

Statement of Environmental Effects

Construction of a Science Centre & Extension to an Administration Building

German International School Sydney

33 Myoora Road, Terrey Hills



Prepared for: German International School Sydney

December 2021

Printed: 8 December 2021

File Name: 21119B German International School Sydney - Science/Reports/21119B.SEE.docx

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Client: German International School Sydney

Project Number: 21119B

Document Control

Version	Prepared By	Reviewed By	Issued To	Date
Rev_1 Draft	T. West P. Hemphill	S. Earp	Betti&knut	07 December 2021
Rev_2 Final	T. West P. Hemphill	S. Earp	Council	08 December 2021

Contents

1	Introduction	1
1.1	Commission	1
1.2	Purpose of this Statement	1
1.3	Material Relied Upon	1
2	Background	3
2.1	Previous Development Consents	3
2.2	Pre-DA Meeting	3
3	Site Context	5
3.1	Location	5
3.2	Site Description	5
3.3	Surrounding Development	8
4	Proposed Development	9
4.1	Summary of Proposed Development	9
4.2	Tree Removal	9
4.3	Demolition and Site Preparation	10
4.4	Proposed Science Centre	10
4.5	Extension to Administration Building	12
4.6	Stormwater Management	12
5	Environmental Planning Assessment	13
5.1	Rural Fires Act 1997	13
5.2	Planning Controls	13
5.2.1	State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017	13
5.2.2	State Environmental Planning Policy (Koala Habitat Protection) 2021	14
5.2.3	State Environmental Planning Policy No. 55 – Remediation of Land	15
5.2.4	State Environmental Planning Policy No. 64 – Advertising and Signage	15
5.2.5	Draft State Environmental Planning Policy (Remediation)	17
5.2.6	Warringah Local Environmental Plan 2011	17
5.2.7	Warringah Development Control Plan 2011	18
5.3	Likely Impacts of the Development	20
5.3.1	Built Environment	21
5.3.2	Natural Environment	21
5.3.3	Bushfire	22
5.3.4	Visual Privacy	22
5.3.5	Solar Access	22
5.3.6	Views	23
5.3.7	Traffic and Parking	23
5.3.8	Waste Management	24
5.3.9	Accessibility	24
5.3.10	Air Quality	24

Executive Summary

5.3.11	Erosion and Sediment Control	24
5.3.12	Stormwater Management	24
5.3.13	Economic Impact	24
5.4	Suitability of the Site for Development	25
5.5	Public Interest	25
6	Conclusion	26
Figure	es es	
Figure 1	Site Location	5
Figure 2	Site Context	5
Figure 3	View from within the GISS campus	6
Figure 4	View of the Heinrich Pestalozzi building located on the GISS campus	6
Figure 5	View of General Learning Areas located on the GISS campus	7
Figure 6	View of the covered sport's court, to the east of the proposed Science Centre	7
Figure 7	View from the front of the GISS campus, identifying the approximate location of the proposed works	8
Figure 8	Location of trees subject to removal and retention (Source: Christina Silk Office of Planting)	9
Figure 9	Proposed excavation plan (Source: Betti&knut architecture)	10
Figure 10	Location of the proposed science centre (Source: Betti&knut architecture)	11
Figure 11	Science centre viewed from Myoora Road (Source: Betti&knut architecture)	11
Figure 12	Building height plane showing the portion of the building that exceeds the maximum building height (Source: Betti&knut architecture)	12
Figure 13	Proposed administration building addition – Ground floor (left) and first floor (right) (Source: Betti&knut architecture)	t 12
Figure 14	Proposed signage on the south elevation of the proposed administration building extension (Source: Betti&knut architecture)	15
Figure 15	Proposed signage as detailed on the west elevation (Source: Betti&knut architecture)	16
Figure 16	Proposed signage as detailed on the street elevation (Source: Betti&knut architecture)	16
Figure 17	Extract of Landscape Plan Section B	22
Figure 18	Extract of Landscape Plan Section A	22
Figure 19	Extract of the proposed shadow diagrams (Source: Betti&knut architecture)	23
Table	s ·	
Table 1	Assessment against Design Quality Principles of the Education SEPP	13
Table 2	Assessment against Schedule 1 – SEPP 64	16
Table 3	Assessment against Relevant Provisions of the Warringah LEP 2011	17
Table 4	Assessment against Relevant Provisions of the Warringah DCP 2011	10

1 Introduction

1.1 Commission

DFP has been commissioned by the German International School Sydney (GISS) to prepare a Statement of Environmental Effects (SEE) for the proposed construction of a new Science Centre development at 33 Myoora Road, Terrey Hills (the site).

This report is to accompany a development application (DA) to Northern Beaches Council (Council) for a new Science Centre located at the GISS. The site is located on the western side of Myoora Road and is zoned RU4 Primary Production Small Lots (the RU4 Zone).

The proposed development comprises:

- Removal of 17 trees located on site;
- Site excavation;
- Construction of a two-storey Science Centre;
- Additions to an existing two-storey Administration Building; and
- Associated landscaping.

1.2 Purpose of this Statement

The purpose of this report is to provide Council and relevant NSW State Government Agencies with all relevant information necessary to assess the subject development proposal and to determine the DA in accordance with section 4.16 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and the *Environmental Planning and Assessment Regulation 2000* (the Regulation).

The proposed development is also Integrated Development pursuant to Part 4 Division 4.8 of the EP&A Act as it requires Authorisation under section 100B of the Rural Fires Act 1997 (RFA) from the Commissioner of the NSW Rural Fire Service, for development of land for a special fire protection purpose that is mapped as comprising bush fire prone land.

This matter is discussed in more detailed in Section 5.1 of this SEE.

1.3 Material Relied Upon

This SEE has been prepared by DFP based on the information listed below.

- Survey Plan (prepared by Bee & Lethbridge);
- Architectural Plans (prepared by Betti&knut architecture);
- Landscape Plan (prepared by Christina Silk Landscape Architects);
- Design Statement Report (prepared by Betti&knut architecture);
- Passive House Report; (prepared by Smart Plus Academy);
- Civil Stormwater Report (prepared by TTW);
- Geotechnical Investigation Report (prepared by JK Geotechnics);
- Arborist Report (prepared by Hugh the Arborist);
- Traffic Impact Statement (prepared by PTC);
- Bushfire Assessment (prepared by Peterson Bushfire);
- Access Statement of Compliance (Accessble Building Solutions);
- BCA Assessment Report (prepared by BCA Logic);
- Fire Safety Engineering Design Review (prepared by Scientific Fire Services);
- Waste Management Plan (prepared by German International School, Sydney); and

1 Introduction

Cost Summary Report (prepared by Wilde and Woollard).

2 Background

2.1 Previous Development Consents

- DA2016/0177 On 1 March 2016, a DA was lodged for alterations and additions for the purpose of school identification signage. DA2016/0177 was approved on 11 April 2016.
- DA2016/0957 On 14 September 2016, a DA was lodged for the installation of 6 x 20-foot shipping containers and 6 x 40-foot shipping containers to form 4 x modules which are situated into 2 x groups of 'flexible learning spaces'. DA2016/0957 was approved on 16 February 2017.

2.2 Pre-DA Meeting

PLM2021/0127 – On 22 June 2021, a Pre-DA meeting was held with Northern Beaches Council for this proposed development. At the time, the development proposed a 10m front setback and in Council's view, the DA was not supportable for this reason. This concern and others raised by Council during this Pre-DA meeting have been summarised and addressed below:

 <u>Front Setback</u> – The development proposed a 10m front setback which resulted in a 50% non-compliance to the 20m minimum front setback control under Part B7 of the Warringah Development Control Plan 2011 (DCP). Council raised concerns regarding the inconsistency of the proposed front setback with other established front setbacks within the surrounding area.

Council stated that a 10m front setback would result in a "highly undesirable precedent for similar incursions into the front setback area which would, in turn, undermine the objectives of the control".

Comment: The revised design has extended the front setback from Myoora Road by an additional 10m from that which was presented to Council at the Pre-DA meeting. The revised siting of the science building incorporates a 20m front setback and therefore is compliant with Part B7 of the DCP.

 <u>Landscaped Open Space</u> – The proposal will result in a reduction in landscaped area, below the required minimum of 70%. Council requested that investigations be conducted to replace hard surfaced areas with deep soil landscaping where possible.

Comment: Where possible, landscaping has been retained and new deep soil landscaping has been incorporated to soften the hard surfaced areas.

 <u>Building Height</u> – The proposal generates a minor non-compliance with the maximum 8.5m building height limit. Council agreed that the "presentation of a sustainably designed building provides a desirable presentation, despite a minor height noncompliance".

Comment: The design of the science building is consistent with the presentation to Council as part of the Pre-DA meeting. A minor non-compliance to the 8.5m maximum building height limit exists, towards the southern side of the building. A Clause 4.6 Written Request has been prepared to accompany this application, which assesses the proposed non-compliance having regard to the relevant zone and development standard objectives.

 <u>Landscaping</u> – The northern portion of the site consists of significant bushland, which should be preserved. It was recommended that an area of 10m landscaping be provided to coincide with the recommended 20m front setback.

Comment: The northern portion of the site which contains dense vegetation will be retained as part of this application. The proposed works are towards the front of the site.

2 Background

As the front setback for the science building has been extended to 20m from the Pre-DA concept design, a greater amount of landscaping has been provided, which will in turn assist in softening the built form whilst retaining the landscaped character of the site.

3.1 Location

The site is located on the northern side of Myoora Road, approximately 300m to the south west of Terrey Hills Public School (**Figure 1**).



Figure 1 Site Location

3.2 Site Description

The site is legally described as Lot 1 in Deposited Plan (DP) 1145029. The site is irregular in configuration, with a total area of 1.62ha. The site has a frontage of 115.45m to Myoora Road and a maximum depth of 151.85m along the north eastern side boundary (**Figure 2**).

The site has a maximum fall of approximately 10m from the north to the south of the site. A survey plan has been prepared by Bee & Lethbridge which details the slope of the site.



Figure 2 Site Context

The GISS campus currently contains buildings and structures that are predominantly confined to the southern and western portions of the site. The south eastern corner of the site contains a covered sport's court, with some scattered buildings and structures located within the central

portion of the site. Land to the north is vegetated, creating a transition from the bushland area to the north and east of the site.

Vehicular access to the GISS is provided via Myoora Road at the site's south eastern frontage. The driveway on the southern corner provides access to a basement garage for onsite parking, as well as a kiss and drop area located within the front setback of the site. A bus drop off bay is also located along the frontage of the site, parallel to Myoora Road.



Figure 3 View from within the GISS campus



Figure 4 View of the Heinrich Pestalozzi building located on the GISS campus



Figure 5 View of General Learning Areas located on the GISS campus



Figure 6 View of the covered sport's court, to the east of the proposed Science Centre



Figure 7 View from the front of the GISS campus, identifying the approximate location of the proposed works

3.3 Surrounding Development

The site is located within an area that consists of a range of land uses within the proximity of the school. To the south east of the site is the St Anthony in the Fields Catholic Church, with a café located to the east of the site, on the south eastern side of Myoora Road. The Kuan Yin Buddhist Temple is also located to the north east of the site.

The Terrey Hills Swim School is located directly adjacent to the site, to the south west. Light industrial and primary production land, and large lot residential dwellings are located in the broader vicinity of the site.

On 2 July 2018, the Sydney Planning Panel - North granted development consent to DA2017/0385 for the "construction of a private hospital with associated car parking, signage and landscaping" on the land adjoining the GISS site at 4a Larool Road, Terry Hills. The approved works will remove a significant portion of the vegetation on the site in the delivery of the new private hospital. Works associated with this DA have not yet commenced.

4.1 Summary of Proposed Development

The proposed development comprises:

- Removal of 17 trees;
- Demolition and site preparation;
- Construction of a two-storey Science Centre;
- Alterations and additions to a two-storey Administration Building; and
- Associated landscaping including planting of 40 new trees.

The aim of the proposal is to enhance the school facilities to cater for the needs of students and staff at the GISS. The construction of a new Science Centre will provide for specialist classroom facilities that have been designed using prefabricated mass timber and be built to the highest energy efficiency standard. The alterations and additions to the Administration Building will be built with a similar façade to the new science centre, with timber cladding.

The following subsections provide a more detailed description of the proposed development.

4.2 Tree Removal

As provided in the Arborist Report prepared by Hugh the Arborist, dated 23 October 2021, 16 trees are proposed to be removed to facilitate construction of the science centre and one (1) tree to facilitate the extension of the administration building.

Of those 17 trees to be removed, ten (10) are deemed to have low retention values and seven (7) have higher retention values. Three (3) trees potentially impacted by the development to be retained (identified in **Figure 8**) have higher retention values and one (1) has low retention value.

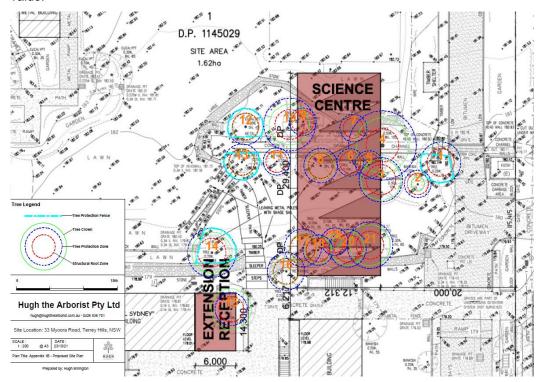


Figure 8 Location of trees subject to removal and retention (Source: Christina Silk Office of Planting)

4.3 Demolition and Site Preparation

To enable the extension to the administration building and construction of the science centre, some excavation is required. An excavation plan prepared by Betti&knut architecture identifies the level of required excavation. The most excavation is required towards the south eastern side of the science centre, where up to 2.5m of excavation is proposed (**Figure 9**).

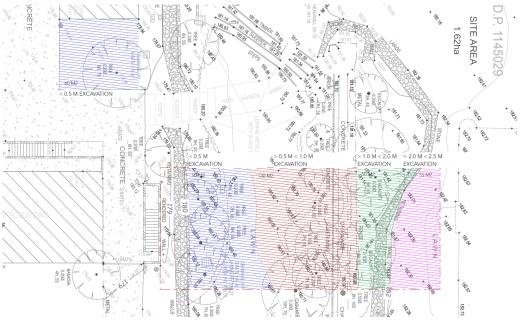


Figure 9 Proposed excavation plan (Source: Betti&knut architecture)

Two (2) stone retaining walls currently located in the proposed building footprint of the science centre are proposed to be removed. Timber sleeper steps to the south of the administration building and a timber shed to the south of the proposed science centre are also proposed to be removed.

4.4 Proposed Science Centre

The proposed science centre is located between an existing synthetic turf playing field and a concrete footpath which leads to the school entrance (**Figure 10**). The science centre will be two-storeys and built of cross-laminated timber. It will be clad with natural weathered timber, triple glazed windows in aluminium frames and with hardwood window surrounds. The structure will have a green roof with rainwater harvesting, natural light, passive ventilation and solar PV panels. It will achieve the highest energy efficiency as documented in the Passive House Report prepared by Smart Plus Academy, submitted in support of this application.

The science centre will provide the GISS with specialist classroom facilities consisting of a ground floor and upper level. The ground floor level will consist of biology and physics labs and a preparation space. Lab extensions and bathroom facilities are also located on the ground floor level.

The first-floor level will consist of biology and chemistry labs and a preparation space. A chemistry storeroom, accessibly bathroom and lab extensions are also located on the first-floor level.

A lift is proposed within the science building. The lift overrun is setback towards the rear of the building and will be partially screened when viewed from the front setback (towards Myoora Road), to minimise its visual impact.



Figure 10 Location of the proposed science centre (Source: Betti&knut architecture)

The science centre will consist of a saw tooth roof form, presenting a high-level architectural design (**Figure 11**). The building will include an extensive green roof and solar panels for environmental sustainability purposes.



Figure 11 Science centre viewed from Myoora Road (Source: Betti&knut architecture)

As a result of the sawtooth roof form, a portion of the southern side of the building exceeds the maximum building height imposed under the LEP. This does not generate any notable amenity impacts on the site or to adjoining properties. A Clause 4.6 written request has been prepared to detail the extent of the contravention and assess the impacts of the proposed height variation, having regard to the objectives and provisions of Clause 4.6 of the LEP.

Figure 12 below is a maximum building height plane of the site, illustrating the small portion of the building which exceeds the maximum building height.

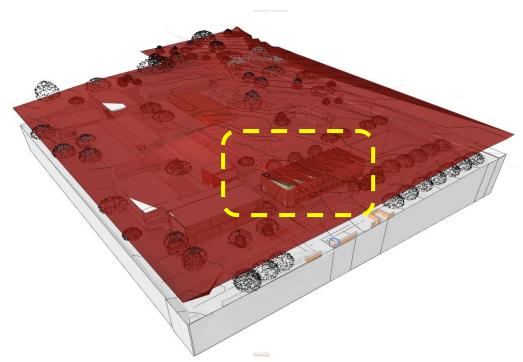


Figure 12 Building height plane showing the portion of the building that exceeds the maximum building height (Source: Betti&knut architecture)

4.5 Extension to Administration Building

The extension to the administration building will provide the GISS with a new reception area on the ground floor and an extension of the existing open plan workspace on the first floor. A new internal staircase to provide access from the ground floor to the first floor is also proposed.

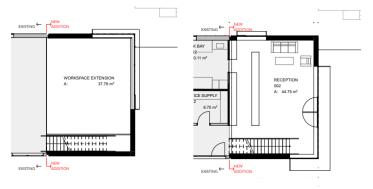


Figure 13 Proposed administration building addition – Ground floor (left) and first floor (right) (Source: Betti&knut architecture)

4.6 Stormwater Management

The proposed development will be connected to Council's existing in-ground stormwater line at Myoora Road, via a proposed surface inlet pit.

An OSD tank is proposed and has been sized in accordance with the Northern Beaches Council Water Management for Development Policy (policy). The OSD tank will contain a volume of 22.6m³ and have a peak flow discharge of 20L/s. The OSD tank will be located between the science building and site frontage to Myoora Road.

This section provides an environmental assessment of the proposed development in respect of the relevant matters for consideration under section 4.15(1) of the Environmental Planning and Assessment Act, 1979 (EP&A Act).

The key environmental planning issues associated with the proposed development are:

- Compliance with relevant planning policies and controls
- Bushfire
- Built Form and Streetscape
- Visual Impact

An assessment of these issues is provided in the following subsections.

5.1 Rural Fires Act 1997

Section 100B of the Rural Fires Act requires an Authorisation from the Commissioner of the NSW Rural Fire Service (RFS) to be obtained for development for a special fire protection purpose (SFPP) (including a school) on land that is mapped as comprising bush fire prone land.

As the proposed development is for a SFPP and is on land that is mapped as comprising bush fire prone land, a bushfire safety authority is required from the RFS. Accordingly, the proposed DA is Integrated Development under the provisions of the EP&A Act.

Matters relating to bushfire safety are discussed further in Section 5.3.3.

5.2 Planning Controls

The following subsections assess the proposal against the relevant provisions of applicable Environmental Planning Instruments (EPIs), Draft EPIs, Development Control Plans (DCPs), Planning Agreements and matters prescribed by the Regulation in accordance with section 4.15(1)(a) of the EP&A Act.

5.2.1 State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

Clause 35 of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (the Education SEPP) provides that development for the purpose of a school may be carried out with development consent on land in a prescribed zone. The RU4 is a prescribed zone under Clause 33 of the Education SEPP, notwithstanding that the GISS is an existing educational establishment (school). The works are proposed pursuant to Clause 35(1) and are permissible with consent.

Clause 35(6) requires the consent authority to consider the design quality principles set out in Schedule 4. **Table 1** sets out the design quality principles and provides a brief comment assessing how the proposal has considered each design principle. A more detailed assessment against these design principles is provided in a Design Statement report prepared by Betti&knut architecture.

Table 1 Assessment against Design Quality Principles of the Education SEPP		
Design Principle	Comment	
Principle 1— context, built form and landscape	The proposal has considered the site's setting, landscape, topography and climate in determining it's siting, orientation and design. The proposal ensures that the landscape setting is retained where possible. The design of the new science centre has incorporated design elements that are resistant to variation in climate. The proposed works respond to the existing context and built form of the GISS school site. There will be minimal adverse visual impacts from the proposal as	

Table 1 Assessment against Design Quality Principles of the Education SEPP		
Design Principle	Comment	
	it has recognised and protected the existing visual appeal of the school site. The proposed science centre has been sited in an area that ensures buildings are set apart to provide for a landscaped buffer between buildings and setbacks.	
Principle 2— sustainable, efficient and durable	Sustainable and efficient elements have been implemented in the design of the proposed development. These elements have assisted in combining positive environmental, social and economic outcomes. The new science centre has been designed of cross laminated timber and will be built to the highest energy efficiency standard (Passivehouse standard).	
Principle 3— accessible and inclusive	The new science centre is located near the main street frontage of Myoora Road and acts as a gateway onto the school campus. The works also set a definitive path to the new reception area.	
	The works improve proximity to stairs, disabled access lifts and ramps and forms the daily access way for parents and carers with prams and students.	
Principle 4— health and safety	Biophilic Design principles have been incorporated into the science centre's indoor and outdoor design. The proven psychological benefits to students and staff through landscaping, nontoxic materials, natural patterns and processes, light and space, sensory variability and a community connection to nature are fundamental.	
Principle 5— amenity	The proposed works will enhance the teaching and learning facilities on the GISS site. The proposed built form and siting of the development has also considered the amenity of adjacent developments and the local neighbourhood.	
	The window orientation on the science centre is facing away from the road, reducing noise pollution and providing privacy.	
Principle 6— whole of life, flexible and adaptive	The proposal will provide for a new science centre facility that incorporates a range of operations that can be undertaken within the building. The building has been designed to take a whole-of-life-cycle approach through the design, materials and flexibility incorporated into the development.	
Principle 7— aesthetics	The proposal has been designed to be aesthetically pleasing and responds to the existing built form of the school and surrounds. The use of rough sawn timber as the exterior cladding on the science centre will be natural, sustainable and will blend into the forest environment.	

Clause 35(9) sets out that a provision of a Development Control Plan (DCP) that specifies a requirement, standard or control in relation to development of a kind referred to in subclause 35(1) (of which the development is included) "is of no effect, regardless of when the development control plan was made".

Therefore, it is noted that the provisions of the DCP are of no effect in the assessment of the proposed development and cannot be used as grounds against which the development can be refused (or approved). Notwithstanding, to enable Council to carry out a full and complete assessment of the application, the relevant provisions of the DCPs are addressed below.

5.2.2 State Environmental Planning Policy (Koala Habitat Protection) 2021

Pursuant to Schedule 1 of *State Environmental Planning Policy (Koala Habitat Protection)* 2021 (the Koala SEPP), the site is located within the central coast Koala Management Area (KMA).

The aim of Koala SEPP is to 'encourage the conservation and management of areas of natural vegetation that provide habitat for koalas to support a permanent free-living population over their present range and reverse the current trend of koala population decline'.

The proposed development involves the removal of 17 trees towards the front of the GISS site to facilitate the construction of the proposed science building. This area of the site is

surrounded by hard surface area and buildings that are used to facilitate the operations of the school.

It is considered that the trees that are subject to removal as part of this application are not appropriate trees for supporting a permanent free-living population for koalas. It is noted that the densely vegetated area towards the northern portion of the site will be retained as part of this application.

5.2.3 State Environmental Planning Policy No. 55 – Remediation of Land

Clause 7(1)(a) of State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) requires the consent authority to consider whether the land is contaminated. The object of this policy is:

- (1) The object of this Policy is to provide for a Statewide planning approach to the remediation of contaminated land.
- (2) In particular, this Policy aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment—
 - (a) by specifying when consent is required, and when it is not required, for a remediation work, and
 - (b) by specifying certain considerations that are relevant in rezoning land and in determining development applications in general and development applications for consent to carry out a remediation work in particular, and
 - (c) by requiring that a remediation work meet certain standards and notification requirements.

Clause 7(1) of SEPP 55 sets out requirements for a consent authority to consider if land is contaminated and if so, be satisfied that the land is suitable in its contaminated state for the purpose of which development is proposed to be carried out.

As the proposal relates to an existing educational establishment, it is considered that there is little to no risk that contaminating activities have been carried out and therefore the land is suitable for the proposed development to be carried out on.

5.2.4 State Environmental Planning Policy No. 64 – Advertising and Signage

Identification signage for the science building is proposed on the western and street elevations, with identification signage also proposed on the south elevation of the administration building extension. The proposed signage will be wall mounted, with **Figure 14** - **Figure 16** providing an indication of the proposed signage.

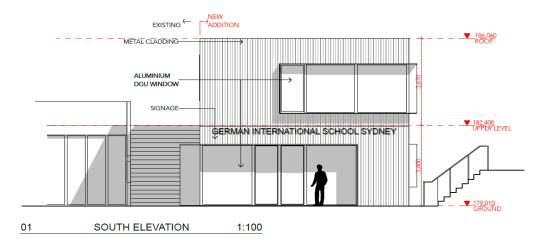


Figure 14 Proposed signage on the south elevation of the proposed administration building extension (Source: Betti&knut architecture)



Figure 15 Proposed signage as detailed on the west elevation (Source: Betti&knut architecture)

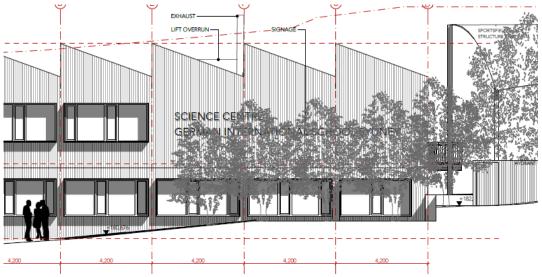


Figure 16 Proposed signage as detailed on the street elevation (Source: Betti&knut architecture)

Table 2 provides an assessment of the proposed signage against the assessment criteria contained in schedule 1 of *State Environmental Planning Policy No. 64 – Advertising and Signage* (SEPP 64).

Table 2 Assessment against Schedule 1 – SEPP 64		
Assessment Criteria	Comment	
	The character of the area surrounding the GISS consists of a range of differing land uses, including a swimming centre, child care centre, place of public worship, industrial land, residential developments and nursery/hobby farm activities.	
Character of the Area	The proposed wall signs will be set back 20 metres from the street frontage and will be of a scale that is suitable considering the height and length of the buildings.	
	The proposed signage consists of laser cut metal single letters, slightly set off the facade.	
Special Areas	The proposed signage does not detract from the amenity or visual quality of any environmentally sensitive area, rural landscapes or residential area that are located within the vicinity of the site.	

Table 2 Assessment against Schedule 1 – SEPP 64		
Assessment Criteria	Comment	
Views and vistas	No views or vistas will be adversely affected by the proposed signage.	
Streetscape, setting or landscape	The proposed signage has been designed of a scale that is appropriate for the size of the buildings, which are setback a suitable distance from the street frontage. The signage will therefore not dominate the streetscape.	
Site and Building	The proposed signage is suitable given the size of the buildings, as well as the nature of the land use, being for an educational establishment (school).	
Associated devices and logos with advertisements and advertising structures	No associated devices are proposed.	
Illumination	There is no illumination proposed to the science centre signage. The signage on the Administration building will be subtle backlighting behind the single laser cut metal lettering.	
Safety	The proposed signage will be fixed to the walls of the science building and administration building. There will be no adverse public safety concerns for students and staff on the site due to the location of the signage.	

5.2.5 Draft State Environmental Planning Policy (Remediation)

The Department of Planning, Industry and Environment (DPIE) exhibited the proposed SEPP from 1 January to 13 April 2018. It is proposed that the new Remediation SEPP will:

- Provide a state-wide planning framework for the remediation of land, maintain the objectives and reinforce those aspects of the existing framework;
- Require planning authorities to consider the potential for land to be contaminated when determining development applications and land rezoning's;
- Clearly list the remediation works that require development consent; and
- Introduce certification and operational requirements for remediation works that can be undertaken without development consent.

In light of the above, it is considered that the assessment of the proposed development within this report satisfactorily considers relevant matters and the proposal is acceptable in this instance.

5.2.6 Warringah Local Environmental Plan 2011

Table 3 provides a summary assessment of the proposed development against the relevant provisions of the LEP.

Table 3 Assessment against Relevant Provisions of the Warringah LEP 2011			
Provision	Assessment	Consistent	
Clause 2.2: Zoning - RU4 Primary Production Small Lots	Development for the purpose of an educational establishment is prohibited within the RU4 zone. However, pursuant to Clause 34 of the Education SEPP, the RU4 zone is a "prescribed zone". Furthermore, the GISS is an existing school, with the proposed development being related to the existing use of the site.	Yes	
Clause 4.3: Height of Buildings - 8.5m	The proposed development involves a minor variation to the maximum 8.5m building height limit. This is caused by an architectural design feature of the roof which results in part of the	No – Please refer to Clause 4.6	

Provision	Assessment	Consistent
	southern corner of the building exceeding 8.5m in height.	Written Request
	The maximum height of the building is 9.67m.	
Clause 6.2: Earthworks (3) Before granting development consent for earthworks, the consent authority must consider the following matters— (a) the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality, (b) the effect of the proposed development on the likely future use or redevelopment of the land, (c) the quality of the fill or the soil to be excavated, or both, (d) the effect of the proposed development on the existing and likely amenity of adjoining properties, (e) the source of any fill material and the destination of any excavated material, (f) the likelihood of disturbing relics, (g) the proximity to and potential for	Appropriate drainage and stormwater management is addressed in Section 5.3.12 of this report. The proposed works are located at the centre of the site, away from any neighbouring property. The quality of fill and soil to be excavated was assessed in the Geotechnical Investigations report prepared by J K Geotechnics submitted with this application.	Yes
adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.		
Clause 6.4: Development on Sloping Land	The site is identified as 'Area A' with a slope <5 degrees on the LEP Landslip Risk Map.	Yes
(3) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that— (a) the application for development has	A Geotechnical Investigations Report prepared by J K Geotechnics submitted with this application has considered the appropriate measures to ensure an appropriate engineering response.	
been assessed for the risk associated with landslides in relation to both property and life, and	Appropriate drainage and stormwater management is addressed in Section 5.3.12 of this report.	
(b) the development will not cause significant detrimental impacts because of stormwater discharge from the development site, and		
(c) the development will not impact on or affect the existing subsurface flow conditions.		

5.2.7 Warringah Development Control Plan 2011

Clause 35(9) of the Education SEPP provides that a development control plan that specifies a requirement, standard or control is of no effect to development for the purpose of a school, regardless of when the development control plan was made.

Notwithstanding the above, consideration of the Warringah Development Control Plan 2011 (the DCP) has been made to assess the proposed development against the relevant provisions of the DCP

Table 4 provides a summary assessment of the proposed development against the relevant provisions of the DCP.

Provision	Assessment	Consistent
Part B Built Form Con	trols	
B1: Wall Heights - 7.2m	As provided on the Sections, the wall height of the building does not exceed 7.2m from the ground level to the underside of the ceiling of the first floor. The maximum wall height of the proposed science building is 6.8m.	Yes
	The maximum wall height for the extension works to the administration building are 7.07m.	
B4: Site Coverage - Maximum 20%	The proposed development meets the objectives of Part B4 the DCP. Existing vegetation is retained on site where possible, with suitable replacement landscaping being provided in accordance with the accompanying Landscape Plan. Proposed landscaping within the front setback suitably minimises the bulk and scale of the science building and extension to the administration building.	Yes
B5: Side Boundary Setbacks - 7.5m	The proposed works are sited greater than 7.5m from the side boundaries.	Yes
B7: Front Boundary Setbacks - 20m	The proposed science building is located 20m from the front setback to Myoora Road. The extension to the administration building is setback further than the science building.	Yes
B9: Rear Boundary Setbacks - 7.5m	The proposed works are sited greater than 7.5m from the rear boundary.	Yes
Part C Siting Factors		
C2: Traffic, Access and Safety	The proposed development does not involve any changes to the on-site car parking and access arrangements to the site. The proposal does not increase the maximum student and staff capacity and therefore there are no additional traffic and parking impacts generated by the proposed works.	Yes
	Nevertheless, a traffic impact statement has been prepared by PTC which concludes by stating the following: Traffic activity will remain unchanged in relation to the existing situation and it is therefore anticipated that there should be no adverse impact on the surrounding road network. Therefore, the proposed development is supportable from a parking and traffic engineering perspective.	
C7: Excavation and Landfill	To facilitate the construction of the science building, between 0.5-2.5m of excavation is required. As the building is sited between existing buildings ad structures on site and adequately setback from the street, the earthworks are not likely to impact on adjoining land.	Yes
	To ensure that the earthworks ensure geological stability of the work, a Geotechnical Report has been prepared by JK Geotechnics which provides recommendations for retaining geological stability.	
	Due to the siting of the proposed works, the excavation and fill proposed will not likely create siltation or pollution of waterways, drainage lines or degrade the natural environment.	
C8: Demolition and Construction	Demolition and construction waste is to be undertaken in accordance with the submitted Waste Management Plan (WMP).	Yes
C9: Waste Management	Management of excavation, demolition, construction and on-going waste will be undertaken in accordance with the submitted WMP.	Yes

Provision	Assessment	Consistent
Part D Design		
D1: Landscaped Open Space and Bushland Setting	The proposed development has been designed to enhance the landscaped open space and retain the bushland setting towards the northern portion of the site.	Yes
	The siting of the development, 20m from Myoora Road has provided opportunities for suitable deep soil landscaping to replace the trees and vegetation that is being removed to construct the science building. The proposed landscaping will screen the built form of the building, whilst enhancing the streetscape.	
D3: Noise		
D6: Access to Sunlight	As provided in the shadow diagrams that are within the Architectural Drawings, the majority of the additional overshadowing occurs over the subject site. The overshadowing to public open space areas is minimal and therefore will not prevent surrounding areas from receiving suitable access to sunlight.	Yes
D7: Views	The proposed development is setback a considerable distance from the frontage and located between existing buildings and structures. There will be no significant view impacts generated by the proposal.	Yes
D8: Privacy	The science building is sited between existing buildings and structures, however there is adequate separation between buildings. Windows have been located in areas to minimise overlooking both on the GISS site and towards occupants of adjoining properties.	Yes
	The building works are also located a considerable distance from adjoining properties and therefore will not result in any significant privacy impacts.	
D9: Building Bulk -	The science building has been designed and sited to minimise excavation works where possible. Some fill is proposed towards the north western side of the building which is created by a short steep slope in the land.	Yes
	Building bulk is to be consistent with the existing built form of the site and will present a transition in building height between the building to the north west of the science centre and the sports field shade structure to the south east of the building.	
D10: Building Colours and Materials	The building works have been designed of prefabricated mass timber (CLT & Glulam structure) and will be built to include the highest energy efficiency standard (Passivhouse standard).	Yes
	Landscaping is also proposed between the building works and the street frontage to minimise the visual impact of the new development.	
D11: Roofs	The design of the science building roof incorporates a saw tooth design and green roof to enhance the sustainability and visual appeal of the building.	Yes
	The lift overrun for the science building has been sited to the rear of the building, so as to minimise any potential obtrusive and negative impacts from the appearance of the roof and when viewed from Myoora Road.	

5.3 Likely Impacts of the Development

The following subsections assess the likely impacts of the development in accordance with section 4.15(1)(b) of the EP&A Act.

5.3.1 Built Environment

The proposed works generate a positive impact on the locality through the construction of a building that has been architecturally designed to enhance the amenity of the site whilst responding to the surrounding built environment. The works are appropriately scaled, places and orientated to sit comfortably within their setting.

The built form of the proposed science building will present as a contemporary and environmentally sustainable building. The sawtooth style of the roof will provide for visual appeal and will create a feature when viewing the school site from the street or within the school boundaries. Despite a minor building height variation, the Clause 4.6 Variation confirms that the proposal is supportable in the circumstances and it is unreasonable and unnecessary to uphold the height control in this instance.

Materials and colours incorporated into the design of the building comprise of predominantly natural earthy tones which complement the proposed and existing landscaped elements within its immediate surrounds. The prefabricated mass timber and colours incorporated into the design of the building will integrate into the natural character of the site, established by the vegetation within the surrounds of the site, particularly to the north east of the school. Overall, the impacts on the built environment will be positive.

The building has been designed to meet the Passive House Standards for heating and cooling, not only showcasing a high benchmark achievement for environmentally sustainable design initiatives to the public domain, but also to the students of the school. The built form therefore represents an ongoing source of learning on sustainability and ESD.

5.3.2 Natural Environment

The proposed science centre has been designed to incorporate sustainably initiatives including a green roof, rainwater harvesting, solar power generation, passive airflow, thermal mass and natural lighting.

Tree Removal and Protection

An Arboricultural Impact Assessment has been prepared by Hugh the Arborist. That report has identified 17 trees for removal and four (4) trees to be retained as part of the proposed works. Of the 17 trees proposed to be removed, ten (10) of them are assessed as being 'Category Z' trees, meaning that they are not suitable for retention. The remaining seven (7) trees have been assessed as 'Category A' and are suitable for retention.

All remaining trees on site will be retained and protected, in accordance with the relevant tree protection requirements that have been provided in **Section 10** of the Arboricultural Impact Assessment.

Landscaping

The proposal incorporates a variety of landscape treatments to the area of the works to integrate the built form into the campus access and open space layout. Access from the front of the site (to the east) is managed through a new ramp, while access from within the site (to the west) is achieved through a combination of ramps and stairs, forming a new landscaped terrace area where lessons can be taught, students can gather and new trees will provide shade (**Figure 17 & Figure 18**).

A total of 40 new trees will be planted through the proposed works, with associated shrub, ground cover and grass plantings. This will include new landscaping works between the new building and Myoora Road, which will blend the built form with its natural surrounds.



Figure 17 Extract of Landscape Plan Section B



Figure 18 Extract of Landscape Plan Section A

5.3.3 Bushfire

Part of the subject site is bushfire prone land, recognised as 'vegetation buffer'. A Bushfire Hazard Assessment Report has been prepared by Peterson Bushfire to assess the proposed development against the specifications and requirements of *Planning for Bushfire Protection* 2019. The report provided the following conclusive summary:

The available APZ exceeds the minimum requirements, and the building works are rated BAL- 12.5. The existing access and water supply comply.

The assessment demonstrates that the proposal, together with the recommendations (see Section 4.2 below), complies with Planning for Bush Fire Protection 2019.

Based on the above, the proposed development is capable of compliance with the specifications and requirements of *Planning for Bushfire Protection 2019*, subject to compliance with the recommendations contained within the report.

5.3.4 Visual Privacy

Visual privacy will be maintained between the site and surrounding properties through the retention of trees between the building and Myoora Road, as well as additional landscaping as provided on the Landscape Plan.

Windows have been located and designed to minimise overlooking onto adjoining land. External retractable blinds have been incorporated into the design of the high performance DGU aluminium windows to obscure lines of sight.

5.3.5 Solar Access

The proposed development has been sited and designed to minimise solar access impacts on the site and to adjoining land. Betti and Knut Architecture have prepared detailed overshadowing plans as provided within the Architectural Drawings (**Figure 19**).

The modelling has incorporated survey data to detail the existing and proposed overshadowing impacts. The results show that no additional overshadowing will be generated onto adjoining properties as a result of the location of the proposed science building.

There will be some additional overshadowing on the subject site, particularly within the front setback. These impacts are negligible, with much of the land in the front setback occupied by the access driveway and not being a recreation or play space.

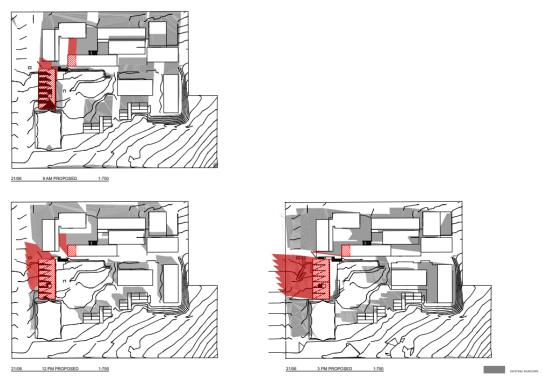


Figure 19 Extract of the proposed shadow diagrams (Source: Betti&knut architecture)

5.3.6 Views

The proposed building works have been sited between existing buildings and structures of the GISS site. The works will have no notable impact on any views or vistas within the immediate proximity of the site.

5.3.7 Traffic and Parking

Access

Access to the site will continue to be made available via Myoora Road. A basement car park is located towards the southern corner of the site, with parking bays and a kiss and drop area located within the front setback. Alternative access to the site is available via a driveway off Myoora Road, towards the eastern corner of the site.

Traffic

The proposed development does not impact on the existing on-site car parking arrangements. The proposal will not increase the student or staff capacity of the site and therefore, no additional traffic impacts will be generated by the proposed development.

Parking

The existing car parking arrangements are to be retained. A basement car park towards the south of the site and parking bays within the front setback provide for on-site car parking. Ten (10) additional bicycle parking spaces have been added next to the current kiss & drop preschool zone. The school is envisaging the install of an electric vehicle charging station on site in the future.

5.3.8 Waste Management

Waste will be managed in accordance with the Waste Management Plan (WMP) that accompanies this application. The WMP has detailed the management of demolition, construction and on-going waste, whilst also having regard to the relevant waste management provisions of the DCP.

5.3.9 Accessibility

The proposed development has been assessed against the access provisions of the Building Code of Australia (BCA). An Accessibility Report was prepared by Accessible Building Solutions and accompanies this application. The conclusion of this report confirmed that the proposal "can achieve compliance with the access provisions of the BCA".

On the basis of the above concluding statement, it is considered that the design of the proposal has adequately considered the relevant accessibility provisions of the BCA.

5.3.10 Air Quality

The proposed works will likely generate some dust during the site preparation and construction phases of the development. However, the impact on air quality can be mitigated through the incorporation of measures such as covering the load of trucks entering and exiting the site and wetting down stockpiled areas. The proposal is not anticipated to give rise to any long term or adverse impacts on the surrounding air quality.

5.3.11 Erosion and Sediment Control

Erosion and sediment control is to be managed in accordance with the plan prepared by TTW, dated 24 November 2021. The Stormwater Report confirms the measures that will be implemented to provide erosion and sediment control, as provided below.

The silt fence will prevent silt and waste being washed onto the neighbouring site and streets. The silt fence can be integrated with safety fencing. A sedimentation trap will be installed in the low point of site excavation. A temporary construction entry will be created off the existing car park and entry into the proposed site. Pits will have silt protection installed to prevent silt entering the stormwater system during construction

5.3.12 Stormwater Management

The proposed development will be connected to Council's existing in-ground stormwater line at Myoora Road, via a proposed surface inlet pit. A Stormwater Management Report prepared by TTW has provided the following comments with regard to the stormwater management of the development:

The proposed development will require diversion of an existing concrete channel which conveys stormwater from the northwestern portion of the site to Myoora Road through a series of pipes and channels.

The proposed diversion will be connected downstream of the Council's existing in-ground stormwater line along Myoora Road via proposed surface inlet pit. The proposed diversion network has been sized to cater for all storm events up to and including the 100 year Annual Recurrence Interval (ARI) storm event with additional capacity. Further, the proposed downstream connection will alleviate the existing flooding/surcharge risk at the existing point of connection

An OSD tank is also proposed and has been sized in accordance with the Northern Beaches Council Water Management for Development Policy (policy). The OSD tank will contain a volume of 22.6m³ and have a peak flow discharge of 20L/s. As provided in the Stormwater Management Report, the OSD tank will be located between the science building and site frontage to Myoora Road.

5.3.13 Economic Impact

The proposed development will enhance the teaching and learning facilities of the GISS. This will provide for the needs of students and staff attending the school, as the development will provide a facility that is exceptionally designed. This results in positive future economic

impacts through the provision of high-quality educational facilities to benefit staff and students into the future.

There will also be short term economic benefits for the construction industry, as a result of the construction of the science centre which in turn assists in stimulating the economy.

5.4 Suitability of the Site for Development

The proposal relates to an existing school that has been operating on the site since 2008. The works will enhance the functioning and operations of the GISS campus whilst being designed to minimise impacts on adjacent properties. The site also has access to all essential infrastructure.

5.5 Public Interest

In accordance with section 4.15(1)(e) of the EP&A Act, the proposed development is considered to be in the public interest. The proposal will provide for an adroitly designed facility that will benefit the current and future student and staff population of the GISS and the educational needs of the Northern Beaches area.

The proposed development relates to an existing educational establishment (school) and has been designed to meet the provisions of relevant environmental planning instruments and the Warringah DCP.

In accordance with Section 4.15(1)(e) of the EP&A Act, the proposed development is therefore considered to be in the public interest.

6 Conclusion

The proposed development for the construction of a science building and extension to an administration building at 33 Myoora Road, Terrey Hills has been assessed in accordance with the requirements of the EP&A Act and other relevant legislation.

The proposed works will result in the construction of a new state-of-the-art science building and an extension to the existing administration building which will provide for the needs of the students and staff attending the GISS. The science building will provide for specialist classroom facilities on both the ground and first floor levels, with the building being sustainably designed with a green roof, rainwater harvesting, solar power generation, passive airflow, thermal mass and natural lighting. The extension to the administration building will provide the GISS with a new reception on the ground floor level and a workspace extension on the first floor.

The proposed building height variation is supported by a Clause 4.6 Variation which outlines that the proposed development is justified in the circumstances of the proposal, and it is unreasonable and unnecessary to maintain the building height development standard in this instance.

Accordingly, the proposal is considered to satisfactorily respond to the opportunities and constraints of the site and the relevant legislation, is unlikely to result in adverse impacts in the locality and is worthy of approval.