This modification would not result in a transformation of the development. The development remains substantially the same and continues to be for the purpose of a health services facility, with supporting infrastructure. The modification can reasonably be defined as being of minimal environmental impact, as evidenced by the nature of the proposed changes and the impact assessment undertaken. As such, the proposal reasonably falls within the provisions of Section 4.55(1A) of the EP&A Act. An assessment against the relevant provisions of Section 4.55(1A) is provided below.

Subsection 1A

“(1A) Modifications involving minimal environmental impact

A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if:

Subsection 1A(a)

(a) It is satisfied that the proposed modification is of minimal environmental impact, and”

Comment: as outlined in **Section 6**, the proposed modification involves a range of relatively modest and minimal-impact alterations to the approved development. There is no new significant disturbance outside of the approved development footprint. The potential environmental impacts of the proposed modifications, which include the addition of the rooftop helipad and lift overruns/ lobbies, etc, plus a range of minor refinements and rearrangements, are minimal.



Whilst a number of changes are made to the built form, the proposed modifications would not result in any significant change to the scale of the development, its appearance, nor be detrimental to visual or environmental amenity. Whilst noise associated with helicopter movements would be introduced, the frequency and duration are limited, and overall, the modified proposal does not introduce any significant new or altered adverse environmental impacts. The modified proposal continues to achieve a quality and acceptable development outcome.

Subsection 1A(b)

(b) "It is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all), and,

Comment: The proposed development remains substantially the same development that was originally approved. This is evidenced in that:

- It retains the same use/ development as approved, providing for a health services facility on suitable land.
- The overall predominant layout, building form and function of the development remain substantially comparable.
- The public health benefits and provision of complementary infrastructure/ services, delivered by the development, remain positive and acceptable.
- The overall environmental impacts are not significantly different compared to the approved development. There would be no significant additional or altered environmental impacts due to the modifications.

Subsection 1A(c)

(c) "It has notified the application in accordance with:

(i) The regulations, if the regulations so require, or

(ii) A development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and,"

Comment: Notification of this modification would be subject to the Department's discretion. The proposed modifications are relatively minor and of minimal environmental impact in the context of the overall approved development, with the addition of the rooftop helipad and introduction of these complementary emergency health services being the main change. However, generally these changes are well setback from the site boundaries, on balance result in positive refinements/ additions, and are complementary to the development. No adverse impacts are expected.

Subsection 1A(d)

(d) It has considered any submission made concerning the proposed modification within any period prescribed by the regulations or provided by the development control plan, as the case may be.

Comment: Given the community engagement that has occurred and that the proposed changes are not expected to significantly alter impacts associated with the development, it is anticipated that no submissions would be received. Nonetheless, if submissions were received, they would be considered as required. No significant agency, Council, or public concern is expected given the nature/ scale of changes and justification provided, along with the overall community support for the addition of emergency helicopter services as expressed during the original development application process.

Subsection 3



“(3) In determining an application for modification of a consent under this section, the consent authority must take into consideration such of the matters referred to in Section 4.15(1) as are of relevance to the development of the subject application. The consent authority must also take into consideration the reasons given by the consent authority for the grant of the consent that is sought to be modified:

Comment: According to Section 4.55(3), the consent authority must take into consideration the relevant matters under Section 4.15(1) of the EP&A Act related to the modification application. The matters for consideration under Section 4.15(1) of the EP&A Act have been considered and are addressed in **Table 4.1** below. Overall, the modification would not alter the development’s compliance with relevant planning instruments.

Table 4.1 Assessment Matters under Section 4.15(1) of the EP&A Act

Section 4.15 ‘Matters for Consideration - general’	Complies	Comment
Section 4.15 (1)(a)(i) – Provisions of any environmental planning instrument	Yes	As detailed in this report, the proposed modifications are consistent with the applicable planning framework and do not alter the previous assessment of the development against the applicable environmental planning instruments, including the LEP and State Environmental Planning Policies (SEPPs) as outlined further below. The building heights have moderately increased to accommodate the additions; however, height is not restricted for this project under the LEP and the proposal continues to have appropriate regard for the objectives of Section 4.3 of the LEP (Height of Buildings), Section 5.6 (Architectural Roof Features), and general amenity.
Section 4.15(1)(a)(ii) – Provisions of any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority	Yes	There are no proposed instruments applicable to the site or modification that need consideration.
Section 4.15(1)(a)(iii) – Provisions of any development control plan	Yes	Being SSD, DCPs are not directly applicable to the Project, however, can be used as a general guide. Notwithstanding the applicability to SSD, the proposed modifications are not inconsistent with the Shellharbour DCP 2017 or the original assessment and approval.
Section 4.15(1)(a)(iiia) – Provisions of any planning agreement that has been entered into under section 7.4 , or any draft planning agreement that a developer has offered to enter into under section 7.4, and	N/A	There are no planning agreements relevant to the approved development, or the development as modified.
Section 4.15(1)(a)(iv) – Provisions of the regulations	Yes	The proposed modification is consistent with the EP&A Regulation 2021.
Section 4.15(1)(b) – The likely impacts of the proposed development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	Yes	As per the assessment and evaluation of merits in this report (Section 6 and supporting appendices), the proposed modifications are not expected to result in any significant additional environmental impacts. The modification application is reasonable and acceptable.
Section 4.15(1)(c) – Suitability of the site for the development	Yes	The proposed modifications would have no material impact/ influence on the suitability of the site. The site



Section 4.15 'Matters for Consideration - general'	Complies	Comment
		remains suitable for the proposed development, inclusive of the HLS.
Section 4.15(1)(d) – Any submissions made in accordance with this Act or the regulations,	Yes	If any submissions are received, these would be considered by DPHI as required. Given the nature of the modification and impacts, no significant impacts are expected, and the changes are complementary to the project and health services.
Section 4.15(1)(e) – The public interest	Yes	The proposed modifications are in the public interest as they support the addition of emergency helicopter services (which was previously supported/ requested during the original community engagement) and result in appropriate refinements of this important health facility. The development, as modified, remains consistent with the relevant objectives of the land use zone. It enables reasonable additions and adjustments to the development to achieve the desired outcomes. The modifications are consistent with the public interest.

4.3 State Environmental Planning Policies

The assessment and conclusions made in the EIS against relevant State Environmental Planning Policies (SEPPs) are not altered by the proposed modifications.

State Environmental Planning Policy (Transport and Infrastructure) 2021 was recently amended and includes changes to Division 10 Health Services Facilities. These changes enable a greater scope of health facility related development by and on behalf of public authorities to be carried out without development consent. These changes relate to development permitted without consent proposed within the boundaries of existing health facilities and proposal not involving more than 30,000m² of gross floor. Therefore, they do not apply to the site/ proposal. The provisions relating to development permitted without consent for new health facilities do not apply as the criteria are not met.

Alignment with relevant SEPPs is maintained.

4.4 Local Planning Controls

4.4.1 Shellharbour Environmental Plan 2013

The proposed modifications do not alter the overall assessment and conclusions made in the EIS against the LEP and relevant local planning provisions. Whilst height is not restricted for this project, the changes to building heights and roof forms in particular (as described in Section 3.1), continue to have appropriate regard for the objectives of Section 4.3 of the LEP (Height of Buildings), Section 5.6 (Architectural Roof Features), and general amenity.

The floor space ratio of the development, based on a site area of 10.56ha and modified GFA of 38,819m², has slightly increased from 0.366:1 to approximately 0.368:1, and continues to remain under/ compliant with the standard (0.5:1) for the site.



4.5 Environmental Protection and Biodiversity Conservation Act 1999 (Cth)

The proposed modifications do not change the considerations relevant to Matters of National Environmental Significance (MNES) and Commonwealth land, and the modifications to the Project would be consistent with the assessment's original findings (i.e. no significant impacts are likely).

As no significant impact to MNES is expected in relation to approval of the proposed modifications, referral to the Australian Government Department of Climate Change, Energy, the Environment and Water is not required.



5. Engagement

In developing the revised and enhanced scheme, the design team, with BESIX Watpac as appointed Main Works Contractor and HI as proponent, have consulted with NSW Health Infrastructure's Design Assurance Group, comprising expertise across architecture, engineering and other disciplines (including HI Planning), to ensure consistency and alignment across the HI Capital Works Portfolio.

The NSH project continues to include ongoing community consultation and updates. As part of this and to inform the community of the proposed rooftop HLS, a project newsletter (refer to **Appendix D**) which incorporated this announcement, was distributed on 3 September 2025. This newsletter was distributed to a broader catchment area than the standard work notifications/ 'Meet the Builder' notice, and close to 450 properties received the newsletter.

The announcement and project newsletter were also posted on the project website. An information session was held at the new Shellharbour Hospital site offices on Wednesday, 10 September 2025, at 4:00 pm, offering the community an opportunity to learn more about the helipad and project generally.

The NSW Health Minister also visited the site and announced there would be a helipad included on 22.08.2025. This was reported in several news outlets including Illawarra Mercury and WIN News (refer to **Appendix D** for copies of public media information).

HI Comms has advised that no complaints or issues were received via the project email address regarding the helipad addition.

It is also understood from the community engagement and Social Impact Assessment (SIA) carried out during the original EIS preparation that there was concern expressed about not including a helipad at the new hospital. Hence, this feedback suggested there was general desire/ support within the community to include a helipad. This modification therefore positively responds to this.

5.1.1 Aviation Related Consultation

AviPro has prepared an aviation assessment for the proposal (refer to **Appendix E**) and has consulted with the following organisations with no reportable feedback:

- Shellharbour Airport,
- NSW Ambulance aeromedical operations,
- Toll Helicopters (contracted helicopter operator), and
- Civil Aviation and Safety Authority (CASA).

AviPro will further engage with the following organisations as appropriate to facilitate inclusion of the helipad into the hospital design and build:

- Shellharbour Airport,
- CASA,
- Health Infrastructure (Program Management),
- Savills (Project Management),
- NSW Ambulance aeromedical operations, and
- Toll Helicopters (contracted helicopter operator).



6. Assessment of Impacts

This section provides an assessment of the relevant environmental considerations applicable to the proposed modification.

6.1 Built Form, Urban Design, and Landscaping

Cox Architects have provided a design statement and list of building changes, including the rationale behind these, at **Appendix C**.

The inclusion of the Helipad and associated infrastructure/forms has been considered with careful regard to:

- Direct access via clinical lift core from the high acuity departments below.
- Minimised impact in building height and built form through consideration of placement, architectural detailing and mitigation of wind/ turbulence around the landing surface.
- Mitigation of acoustic and downwash aspects on the building form.

The inclusion of a SAU at Level 01 is a four (4) bed unit within the Emergency Department for assessment of high-risk patients. The inclusion of this unit requires a moderate expansion of the Level 01 floorplate but is within the envelope of the upper inpatient levels above this floor. Inclusion of this unit requires a small increase in floor space.

Modification to privacy fins to the mental health inpatient windows has occurred. The length of these fins as shade/ privacy devices on the mental health facades have been shortened to afford a greater outlook to mental health inpatient rooms.

The multideck car park has been simplified in configuration to:

- Enable construction in staggered flat plates, with lift access to all floor plates;
- Preserve capacity for future expansion, if required to suit the hospitals services;
- Include an updated façade treatment.

An improved distribution of car spaces has been achieved within the site total of 1000 car spaces.

The changes also enable optimising carparking distribution and minor site layout/ landscaping refinements, including pedestrian connectivity within the site.

A comparison of architectural renders/ photomontages is provided below, demonstrated that the overall form and appearance remain well resolved, with the original design intent and approach being carried through.



Plate 6.1 Photomontage of current approved hospital form - north aerial view (source COX)



Plate 6.2 Photomontage of modified hospital form - north aerial view (source COX)



Plate 6.3 Photomontage of current approved form - view from Dunmore Road (source COX)



Plate 6.4 Photomontage of modified built form - view from Dunmore Road (source COX)



Overall, the built form of the hospital development and associated infrastructure, as modified, would be, on balance, perceived as comparable to the approved version, with the main upper level changes being notable but well integrated into the form.

The changes to the built form maintain the overall design philosophy and quality. They effectively integrate into the approved built form, layout, character/ purpose, and associated urban design and landscaping response. The modifications are appropriate and align with the design principles and outcomes of the approved version, whilst enabling enhancements to the health service offering through the provision of the helipad and SAU.

The limited changes to the façade and carparking arrangements maintain appropriate and inconsequential. The general landscaping and pathway changes are also inconsequential but enable appropriate refinements.

In summary, it is proposed modification maintains overarching design quality and continues to be an acceptable design outcome for the site and new health services facility.

6.2 Environmental Amenity and Visual Impact

Environmental amenity considerations relevant to the proposed modifications are addressed in the following subsections. No other environmental amenity matters would be materially affected.

6.2.1 Environmental Amenity

An assessment of environmental amenity and key factors that influence the quality of amenity, particularly for residential receivers and users of the facility, was included in the EIS. This found that overall, no significant detriment to environmental amenity based on the factors considered, including surrounding residential land uses, is expected. The modifications, including the addition of the helipad and other various minor alterations/ refinements, continue to appropriately respond to maintaining acceptable environmental amenity.

6.2.2 Wind and Rotorwash

CPP Wind Engineering Consultants (CPP) have assessed the potential impact of helicopter rotorwash on the ground plane and elevated accessible terraces of the New Shellharbour Hospital from helicopters approaching the rooftop helipad (refer to **Appendix G** for the full report).

The design of the NSH includes a rooftop helipad and several rooftop accessible areas, along with the preferred helicopter operational flight paths. There are also elevated terraces with direct exposure to the sky.

The information in this assessment considered operations along any flight path to the helipad. The height of the helicopter above the site level is the critical dimension for incident wind speed. Helicopter rotorwash causes a jet of air moving perpendicular to the rotor plane.

The gust wind speed caused by the helicopter rotorwash at a specific location reaches its peak in less than a second. Compared with natural wind, the wind shear created by the rotorwash with a large vertical component causes a greater risk of pedestrian instability and material transport.

Primary controls that are used in the assessment of how wind affects pedestrians are the wind speed and the rate of change of wind speed. There are no specific criteria for helicopter rotorwash.

As helicopter operations are infrequent, it is considered that any rotorwash assessment criterion should be based on pedestrian and patient safety.



The expected peak rotorwash wind speed at the main entrances, and closest point to the helipad on the elevated terraces are presented in Table 2 of the CPP report.

The peak rotorwash gust wind speeds near the main (hospital) entrances would be noticeable but are not considered a significant safety hazard to patients or pedestrians. The typical natural gust wind speed used for pedestrian safety is 23 m/s, which would result in about seven times the force associated with the fastest speed near entrances (presented in Table 2 of the CPP report).

The peak wind speed on the elevated terraces close to the helipad exceeds the patient criterion, with the Level 5 terrace exceeding the pedestrian criterion.

Landing operations are more important than take-offs as the helicopter is closer to the accessible surfaces. As the helicopter approach paths are not fixed, and there is no known agreement with pilots not to use certain approaches, it has to be considered that helicopters could approach from any direction.

On the ground plane, all elevated terraces on Level 1, and the northern terrace on Level 2, L2T2 Figure 2, meet the patient rotorwash criterion wind speed of 10 m/s. Exceedance of the patient rotorwash criterion occurs for the Level 2 terraces close to the helipad and all higher terraces, with the Level 5 terrace exceeding the pedestrian rotorwash criterion.

The CPP report outlines that for access to the elevated terraces, exceeding the rotorwash criteria would require a management plan during helicopter operations. This would have to actively control pedestrian access to the affected areas during helicopter operations. Alternatively, helicopters could approach at a steeper angle when operating over the Level 2 terraces. Greater coverage of the Level 4 and 5 terraces would be required to ensure protection to users. HI would therefore prepare a management plan prior to operation, and it is understood at this stage that the terraces would not have uninterrupted access. i.e the access to the terraces would be restricted when a helicopter arrives / departs and the management plan would outline measures and protocols for this.

To quantify the qualitative advice provided in this report, physical or numerical modelling would be required.

An assessment of potential rotorwash impacts from helicopter operations indicates that wind forces generated by rotorwash are generally lower than natural design wind speeds. However, certain fixtures and fittings—particularly unsecured or lightweight elements—may still be affected.

Key considerations include:

- Structural elements enclosed on four sides without a roof may experience outward loading from rotorwash.
- Lightweight or partially secured items (e.g. roof flashings, loose furniture, planters, rubbish bins) should be fixed or stored during helicopter operations.
- Loose materials such as mulch or small stones should be avoided or treated (e.g. covered or bound) to prevent displacement.
- Higher levels (particularly Levels 4–7) are more exposed, requiring management to ensure no loose materials or tools are left unsecured.
- Loose-laid pavers are not expected to be affected.

Overall, a helicopter management plan would be prepared and implemented to manage access and ensure all rooftop and terrace items are secured and appropriately designed to withstand rotorwash effects.

Some mechanical plant louvred sections and rooftop exhausts are located adjacent to preferred flight paths. The greatest potential for aviation fuel odours ingress to the plant intakes would be for the preferred flight path from the east landing into a headwind from the west. Operations from this



direction would direct aviation fuel odours towards the louvres on the west face of the southern Level 4 plant room.

A quantitative assessment of building-induced turbulence was conducted and reported in CPP (2023) and concluded that turbulence effects are generally minor relative to the helicopter size. Since this testing, the only difference to the building geometry is that the helipad has dropped in height by about 2.5 m. The decrease in height has increased the rotorwash speed on terrace levels and reduced the operating height of the helicopter relative to the building. The greatest effect would occur with south-west winds over the plant room with porous walls and a free roof covering the space. Despite this change, the previous report's conclusions regarding building-induced turbulence are still considered valid.

Aeroacoustic noise from the building comprises two types: broad-band (general wind noise) and tonal (single-frequency whistling).

- Broad-band noise is generated by flow over sharp-edged vertical elements. Noise levels are primarily influenced by the number of such elements rather than detailed façade design, and full-scale testing is generally unnecessary.
- Tonal (narrow-band) noise can arise from vortex shedding, flow through gaps or slots, and resonant effects in perforated or plate elements. Façade inspection indicates minimal risk for tonal noise, as mechanical louvres are horizontal and façade elements are unlikely to create significant resonance.

Mitigation measures for aeroacoustic noise include:

- Avoiding uniform perforated patterns or excessive porosity (<20%), using punched rather than laser-cut holes, varying hole shapes and sizes, and integrating irregular designs or artwork.
- Reducing plate resonance through allowance for movement or incorporating damping materials in mounting (e.g., neoprene washers).

Overall, the building's design is expected to have a low aeroacoustic noise risk, with further mitigation achievable through façade detailing.

6.2.2.1 Summary of Recommendations

A desktop assessment of the rotorwash impacts on accessible areas has been conducted, which will be superseded by the numerical modelling that models the interaction of the rotorwash with the building massing as part of detailed design. Strong rotorwash conditions would only occur for certain flight paths, however, these are at the discretion of the pilot depending on the flight conditions.

1. It is recommended that a helicopter wind management plan be developed for the publicly accessible terraces close to the helipad (L2T1 and L2T3), as wind speeds on these terraces exceed the patient criterion and would be problematic for people with large items, such as prams.
2. It is recommended that a helicopter wind management plan be developed for the elevated patient terraces (L4T1 and L5T1) as the wind speed on these terraces exceeds the patient and pedestrian criteria. Unless knowledge of the flight paths are known, it is recommended that the terraces not be used during helicopter operations.
3. The wind conditions on the ground plane for shallower approach angles approach the patient criterion. The interaction of the flow with the building has the potential to increase the local wind speed. Wind conditions on the ground plane would improve if helicopters were to approach at a steeper angle. It would be beneficial during the commissioning of the helipad to measure wind conditions at various locations around the site to inform any helicopter wind management plan.
4. All fixtures and fittings on the Level 4 and 5 terraces, such as seats, equipment, and planters, should be fixed. If lightweight items cannot be secured, there should be a wind management plan to ensure they are suitably located during helicopter operations. The wind speeds on Levels 1 and



2 would be sufficient to displace lightweight elements such as large, wheeled rubbish bins, and any such item should be secured. Close to the building, rubbish and loose items would be displaced by the rotorwash outflow on all levels.

5. Loose landscaping items such as mulch or small stones are not recommended on the terraces. Large lightweight mulch will be displaced at a wind speed of about 5 m/s, and small stones at about 15 m/s. Such products should be covered with a suitable mesh or coated with a binding agent to avoid transportation.
6. A helicopter wind management plan should be developed for maintenance access to Levels 4-7 to avoid loose materials or tools being left unattended and unsecured.
7. There is potential for aviation fuel odour to be experienced outside during operations and at air intake locations. This will be quantified in the numerical modelling report and could be addressed with relocation or filtering at the inlet locations.

6.2.2.2 Mitigation Measures

The following measures would respond to the above seven recommendations (in corresponding order):

1. Management plan to be developed by ISLHD with assistance from project team.
2. Management plan to be developed by ISLHD with assistance from project team.
3. To be carried out during handover/commissioning phase and outcomes coordinated within final management plan.
4. All loose items to be secured where possible, remaining items (rubbish etc.) will be addressed in the management plan.
5. Recommendations will be coordinated with final selections of landscape materials.
6. Management plan to be developed by ISLHD with assistance from project team.
7. This has been taken into account with the final mechanical design of the building.

On this basis, a helicopter wind management plan would be prepared prior to operation. The plan is to respond to the relevant recommendations of the *Shellharbour Hospital – Helicopter operations and general wind advice* prepared by CPP Wind Engineering Consultants (dated 23 September 2025). A condition of the modified consent can facilitate this.

6.2.3 Visual Impact

The previous method and established viewpoints of the NSH - Visual Impact Assessment (VIA) report prepared by Architectus have been reviewed and updated by COX+STH architects to inform this modification (refer to the visual impact analysis provided in the architectural design statement at **Appendix C**). This updated analysis reflects:

- The inclusion of the helipad and associated raised roof form is included in this proposal.
- Slight modifications to the landscape form at the top northeastern corner of the site (the Geera Gardens) area, where the landform change is marginally visible;
- The proposed inclusion of the SAU unit at Level 1 is not visible within the established important external views into the site.

Each view has been revised using original images and calibrated model overlays as originally prepared by COX+STH.

The initial version of each view provided in the analysis represents the overall massing of the modified proposal. The second version includes a masking region in green to demonstrate the additional visible massing beyond this mask (green mask represents the original massing). Some of these key viewpoint images are provided below; however, refer to the visual impact analysis provided in the architectural design statement at **Appendix C** for all images.



Plate 6.5 V16 - Bonville Parkway Viewpoint



Plate 6.6 V9 - Verge at the Corner of Dunmore and Buckleys Road



Plate 6.7 V11 - Dunmore Road Viewpoint



In general, the analysis demonstrates that the proposed modifications result in only a minor increase in view impact due to the inclusion of the helipad and increased roof form, and there is not substantial change to the visual impact rating of any viewpoint.

Whilst there are a number of changes that will influence visual aspects of the proposal, including a modest increase in height and additional massing, the proposed modifications are well integrated into the overall hospital design. The changes do not significantly alter the overall design strategy or principles that underpin the approved design. The changes are not likely to be perceived as a substantial or detrimental change, particularly from a distance or from surrounding properties.

The increase in building height is relatively minor in the context of the approved development and the hospital's scale and siting. The new uppermost level comprises the helipad and lift/ lobby are recessed, constrained in size, and the overall form retains good articulation. The design remains well integrated into the overall massing. The scale and appearance would continue to be appropriately distributed and broken up to minimise bulk and visual impacts. The increased height would result in some additional visual impact, but the scale of this is restrained and not dominating.

Past the bulk and massing of the proposal and main hospital building helipad addition, the refinements to the building, parking, and landscaping are minor and complementary improvements.

The comprehensive landscaping and future canopy cover would support the site's visual amenity and experience.

Overall, the proposed modifications do not amount to a significant or unreasonable additional visual impact from surrounding public or private viewpoints and are acceptable.

6.3 Aviation

AviPro has prepared an aviation assessment for the proposed modification to include a helipad/ HLS (refer to **Appendix E**).

This assessment was prepared by AviPro on behalf of HI to address aviation considerations associated with the proposed rooftop HLS for the New Shellharbour Hospital.

The decision whether or not to have an HLS at all is a clinical decision, not an aviation decision (unless it was considered unsafe from an aviation perspective). The HLS is required to support emergency medical transfers—averaging an estimate of around three patient transfers per month—and will form an important component of the hospital's clinical operations.

6.3.1 Key Issues and Assessment

Airspace and Safety Compliance:

The proposed HLS is located outside controlled or restricted airspace and clear of the Shellharbour (Albion Park) Aerodrome Obstacle Limitation Surfaces. Assessments confirm no conflict with flight paths or aviation safety zones, and no infringement of protected airspace. CASA confirmed in October 2024 that construction cranes would not pose a hazard to aircraft operations.

Design and Operations:

The rooftop HLS will comply with CASA Advisory Circular 139R-01 and NSW Health Guideline GL2020_014 for hospital helicopter landing sites. The design incorporates a touchdown and lift-off area (TLOF), safety nets, lighting, drainage, firefighting systems, and adjustments to rooftop services to manage downwash and exhaust impacts.



Approach and Departure Paths:

Two Visual Flight Rules (VFR) paths are proposed—northeast and south-southwest (as shown in **Plate 6.8**)—selected to align with prevailing winds and avoid sensitive areas, tall structures, and populated zones. A LiDAR analysis confirmed these paths achieve the required 2.6° obstacle-free gradient.



Plate 6.8 Approach and Departure Paths for the NSH HLS

Environmental and Amenity Impacts:

- Noise: Acoustic modelling (refer to the acoustic assessment by PWNA at **Section 6.4** and **Appendix F**) found the HLS to be acoustically acceptable. Flight activity is low (estimated at around three arrivals and departures per month), resulting in minimal cumulative noise impact.
- Lighting: HLS lighting will be limited to operational use for safety purposes, with minimal visibility from surrounding areas.
- Rotor Downwash: Engineering assessments confirm no adverse downwash effects on nearby structures or occupants.
- Ecological and Cultural Values: No sensitive environmental or cultural areas would be affected by helicopter operations.

Contamination and Drainage

Although Section 4.4 of the Aviation Report states 'If there was a fuel leak of any sort from the helicopter, the installation of the fuel/water separator will mitigate the contamination risk', no refuelling or maintenance will occur at the helipad or anywhere on the site, significantly reducing any potential contamination risk. Runoff from the deck will be managed through sloped drainage and spill containment systems and in the event that any leak occurs while the helicopter is on the helipad, suitable flame trap/collection pit has been detailed at helipad level as a collection point. No further specific mitigation is required.

Construction Cranage

Construction cranes will be fitted with aviation obstacle lighting in accordance with CASA Regulation 139.165 to ensure safety during construction.



Consultation

Consultation was undertaken with Shellharbour Airport, NSW Ambulance, Toll Helicopters, and CASA, with no issues raised. Ongoing consultation with these parties and project management teams is proposed during detailed design and commissioning.

6.3.2 Conclusion

The proposed rooftop HLS is appropriately designed and compliant with all relevant aviation safety and design standards. The aviation assessment concludes that:

- The HLS and associated operations pose no unacceptable impact on airspace, safety, or amenity.
- Approach and departure paths are appropriate and operationally efficient.
- The design meets CASA and NSW Health requirements for hospital HLS facilities.
- Environmental and acoustic impacts are expected to be minimal and manageable.

Overall, the Aviation Assessment supports the inclusion and operation of the rooftop HLS for the New Shellharbour Hospital.

6.4 Acoustic Assessment

An acoustic assessment was previously undertaken as part of the EIS submission by Stantec.

The proposed modifications involve changes to the built form, plant, landscaping, and carparking layouts. As part of this modification assessment, Pulse White Noise Acoustics Pty Ltd (PWNA) have reviewed the changes and provided an acoustic assessment (refer to **Appendix F**).

In addition to the unattended and attended noise survey undertaken by Stantec previously, PWNA also conducted an additional acoustic survey to verify the adopted levels. There are no proposed amendments to the previously established acoustic criteria.

6.4.1 Helicopter Impacts – Surrounding Neighbours

In Australia, Australian Standard AS 2021:2015 is the guideline used to determine the average daily noise exposure of aircraft noise. An ANEF number is a single derived number that is calculated using the following inputs:

- Ratio of aircraft movements by day and by night.
- Forecast frequency of aircraft movements on flight paths (i.e. take-off, landing, or touch and go).
- Daily average number of events with a correction for evening and night, when people are most sensitive to noise.

This assessment/ methodology does not represent the HLS associated with a hospital well, nor can be accurately determined as the majority of movements are medical emergencies and cannot be determined/ known at any time.

A review of the NSW EPA Noise Policy for Industry (NPI) 2017, noise associated with transportation corridors (such as air corridors) is not covered by the policy.

Notwithstanding the above, to quantify the resulting façade incident noise levels at surrounding neighbours, the acoustic report has predicted noise levels to the surrounding residential receivers for the use (including approach, landing, take off and departure) of the proposed rooftop HLS.

From the predicted noise level, it is noted that:



- Predicted noise levels range between 70dBA to 95dBA.
- Comparing the general ambient (LAeq) noise levels and the predicted noise levels during an arrival or departure of a helicopter, noise levels within the surrounding environment will be dominated during an aircraft movement.
- Notwithstanding this, it is important to identify the arrival and departure of a helicopter to/ from the site is for emergency purposes only, and of a relatively short duration.
- In regard to the frequency of these events, this is difficult to determine due to the scenario being an emergency. However, it is anticipated that an average of three (3) movements could occur per month.

A detailed acoustic review of feasible and reasonable mitigation measures for the proposed Helicopter Landing Site (HLS) has been undertaken. The review can be summarised as follows:

- All aircraft operating in Australia must comply with the Air Navigation (Aircraft Noise) Regulations 1984 and meet International Civil Aviation Organisation (ICAO) noise standards.
- Under the NSW Health Plan of Management, helicopter engines will be switched off after landing to minimise noise impacts.
- The HLS is positioned at the highest point of the development, creating significant height separation from surrounding receivers and avoiding proximity to ground-level residential properties.
- Acoustic screening is not feasible due to safety, helicopter downwash, and the elevated airborne operation of aircraft.
- Operational noise can be further reduced where feasible by adopting the Air Services Australia “Fly Neighbourly” procedures, which include avoiding noise-sensitive areas, following high ambient or unpopulated routes, maintaining higher altitudes where possible, reducing speed, avoiding sharp manoeuvres, and varying flight paths.

Based on the information detailed above, PWNA believe the proposed Helicopter Landing Site (HLS) above the roof of the New Shellharbour Hospital (NSH) is acoustically acceptable, noting no relevant acoustic requirements in NSW for emergency HLS.

6.4.2 Hospital Building Envelope

Whilst strictly speaking the façade of the building is not being amended, a re-assessment of the façade's acoustic performance has been undertaken to ensure the inclusion of a future HLS above the southern IPU is acceptable.

The parameters that are adopted are taken from the AviPro Aviation Report, including (HLS location, Flight Paths, Flight Path Trajectory, Design Helicopter, etc.).

Regarding assumed noise levels, PWNA have measured the Augusta Westland AW139 previously, which is the current NSW Toll Ambulance helicopter widely used in NSW. This has a resulting noise level of ~ 135dBA LMax (Slow).

Utilising the predicted façade incident noise levels provided (refer to **Appendix F**), PWNA confirm full compliance with the recommended Internal Noise Levels as outlined in the NSW Health Infrastructure (HI) *Engineering Services Guideline (ESG) 2023* will be achieved with the nominated acoustic façade performances.

6.4.3 Safe Assessment Unit

PWNA have undertaken a review of the proposed amendments and notes that the proposed modifications are acoustically acceptable. This review includes building envelope constructions and noise emissions to neighbouring property.



6.4.4 Noise from Engineering Services/ Plant

Amendments to the Level 06 Plant Area are required to accommodate the rooftop HLS, including structural, access and service provisions. PWNA has reviewed the proposed changes and confirmed that compliance can be achieved. Consistent with the approved acoustic report process for the original submission, a detailed acoustic assessment by a qualified consultant will be required prior to the Crown Certificate to verify compliance with the Project Trigger Noise Levels (PTNLs). Nonetheless, compliance is expected to be achievable.

6.4.5 Construction Noise and Vibration

PWNA has reviewed the construction noise and vibration impacts of adding the proposed rooftop helipad against the previously established management levels. The assessment concludes that construction impacts would be acoustically acceptable, provided works are undertaken in accordance with the site's existing approved Construction Noise and Vibration Management Sub Plan (CNVMSP). It is recommended that, if approved, the CNVMSP be updated to include the helipad works.

6.4.6 Summary of Mitigation Measures

- Design of building envelope (i.e. Glazing Construction, External Wall Construction and Roof Construction) should meet the minimum acoustic design requirements.
- A detailed acoustic review of all proposed building services is required to be undertaken prior to installation, once final selections are made, to ensure compliance with the relevant PTNLs.
- An update to the dedicated site-specific Construction Noise and Vibration Sub-Plan (CNVMSP) must be prepared for the site, outlining the relevant noise and vibration mitigation measures required.
- All onsite works must be undertaken in accordance with the updated Construction Noise and Vibration Sub-Plan (CNVMSP).
- Where feasible and reasonable, implement Air Services Australia (ASA) "Implement Fly Neighbours Procedures".

6.5 Car Parking Refinements

The minimum 1000 spaces, as conditioned, are retained across the site. Accessible spaces have increased from 18 to a total of 20 following review and feedback from Stantec traffic engineers and BM+G building surveyors. Stantec traffic engineers have reviewed the updates and, in general, support the changes as minor refinements to the scheme, and the proposed design would continue to comply with the relevant standards and parking supply.

6.6 BCA Capability

BMG have reviewed the referenced modified architectural documentation (including addition of the helipad and SAU) for the proposed New Shellharbour Hospital at the Greenfield site in Dunmore, NSW 2529 against the Deemed-to-Satisfy provisions and Performance Requirements of the National Construction Code Series (Volume 1) Building Code of Australia 2022 & Disability (Access to Premises – Buildings) Standards 2010 (refer to **Appendix I**). BMG confirms that compliance with the provisions of the BCA is readily achievable.

Furthermore, it is concluded that the modified development proposal is capable of achieving compliance with the accessibility provisions of the BCA and Access to Premises Standard. Noting that



the design will be subject to refinement in preparation of the construction documentation to capture detailed compliance matters.

In addition, it is considered that such matters can adequately be addressed in the preparation of the Crown Certificate documentation without giving rise to any inconsistencies with the State Significant Development Approval.

6.7 Social Impact

A Social Impact Assessment (SIA) was prepared for the EIS by Ethos Urban Pty Ltd as per the principles set out in the Social Impact Assessment Guideline for State Significant Projects (DPE, 2022) ('SIA Guideline').

The assessment considered a range of social impacts – both positive and negative – arising from the development.

Most of the social-related impacts assessed as part of the SIA and EIS are not expected to be affected or substantially altered due to the proposed modifications. However, the lack of a helipad in the original design scope was a specific matter that was previously raised by the community. Its addition would translate to a positive outcome on balance.

This is on the basis that from the original community engagement and SIA carried out during the EIS preparation, there was concern expressed about not including a helipad. The response at the time was that the project included a future proofed design to enable construction of a rooftop helipad in the future, but it was not included in the original scope. Feedback received during engagement and submissions suggested there was general desire/ support within the community to include a helipad as part of the new hospital and services that would be available. Recent NSW Government announcements, information sessions, and distribution of a community newsletter, plus media coverage, advising of the addition did not raise any objection from the community. In general, the helipad inclusion has been advocated for, both politically and through the local community.

The proposed modification, which includes the provision of a helipad, therefore positively responds to this sentiment and would complement one of the key benefits of the proposal identified in the SIA, being improved accessibility to high-quality health care services (including emergency transport/ transfer services), leading to health and wellbeing benefits.

The additional noise associated with occasional helicopter movements is not expected to be unreasonable and would be infrequent, as outlined in **Sections 6.3** and **6.4**. On balance, the modifications and addition of a helipad and the SAU contribute positively to the health services offering and benefits of the NSH.

6.8 Soils, Sediment and Erosion Control, and Dust

Overall, these proposed changes that involve ground disturbing works are minor in the context of the approved works and would not introduce notable new or altered impacts. All ground disturbance/ earthworks would continue to be managed in accordance with the Project's Construction Environmental Management Plan, including dust minimisation, spoil management, and sedimentation and erosion controls.



6.9 Structural Design

Aurecon has prepared a Structural Design Criteria Report, which is attached as **Appendix H**.

The Structural Design Criteria Report outlines the basis for design and design criteria that the building will meet. The structural design shall be in accordance with the latest revision of all relevant structural Australian Standards, relevant structural sections of the BCA and other statutory requirements.

In particular, the structural design will be in accordance with the following relevant Australian Standards:

- NCC 2022
- AS/NZS 1170.0 (2002) – Structural Design Actions - General Principles
- AS/NZS 1170.1 (2002 - R2016) – Structural Design Actions - Permanent, Imposed & Other Actions
- AS/NZS 1170.2 (2021) – Structural Design Actions - Wind Loads
- AS 1170.4 (2024) – Structural Design Actions - Earthquake Actions in Australia
- AS 2159 (2009) – Piling – Design and Installation
- AS 3600 (2018) Amendment 2 – Concrete Structures
- AS/NZS 2327 (2017) – Composite structures Composite steel-concrete construction in buildings
- AS 3700 (2018) – Masonry Structures
- AS 4100 (2020) – Steel Structures
- AS 4600 (2018) – Cold-formed Steel Structures
- AS 4678 (2002) – Earth Retaining Structures
- SCI P354 (2009) – Design of Floors for Vibration: A New Approach.

6.10 Ecologically Sustainable Development (ESD)

The EIS and supporting Ecologically Sustainable Design (ESD) report outlined that the Project has had regard for a range of sustainability strategies and measures to minimise consumption of resources, water and energy, as well as providing better environmental quality outcomes in the design of the facility and operational procedures.

The modification would continue to achieve quality ESD outcomes and comply with the related conditions of consent.

The modified Project also remains consistent with the principles of ecologically sustainable development as outlined in the EP&A Regulation 2021 and as assessed in the EIS.

6.11 Cumulative Impacts

Given the nature of the modifications (being changes to already approved elements/ infrastructure and relatively modest in the context of the development) and that they would effectively integrate into the design response and construction delivery of the Project, they are not expected to result in any new, additional, or substantially altered cumulative impacts.



7. Conclusion & Justification of Modified Project

This Section 4.55(1A) Modification Report and supporting documentation demonstrate that the proposed modifications to the approved NSH (SSD-57064458) are reasonable and acceptable when tested against the relevant considerations detailed within Sections 4.55(1A) and 4.15(1) of the EP&A Act.

The proposed changes are positive and will enhance the health services delivery by the NSH through the provision of SAU and helipad for emergency transfers. Other minor changes are typical of design progression and refinement of a major project. Overall, the proposed modifications effectively integrate into the approved development and are not expected to significantly alter the predicted environmental impacts of the Project. Minor resultant impacts of including the helipad (e.g. occasional noise during emergency helicopter movements) are outweighed by the benefits of its inclusion and can be suitably managed. The modifications maintain the standard/ quality of design and continue to offer an acceptable response to the site context.

This report has established that there are no significant matters affected by, or resulting from, the modified development outcome, with the identified environmental considerations being generally of minor or minimal consequence/ impact. Given this, the existing Project mitigation measures, along with management of rotorwash as recommended by the Wind and Rotorwash Assessment (which can be facilitated by a condition of the modified consent), are appropriate and adequate.

The application remains consistent with the relevant aspects of SSD consent and the objects of the EP&A Act. It continues to be consistent with strategic directions for the State and the statutory planning framework. On balance, the modifications are acceptable, align with the public interest, and enhance this important investment in and delivery of social infrastructure.



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Appendix A

Architectural Plans – Mod 2



Appendix B

Landscape Plans – Mod 2



Appendix C

Architectural Design Statement



Appendix D

Engagement and Project Update Newsletter



Appendix E

Aviation Assessment



Appendix F

Acoustic Assessment



Appendix G

Wind and Rotorwash Assessment



Appendix H

Structural Design Statement



Appendix I

BCA Capability Statement



Appendix J

Estimated Development Cost (Provided as Commercial-in-Confidence)



Appendix K

Modified Plan Register