

13 February 2023

Attn: Kevin Kim
NSW Planning, Industry and Environment
GPO Box 9898
SYDNEY 2000

Dear Mr Kim,

RE : SSD-31822612 - Barker College 91 Pacific Highway, Hornsby: 9 & 27-31 Clarke Road and 5 & 7 Marillian Avenue, Waitara and 30A & 32A Unwin Road, Wahroonga

The following comments are provided for consideration and to assist the Department in the assessment of the SSD application.

Heritage

Proposed Works

Concept proposal and Stage 1 development for alterations and additions to Barker College including:

- Raised walkway
- Aquatics and Tennis Centre
- Co-Curricular Performing Arts & Exam centre and Maintenance Facility
- Upgraded campus infrastructure and landscape works, and
- Increased school population.

Heritage Listings

Barker College is listed as a Heritage Conservation Area (C1) and four of the college buildings/grounds within the conservation area (HCA) curtilage are listed as individual heritage items within Schedule 5 of the *Hornsby Local Environmental Plan (HLEP) 2013*.

A summary of the heritage item listings within the site is listed below:

Suburb	Item Name	Address	Property Description	Significance	Item No.
Hornsby	Barker College Junior School	College Crescent	Lot 1 DP 1146779	Local	465
Hornsby	Barker College – group of buildings, grounds and gates	91 Pacific Highway	Lot 1 DP 1146779; Part Lot 1 DP 135493	Local	501
Hornsby	Barker College – Centenary Design Centre, McCaskill Music	91 Pacific Highway (2,4,6 and 8-10 The	Lot 1 DP 1146779	Local	782

	Centre and Development Office	Avenue and 2-6 Unwin Road)			
Waitara	House and Garden	27-31 Clarke Road	Lot 1, DP 857049	Local	779

The HCA curtilage within the context of the Barker College property boundary is shown in the map below:



Heritage Management Policies and Guidelines

Draft Barker Conservation Management Plan (2016)

In 2016 Barker College commissioned Paul Davies to prepare a draft Conservation Management Plan (CMP) to inform the preparation of a Masterplan for the college campus so that the heritage values of the site are understood prior to proposing future development on any part of the campus.

This was an update from a previous CMP which was prepared in 1999 as part of an application to build a new science wing. Since that time Barker college has undertaken a considerable amount of land acquisition, new building works as well as change of building uses. The 2016 was a key document used to address the heritage values of the site and to help the college plan for future development under best practice and the current heritage guidelines between 2016 and 2022.

Conservation Management Plan (2022)

In 2022 a new draft CMP for Barker College was prepared by EBRs to guide future works and changes at the college campus to ensure its identified heritage significance is adequately identified, protected, and preserved. The 2022 CMP is an update from the 2016 CMP and forms part of the documentation submitted with the subject SSD Application. The new CMP includes the campus expansion and major projects undertaken by the school between 2018 and 2021, which have included acquisition of The Avenue and substantial new developments on the junior school and senior school sites.

Hornsby Shire Heritage Conservation Areas Review (Unpublished draft 2022)

In 2018 Hornsby Shire Council embarked to complete a shire wide Comprehensive Heritage Study. In 2021 Hornsby Shire Council commissioned GML Heritage (GML) to prepare a review of existing and potential new conservation areas (HCAs). Whilst the document is currently an unpublished draft, its findings to date reflect Council's proposed future management of the heritage values of the site. The recommendations of this report have been considered in the heritage assessment of the proposed works.

Heritage Comment

The proposal has been considered regard to the documentation submitted with the SSD Application, including the *Heritage Impact Statement (HIS)* prepared by NBRIS, dated 26 September 2022 and the heritage requirements of the HLEP, the *Hornsby Development Control Plan 2013 (HDCP)*.

Consideration of relevant heritage matters are discussed in the table below.

Proposed Development	Heritage Comment
<p><i>Raised walkway</i></p>	<p>A new raised walkway is proposed along the southern elevations of C Block and Leslie Hall to improve pedestrian movement and circulation within the campus.</p> <p>Leslie Hall was constructed in 1964-65, designed by architects Fowell, Mansfield, Jarvis and Maclurcan and named after former headmaster W. S. Leslie who died in 1957. The 2022 CMP and HIS describe the hall as an intact four storey building designed in the Late Twentieth Century International architectural style, constructed in brick with a rendered concrete finish to the middle portion of the building and an almost flat corrugated iron roof. The 2022 CMP and HIS grades the hall interior and exterior to be of High significance for retention and to ensure the significant elements are conserved.</p> <p>C Block was constructed in 1967, designed by architects Laurie & Heath as an extension from the science building and connecting Leslie Hall to complete the quadrangle formed by the four buildings. The 2022 CMP and HIS describe the classroom building as a three-storey brick and concrete building with metal framed windows are evenly spaced across the northern and southern facades and a covered verandah long the northern façade. The 2022 CMP and HIS grades the classroom to be of Moderate significance, associated with later development of the site and compromised by less significant modification and buildings within its setting. Fabric of moderate development is recommended to be preserved or adapted, permitting the removal of a particular element if the overall significance is retained to ensure continual use of the building.</p> <p>No heritage objections are raised to the proposed raised walkway. The supporting HIS has provided an accurate description of the heritage impact and is supported by Council. The new work is regarded to be acceptable as it involves</p> <ul style="list-style-type: none"> • retention of all identified highly significant fabric; • respect the historic and aesthetic values, and significant vistas and views of the affected buildings.

Proposed Development	Heritage Comment
	<ul style="list-style-type: none"> • minimal demolition of less significant elements to support the practical and ongoing use of the spaces; and • new work of a design, siting, form and materials which satisfy Section 6.6 Conservation Policies of the 2022 CMP
<p><i>Aquatics and Tennis Centre</i></p>	<p>A new Aquatics and Tennis Centre building is proposed to be constructed on the southeast corner of the main School campus, at the intersection of Unwin Road and Clarke Road and removal of the existing open air tennis courts and surrounding landscape features. The tennis courts (and underground car parking) were constructed in 2007. The structures are graded within the 2022 CMP and HIS to be of little heritage significance and recommended for retention or removal depending on the continual use and enhancement of the established heritage values of the site.</p> <p>No heritage objections are raised to the new Aquatics and Tennis Centre building. The supporting HIS has provided an accurate description of the heritage impact and is supported by Council. The new work is regarded to be acceptable as it is:</p> <ul style="list-style-type: none"> • located at a distance from the “heritage precinct”; • would have no adverse physical or visual impact on the buildings, landscapes or vistas and views identified to be of High significance; and • of a design, siting, form, height, scale and materials which satisfy Section 6.6 Conservation Policies, in particular Principles for New Elements (Section 6.6.8) of the 2022 CMP.
<p><i>Co-Curricular Performing Arts & Exam centre and Maintenance Facility</i></p>	<p>A new Co-Curricular Performing Arts & Exam centre and Maintenance Facility are proposed to be constructed on the southern corner of Unwin Road and Clarke Road, to the south of the main school campus, and demolition of the existing school buildings (Nos. 1-13 Clarke Road, Waitara).</p> <p>The affected buildings along Clarke Road are under Barker College’s ownership but are not within the Barker HCA boundary, its listed heritage item curtilages or heritage listed in their own right. They include a row of modest dwellings dating from the Federation to Post-war period. The original subdivision was amalgamated with the school ownership after their progressive acquisition between 1971 and 1989. The 2022 CMP includes the affected buildings within the historic overview of the campus (<i>Section 2.17 Campus Development South of Clarke Road</i>), however the area is omitted from the Sections 3 and 4 covering <i>Physical Evidence and Assessment of Significance</i>. Similarly, the HIS omits any assessment of significance of heritage impact in regard to the existing residential buildings.</p>

Proposed Development	Heritage Comment
	<p>Council's unpublished 2022 Draft HCA Review has identified that the architectural style and setting of the existing buildings within formal gardens is complementary to the historical development of Barker College (1896-1950s) and its significant physical attributes, and that they align with the heritage significance of the place. The report goes on to recommend the properties along Clarke Road to be included in the revised boundary and final Statement of Heritage Significance of the proposed amalgamated heritage item for the site, and that heritage values of the College be managed in accordance with the 2016 CMP (which was the most recent published CMP at the time of preparation of the report).</p> <p>The 2016 CMP identifies the buildings at Nos. 1-7 Clarke Road to have a Neutral grading of significance and No. 9 Clarke Road to have a Medium grading of significance. The graded levels of significance identify that:</p> <p><i>“Moderate Significance</i></p> <p><i>These are elements that have heritage significance but which are not key to the core elements of the place and which are not essential to the understanding of the former use or its significance, Their retention is desirable but not essential. Changes that provide for future use are acceptable.</i></p> <p><i>Neutral significance</i></p> <p><i>These are elements that form part of the overall site which have minimal or no heritage significance, but which do not adversely impact on elements of high heritage value. They can be retained, altered or removed.”</i></p> <p><i>*Note there is a minor discrepancy in the report between the term Moderate & Medium”</i></p> <p>No heritage objections are raised to the new Co-Curricular Performing Arts & Exam centre, Maintenance Facility and associated demolition work. The supporting HIS has provided an accurate description of the heritage impact and is supported by Council. The proposal is regarded to be acceptable as it:</p> <ul style="list-style-type: none"> • involves the removal of moderate and neutral significant fabric that is permitted to be removed under the most recent heritage management policies of the site (2022 CMP, 2016 CMP and unpublished 2022 HCA Review). • Is located at a distance from the “heritage precinct”; • would have no adverse physical or visual impact on the buildings, landscapes or vistas and views identified to be of High significance; and

Proposed Development	Heritage Comment
	<ul style="list-style-type: none"> • has a concept siting, height and form which satisfy Section 6.6 Conservation Policies, in particular Principles for New Elements (Section 6.6.8) of the 2022 CMP.
<p><i>Upgraded campus infrastructure and Landscape works</i></p>	<p>The upgrade of campus infrastructure and various landscape works are proposed, including the addition of new landscape features (fencing, pathways, ramps, driveways, retaining walls and plantings), realignment of Chapel Drive, creation of a new Civic space within “The Avenue” and alteration of existing non-significant landscape features.</p> <p>No heritage objections are raised to the upgraded campus infrastructure and landscape work. The supporting HIS has provided an accurate description of the heritage impact and is supported by Council. The proposal is regarded to be acceptable as it:</p> <ul style="list-style-type: none"> • involves revitalization of the connecting footpaths, driveways, ramps, fencing and landscape spaces between the buildings and open spaces within the site • improve the connectivity and efficient pedestrian movement within the campus • would have no impact on the elements, vistas or views identified to be of High significance; and • is of a design that minimises tree loss, includes replacement planting and finishing materials which satisfy Section 6.6 Conservation Policies, in particular Principles for New Elements (Section 6.6.8) of the 2022 CMP.
<p><i>Increased school population</i></p>	<p>An increase to the existing cap that applies to total staff and student numbers is proposed. The increase in school population is not a matter that requires heritage comment.</p>

Summary

The Concept Proposal and Stage 1 Development for alterations and additions to Barker College are consistent with the objectives and requirements of the HLEP and HDCP, as well as the site-specific conservation policies within the heritage management documents for the site (2022 CMP and 2016 CMP). The proposal and supporting documentation have demonstrated that the proposed works would have no discernible impact on the heritage values of the HCA, listed items, and grounds, and would support the future functionality of the school and represent an early 21 century phase in the development.

Recommendation

That, no objections are raised to the proposal on heritage grounds.

Bushland Protection

The proposed development does not trigger the Biodiversity Offsets Scheme (BOS) as per the BDAR waiver documentation from the NSW DPE.

No trees belonging to mapped Blue Gum High Forest Critically Endangered Ecological Community listed under the NSW Biodiversity Conservation Act 2016 is proposed for removal.

The concept landscape plan includes supplementary planting of locally native species on the site.

The Natural Resources Unit considers that the proposal is unlikely to have a significant impact upon species, populations and communities listed under the NSW Biodiversity Conservation Act 2016.

Environment Protection

The application has been assessed utilising the *Protection of the Environment Operations Act 1997, Local Government Act 1993, Local Government (General) Regulation 2005 and Environmental Planning & Assessment Act 1979*.

There are contamination issues in the area of the site identified as being in 'concept stage'. Accordingly, a DSI and RAP will be required when an application is lodged for future stages of development.

The Environmental Compliance Team has assessed the Application and if consent is granted to this application, the following conditions should apply for Stage 1 of the Development.

Further information is to be submitted post concept stage for the development in order to address outstanding acoustic, contamination and construction management issues.

PROPOSED CONDITIONS - Stage 1:

REQUIREMENTS PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE

Construction Management Plan (CMP)

To assist in the protection of the public, the environment and Council's assets, a separate Construction Management Plan must be prepared by a suitably qualified environmental consultant in consultation with a qualified traffic engineer and AQF 5 arborist and submitted to Council's Compliance Team via Council's Online Services Portal for review and written approval.

The CMP must include the following details:

- a) A Construction Traffic Management Plan (CTMP) including the following:
 - i) The order of construction works and arrangement of all construction machines and vehicles being used during all stages.
 - ii) The CTMP plans shall be in accordance with all other plans submitted to Council as part of this development proposal.

- iii) A statement confirming that no building materials, work sheds, vehicles, machines or the like shall be allowed to remain in the road reserve area without the written consent of Hornsby Shire Council.
- iv) The Plan shall be in compliance with the requirements of the Roads and Maritime Services *Traffic control at work sites Manual 2018* and detail:
 - a. Public notification of proposed works;
 - b. Long term signage requirements;
 - c. Short term (during actual works) signage;
 - d. Vehicle Movement Plans, where applicable;
 - e. Traffic Management Plans;
 - f. Pedestrian and Cyclist access and safety.
- v) Traffic controls including those used during non-working hours. Pedestrian access and two-way traffic in the public road must be able to be facilitated at all times.
- vi) Details of parking arrangements for all employees and contractors, including layover areas for large trucks during all stages of works. The parking or stopping of truck and dog vehicles associated with the development will not be permitted other than on the site and the plan must demonstrate this will be achieved.
- vii) Confirmation that a street 'scrub and dry' service will be in operation during all stages of works.
- viii) Proposed truck routes to and from the site including details of the frequency of truck movements for all stages of the development.
- ix) Swept path analysis for ingress and egress of the site for all stages of works.
- x) Site plans for all stages of works including the location of site sheds, concrete pump and crane locations, unloading and loading areas, waste and storage areas, existing survey marks, vehicle entry, surrounding pedestrian footpaths and hoarding (fencing) locations.
- xi) The total quantity and size of trucks for all importation and exportation of fill on site throughout all stages of works, and a breakdown of total quantities of trucks for each stage of works.
- xii) The number of weeks trucks will be accessing and leaving the site with excavated or imported fill material.
- xiii) The maximum number of trucks travelling to and from the site on any given day for each stage of works.
- xiv) The maximum number of truck movements on any given day during peak commuting periods for all stages of works.
- xv) The source site location of any proposed fill to be imported to the site, for all stages of works.
- xvi) The Plan must state that the applicant and all employees of contractors on the site must obey any direction or notice from the Prescribed Certifying Authority or Hornsby Shire Council in order to ensure the above.
- xvii) If there is a requirement to obtain a Work Zone, Out of Hours permit, partial Road Closure or Crane Permit, the Plan must detail these requirements and include a

statement that an application to Hornsby Shire Council will be made to obtain such a permit.

- b) A Construction Waste Management Plan detailing the following:
 - i) Details of the importation or excavation of soil and fill, the classification of the fill, disposal methods and authorised disposal depots that will be used for the fill.
 - ii) Asbestos management requirement and procedures for removal and disposal from the site in accordance with *AS 2601–2001 – ‘The Demolition of Structures’*, and the *Protection of the Environment Operations (Waste) Regulation 2005*.
 - iii) General construction waste details including construction waste skip bin locations and litter management for workers.
- c) A Tree Protection Plan (TPP) prepared by an AQF 5 Arborist in accordance with any approved Arboricultural Impact Assessment and tree location plans, detailing the following:
 - i) A site plan showing tree protection zones (TPZ) and structural root zones (SRZ) of trees to be retained and specific details of tree protection measures inclusive of distances (in metres) measured from tree trunks.
 - ii) Construction methodology to avoid damage to trees proposed to be retained during construction works.
 - iii) Specifications on tree protection materials used and methods within the TPZ or SRZ.
 - iii) Location of dedicated material storage space on site outside of TPZ’s and SRZ’s for retained trees.
- d) A Construction Noise and Vibration Management Plan (CNMP) which includes:
 - i) Existing noise and vibration levels within the proximity of the proposed development site.
 - ii) Details of the extent of rock breaking or rock sawing works forming part of the proposed development works.
 - iii) The maximum level of noise and vibration predicted to be emitted during each stage of construction.
 - iv) The duration of each stage of works where the maximum level of noise and vibration are predicted to be emitted for.
 - v) Details of mitigation measures, inclusive of respite periods, that will meet acoustic standards and guidelines at each stage of works.
 - vi) Details of a complaints handling process for the surrounding neighbourhood for each stage of works.
- e) Identification of approved sediment and erosion control measures.
- f) The CMP must detail the contact information for developers, builder, private certifier and any emergency details during and outside work hours.

Note: The CMP must be lodged via Council’s Online Services Portal at: <https://hornsbyprd-pwy-epw.cloud.infor.com/ePathway/Production/Web/Default.aspx> and by selecting the following menu options: Applications > New Applications > Under ‘Application Types’: Management Plans.

REQUIREMENTS PRIOR TO THE COMMENCEMENT OF ANY WORKS

Protection of Adjoining Areas

A temporary hoarding, fence or awning must be erected between the work site and adjoining lands before the works begin and must be kept in place until after the completion of the works if the works:

Could cause a danger, obstruction or inconvenience to pedestrian or vehicular traffic;

Could cause damage to adjoining lands by falling objects; and/or

Involve the enclosure of a public place or part of a public place; and/or

Have been identified as requiring a temporary hoarding, fence or awning within the Council approved Construction Management Plan (CMP).

Note: Notwithstanding the above, Council's separate written approval is required prior to the erection of any structure or other obstruction on public land.

Erosion and Sediment Control

To protect the water quality of the downstream environment, erosion and sediment control measures must be provided and maintained throughout the construction period in accordance with the manual '*Soils and Construction 2004 (Bluebook)*', the approved plans, Council specifications and to the satisfaction of the principal certifying authority. The erosion and sediment control devices must remain in place until the site has been stabilised and revegetated.

Note: On the spot penalties may be issued for any non-compliance with this requirement without any further notification or warning.

REQUIREMENTS DURING DEMOLITION CONSTRUCTION

Construction Work Hours

All works on site, including demolition and earth works, must only occur between 7am and 5pm Monday to Saturday.

No work is to be undertaken on Sundays or public holidays.

Demolition

To protect the surrounding environment, all demolition work must be carried out in accordance with *Australian Standard AS2601-2001 – The Demolition of Structures* and the following requirements

Demolition material must be disposed of to an authorised recycling and/or waste disposal site and/or in accordance with an approved waste management plan; and

Demolition works, where asbestos material is being removed, must be undertaken by a contractor that holds an appropriate licence issued by *SafeWork NSW* in accordance with the *Work Health and Safety Regulation 2017* and be appropriately transported and disposed of in accordance with the *Protection of the Environment Operations (Waste) Regulation 2014*; and

On construction sites where any building contain asbestos material, a standard commercially manufactured sign containing the words 'DANGER ASBESTOS REMOVAL IN PROGRESS' and measuring not less than 400mm x 300mm must be displayed in a prominent position visible from the street.

Compliance with Hazardous Materials Report

The Hazardous Materials Report approved by Council must be complied with for the duration of works, unless otherwise approved by Council.

Environmental Management

To prevent sediment run-off, excessive dust, noise or odour emanating from the site during the construction, the site must be managed in accordance with the publication *'Managing Urban Stormwater – Landcom (March 2004)* and the *Protection of the Environment Operations Act 1997*.

Council Property

To ensure that the public reserve is kept in a clean, tidy and safe condition during construction works, no building materials, waste, machinery or related matter is to be stored on the road or footpath.

Note: This consent does not give right of access to the site via Council's park or reserve. Should such access be required, separate written approval is to be obtained from Council.

Disturbance of Existing Site

During construction works, the existing ground levels of open space areas and natural landscape features, including natural rock-outcrops, vegetation, soil and watercourses must not be altered unless otherwise nominated on the approved plans.

Landfill not Permitted

The importation of fill material associated with earthworks, or structural or engineering works, is not permitted as part of this consent.

Excavated Material

All excavated material removed from the site must be classified by a suitably qualified environmental consultant in accordance with the NSW Environment Protection Authority's *Waste Classification Guidelines* and *Protection of the Environment Operations (Waste) Regulation 2014* prior to disposal to a licensed waste management facility. Tipping dockets for the total volume of excavated material that are received from the licensed waste management facility must be provided to the principal certifying authority prior to the issue of an Occupation Certificate.

Compliance with Construction Management Plan

The Council approved Construction Management Plan must be complied with for the duration of works, unless otherwise approved by Council.

Unexpected Finds

Hornsby Shire Council

ABN 20 706 996 972

296 Peats Ferry Rd, Hornsby 2077

PO Box 37, Hornsby NSW 1630

Phone 02 9847 6666

Fax 02 9847 6999

Email hsc@hornsby.nsw.gov.au

Web hornsby.nsw.gov.au

Should the presence of asbestos or soil contamination, not recognised during the application process be identified during any stage of works, the applicant must immediately notify the PCA and Council.

PRIOR TO THE ISSUING OF AN OCCUPATION CERTIFICATE

Asbestos Clearance Certificate

Should any asbestos be encountered during demolition or construction works, a licenced asbestos assessor is required to provide a Clearance Certificate to the Certifier prior to the issue of an Occupation Certificate, certifying that the asbestos has been removed and appropriately disposed of, and the site is now suitable for its approved use.

Damage to Council Assets

To protect public property and infrastructure, any damage caused to Council's assets as a result of the construction or demolition of the development must be rectified by the applicant in accordance with AUS-SPEC Specifications (www.hornsby.nsw.gov.au/property/build/aus-spec-terms-and-conditions). Rectification works must be undertaken prior to the issue of an Occupation Certificate, or sooner, as directed by Council.

REQUEST FOR INFORMATION: Post Concept Stage

Preliminary Construction Traffic Management Plan, dated 13 July 2022 prepared by The Transport Planning Partnership.

The plan details that work zones will be required during stages 2 and 3 of the development. Works Zones are provided to facilitate the efficient and safe operation of construction projects while minimizing disruption to traffic and pedestrians. They are provided in accordance with the Road Transport Act 2013. Rule 181 of the Road Rules 2014 permits a driver to stop in a Work Zone if the driver is driving a vehicle that is: engaged in construction work in or near the Work Zone or dropping off or picking up passengers. A Work Zone Permit is to be obtained from Council to facilitate this requirement.

SSDA Acoustic Assessment – Concept Approval and Stage 1 dated 16 August 2022 prepared by Acoustic Logic.

Acoustic Report

An Acoustic Report prepared by a suitably qualified Acoustic Consultant and member of the Association of Australasian Acoustical Consultants (AAAC) is to be submitted to Council for review. The report must detail the predicted noise levels to be emitted from the proposed development and proposed noise attenuation measures to be implemented so that background levels (L90) are not exceeded by 5dB(A) when measured at any sensitive receiver locations. The report must be prepared in accordance with the Hornsby Shire Council *Policy and Guidelines for Noise and Vibration Generating Development (Acoustic Guidelines V.5, 2000)*, the NSW Environment Protection Authority's (EPA) *Noise Policy for Industry*, the Association of Australasian Acoustica Consultants *Guideline for Child Care Centre Acoustic Assessment* and the DEC's *Noise Guide for Local Government*.

The detailed acoustic report is required post concept stage to identify specific noise mitigation measures; inclusive of operational hours, construction materials or acoustic treatments would be required. The report must detail the expected noise generated by the use of the proposed developments.

Preliminary (Stage 1) Site Investigation dated 18 August 2022, prepared by JK Environments.

The PSI prepared by JK Environments identified Carcinogenic PAH in fill which exceeded the health based criteria in one area proposed as part of the concept stage of the development. The PSI recommends that further investigations by way of a Detailed Site Investigation and Remediation Action Plan are undertaken. Accordingly the following information is required post concept stage.

1. A Detailed Environmental Site Investigation (Stage 2) must be prepared for the subject site by a certified consultant as recognised under the Certified Environmental Practitioners Scheme - Site Contamination (CEnvP (SC)) and the Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) certification and submitted to Council. The investigation must be undertaken in accordance with NSW Environment Protection Authority's *Contaminated Sites Guidelines* and the *National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPM)*.

Note: A detailed investigation will be required where the extent of contamination is significant in accordance with the NSW Environment Protection Authority's Contaminated Sites Guidelines or Council considers such investigation is warranted after consideration of the Preliminary Report.

2. A Remedial Action Plan (RAP) must be prepared for the subject site by a certified consultant as recognised under the Certified Environmental Practitioners Scheme - Site Contamination (CEnvP (SC)) and the Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) certification and submitted to Council, should the Preliminary/Detailed investigation reveal contamination exceeding criteria prescribed by the *National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPM)* and in accordance with the NSW Environment Protection Authority's *Contaminated Sites Guidelines*.
3. The Remediation Action Plan (RAP) must contain an associated Site Management Plan for remediation works, for Council's review and approval.

The Site Management Plan must include the following:

- a) Environmental Management Plan (EMP)

An Environmental Management Plan (EMP) is to be prepared by a suitably qualified Environmental Consultant in association with the certified land contamination consultant as recognised under the Certified Environmental Practitioners Scheme - Site Contamination (CEnvP(SC)) or the Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) certification, detailing the actions that will be taken to protect the environment for the duration of remediation works, and all responsible parties ensuring compliance with the document. The Plan is to be in accordance with the publication 'Managing Urban Stormwater – Landcom (March 2004)' and the Protection of the Environment Operations Act 1997 by way of implementing appropriate measures, and should include but not be limited to:

- i. Water quality and soil management, including but not limited to sediment and erosion control measures;
- ii. Air quality;

- iii. Noise management, including excavation noise mitigation measures will be implemented;
 - iv. Waste Management.
- b) Construction Management Plan (CMP)
- A Construction Management Plan, including a Construction Traffic Management Plan (CTMP) and scaled construction plans is to be prepared by a suitably qualified traffic engineer and qualified Worksite Traffic Controller in association with the certified land contamination consultant as recognised under the Certified Environmental Practitioners Scheme - Site Contamination (CEnvP(SC)) or the Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) certification, detailing the following:
- a) A copy of plans shall be submitted to Council detailing the proposed stages of remediation and arrangement of all construction machines and vehicles being used at the same time during all remediation stages.
 - i. The CMP plans shall be in accordance with all associated contamination reports provided to Council.
 - c) The plan shall include site plans for remediation works including the location of site sheds, unloading and loading areas, waste and storage areas being used.
 - d) The plan shall include details of parking arrangements for all employees and contractors, including layover areas for large trucks during remediation. The parking or stopping of truck and dog vehicles associated with the development will not be permitted other than on the site and the plan must demonstrate this will be achieved.
 - e) In order to prevent injury, accident and loss of property, a statement must be included within the Plan confirming that no building materials, work sheds, vehicles, machines or the like shall remain in the road reserve area during remediation without the written consent of Hornsby Shire Council.
 - f) Survey plan showing site sheds, concrete pump location, crane location and existing survey marks during remediation.
 - g) The Plan shall be in compliance with the requirements of the Road and Traffic Authority's "Traffic Control at Worksites Manual 1998" and detailing:-
 - 1. Public notification of proposed works;
 - 2. Long term signage requirements;
 - 3. Short term (during actual works) signage;
 - 4. Vehicle Movement Plans, where applicable;
 - 5. Traffic Management Plans;
 - 6. Pedestrian and Cyclist access and safety.
 - 7. The plans shall indicate traffic controls including those used during non-working hours and shall provide pedestrian access and two-way traffic in the public road to be facilitated at all times.
 - h) The plan shall include the proposed truck routes to and from the site including details of the frequency of truck movements during remediation works.

- i) The plan shall include swept path analysis for ingress and egress of the site during remediation.
- j) The plan shall include the total volume of fill to be imported to the subject site during remediation.
- k) The plan shall include the total volume of fill to be exported at the subject property during remediation.
- l) The plan shall include the total quantity and size of trucks for all importation and exportation of fill on site during remediation works, and a breakdown of total quantities of trucks.
- m) The plan shall include the number of total truck movements to and from the site during remediation.
- n) The plan shall include the number of weeks trucks will be accessing and leaving the site with excavated or imported fill material during remediation works.
- o) The plan shall include the maximum number of trucks travelling to and from the site on any given day for the duration of remediation works.
- p) The plan shall include the maximum number of truck movements on any given day during peak commuting periods during remediation works.
- q) The plan must include but not be limited to the location details of the licensed waste facility where excavated material required for removal will be disposed to.
- r) The plan must include the location details of the source site of any proposed fill to be imported for site remediation purposes.
- s) The Plan must state that the applicant and all employees of contractors on the site must obey any direction or notice from the Prescribed Certifying Authority or Hornsby Shire Council in order to ensure remediation works are undertaken in accordance with the CMP.
- t) Confirmation that a street 'scrub and dry' service will be in operation during remediation works.
- u) If there is a requirement to obtain a Work Zone, Out of Hours permit, partial Road Closure or Crane Permit as part of remediation works, the Plan must detail these requirements and include a statement that an application to Hornsby Shire Council will be made to obtain such a permit.

Engineering

The application has been considered with regards to Section 4.15 of the E P & A Act 1979 and no objections are raised to consent being granted based on engineering assessment subject to the following conditions:

1. Construction Certificate

- a) A Construction Certificate is required to be approved by Council or a Private Certifying Authority prior to the commencement of any construction works under this consent.
- b) The Construction Certificate plans must be consistent with the Development Consent plans.

REQUIREMENTS PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE

2. Stormwater Drainage

a) The stormwater drainage system for the development must be designed for an average recurrence interval (ARI) of 20 years and be gravity drained in accordance with AUS_SPEC Specifications and the following requirements:

Connected to the existing internal drainage system.

a) The stormwater drainage system must be designed by a qualified hydraulic engineer.

3. Internal Driveway/Vehicular Areas

a) The driveway and parking areas on site must be designed, constructed and a Construction Certificate issued in accordance with Australian Standards AS2890.1, AS3727 and the following requirements:

The driveway be a rigid pavement.

a) The driveway grade must not exceed 25 percent and changes in grade must not exceed 8 percent.

b) The driveway pavement be a minimum 3 metres wide, 0.15 metres thick reinforced concrete with SL72 steel reinforcing fabric and a 0.15 metre sub-base.

c) A common turning area to service the proposed development in accordance with *Australian Standards AS 2890.1* to ensure all vehicles can enter and leave the site in a forward direction.

REQUIREMENTS PRIOR TO THE ISSUE OF AN OCCUPATION CERTIFICATE

4. Damage to Council Assets

a) To protect public property and infrastructure, any damage caused to Council's assets as a result of the construction or demolition of the development must be rectified by the applicant in accordance with AUS-SPEC Specifications (www.hornsby.nsw.gov.au/property/build/aus-spec-terms-and-conditions). Rectification works must be undertaken prior to the issue of an Occupation Certificate, or sooner, as directed by Council.

Traffic and Parking

Council's *Traffic and Road Safety Branch* (the Branch) has undertaken an assessment of the above State Significant Development (SSD) for alterations and additions.

The assessment of the DA was based on:

- Environmental Impact Statement (EIS) prepared by Urbis Pty Ltd
- Architectural Drawings prepared by Neeson Murcutt +Neille Architects
- Transport and Accessibility Impact Assessment prepared by The Transport Planning Partnership (TTPP)
- Green Travel Plan prepared by The Transport Planning Partnership (TTPP)
- Preliminary Construction Traffic Management Plan prepared by The Transport Planning Partnership (TTPP)

Introduction

Hornsby Shire Council

ABN 20 706 996 972

296 Peats Ferry Rd, Hornsby 2077

PO Box 37, Hornsby NSW 1630

Phone 02 9847 6666

Fax 02 9847 6999

Email hsc@hornsby.nsw.gov.au

Web hornsby.nsw.gov.au

The Baker College site The site is located approximately 500 m south of the Hornsby Town Centre. area is 168,462 m²

The school runs staggered school hours as detailed below.

Pre-K to Year 2: 8:25am to 2:45pm
Years 3-6 8:30am to 3:00pm
Years 7 to 12 8:20am: to 3:20 pm

The proposal involves

- Tree removal and demolition
- C-Block Elevated Walkway
- The Avenue +RB Finlay Walk 'Public Domain' Civic Landscape
- Rose Wood West Connection
- Drop-Off/Pick-Up Rationalisation (Refer Traffic Report)
- Concept approval for the redevelopment the existing tennis courts and former Preparatory School access off Unwin Road to the following,
 - Removal of 78 car parking from the existing tennis courts and 44 from the former Preparatory School total 122 carpark spaces and replaced with 122 carpark spaces listed below with no changes to on site carpark spaces of 487.
 - Performance arts and exam centre capacity for 750 person capacity with basement carpark including with vehicle access from Unwin Road with 90 basement carpark. *Ref Section 3.2.1 Barker College EIS SSD-31822612.*
 - Aquatic including 25m pool and tennis centre with vehicle access from Clarke Street with 35 basement carpark. *Ref Section 3.2.1 Barker College EIS SSD-31822612.*
 - Maintenance shed and associated car parking- Relocate existing 2 storey steel framed 'shed' 1000 m² with 4 carpark spaces.
- Increase student numbers by 430 from 2420 to 2850 and staff numbers by 141 from 339 to 480.
- The concept approval has been requested for the redevelopment involving the removal of parking associated with the existing tennis courts and the former Preparatory School accessed of Unwin Road. Car parking associated with existing facilities is proposed to be replaced and incorporated into the concept development with 32 spaces associated with the Aquatics and Tennis Centre and 90 spaces associated with the Co-curricular Performing Arts and Exam Centre. The overall car parking provision on-site of 487 spaces is to be retained.

Below is an extract from the traffic report Ref Section 3.2.4 Pick Up/Drop Off Arrangements and onsite Park

3.2.4. Pick Up/Drop Off Arrangements and On Site Parking

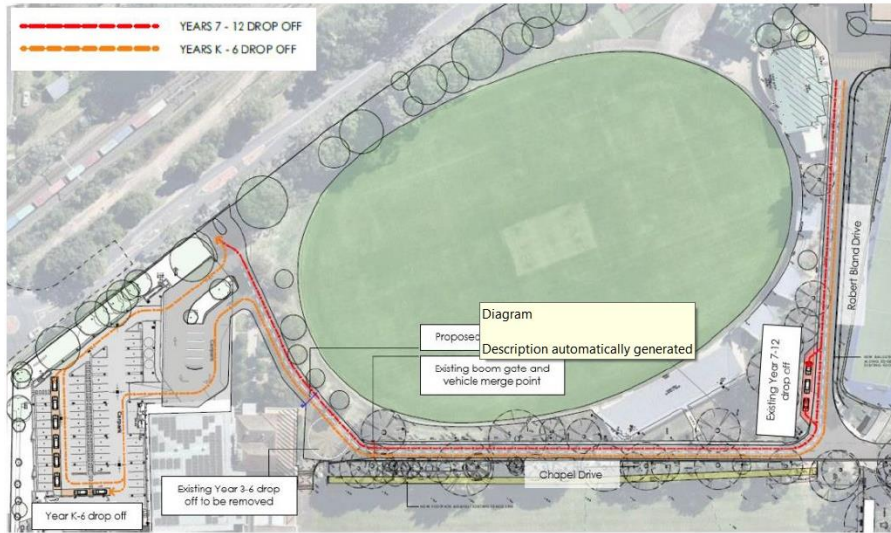
Pedestrian safety and an improved flow of vehicles during pick-up and drop-off hours is an important objective in this overall project. The proposed development includes improvements to the existing on-site drop off and pick up arrangements, and subsequently seeks to improv the efficiency of on-site circulation.

The proposed upgrades include:

- Relocation of the existing boom gate to enable two traffic lanes along the entire internal road network used for pick-up and drop-off. This. The resulting arrangement will prevent the need for approaching traffic to merge into one lane and ensure that primary and prep school drop-off/pick-up is completely separated from high school drop-off/pick-up.
- Enforcement of a one-way circulation flow for prep and primary school pick up/drop off, which is separated from the high school flow. Primary school (Years 3 to 6) traffic will continue through the pre-school car park and past the drop off area to prevent Years 3 to 6 from merging with Years 7 to 12 and thereby minimising the number of merge points prior to the exit.
- Introduction of a pedestrian path along the western edge of Phipps Taylor field along Robert Bland Drive to provide connection between the northern campus and the Junior School to the south, creating a safe pedestrian link separate from vehicle traffic.

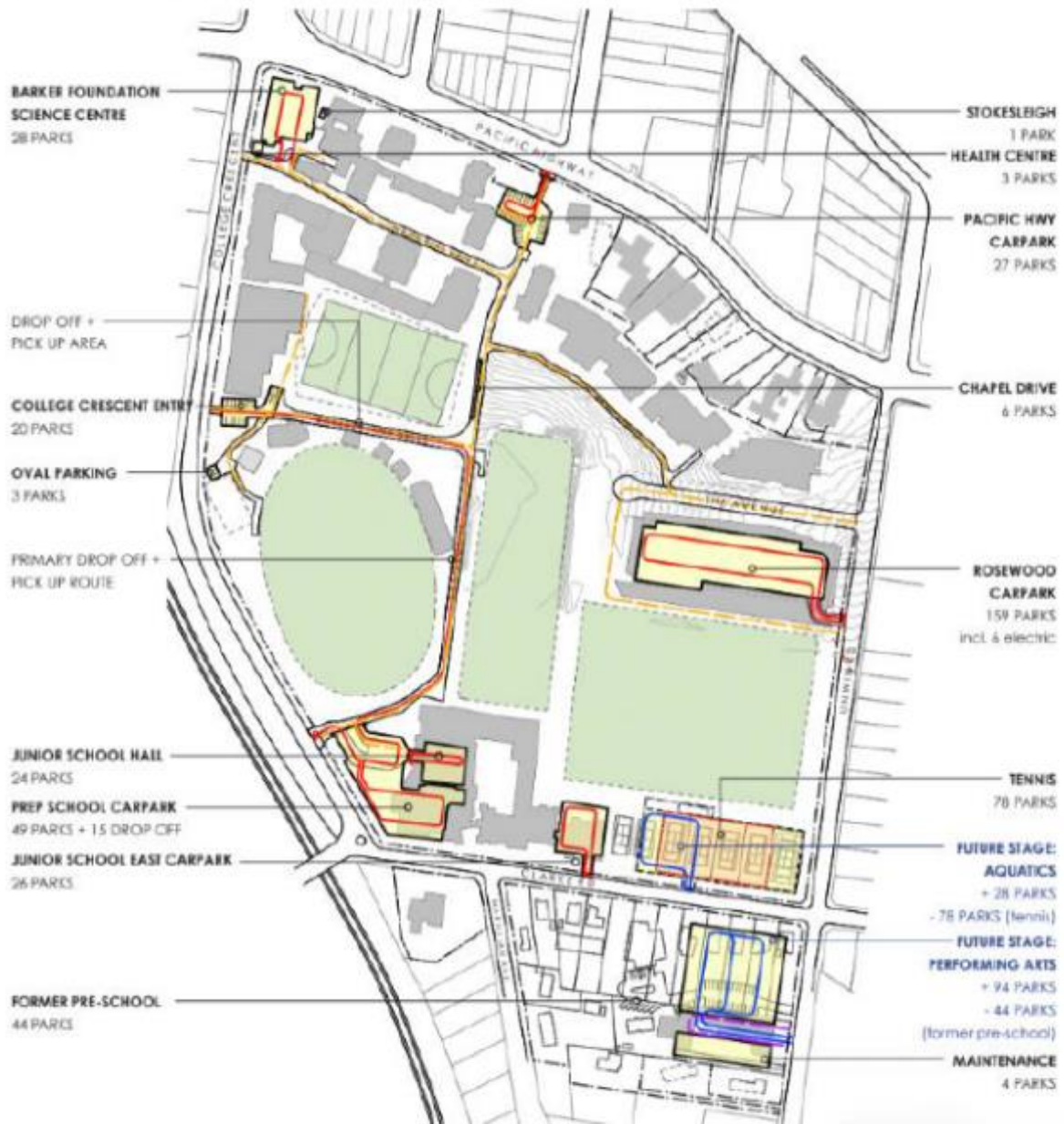
As illustrated in **Figure 19**, the proposed arrangements will result in two ultimate lanes of traffic which will merge at the exit point to College Crescent.

Figure 19 On Site Pick up/Drop off arrangements



Picture 7 Proposed pick up/drop off arrangements

Figure 20 On Site Parking and Pick up/Drop off arrangements



Picture 8 Proposed Parking Provisions

Source: Neeson Murcutt + Neille

Development History

Below is a list of recent Development Applications for the site.

DA Reference	Description of Development	Decision
DA/1194/2016	Demolition of basketball and tennis courts and construction of an educational establishment and childcare centre in two stages. This project has been fully developed.	Approved by Hornsby Shire Council
DA/1015/2020	Extension of the approved cafeteria development involving the construction of 2 storeys above the level 1 cafeteria for the purpose of providing a general maths and student hub for students and staff. Construction of the project has begun and is due for completion in early 2023.	Approved by the Sydney North Planning Panel

Over the years Baker College have continued to increase student numbers and staff.

Condition 60 of DA/1194/2016 states:

Number of Students

A maximum of 2420 students are to be enrolled at Barker College, and a maximum of 339 equivalent full time staff are to be employed at Barker College. This includes a childcare centre (Pre-Kindergarten which must accommodate a maximum of 40 children at any one time.

Any increase to these student or staff numbers is not to occur with prior development consent.

Baker College enrolled student numbers in 2017 were approximately 2150. Beyond the year 2022 Baker College intend to increase student numbers to 2,850 not 3,100 as Barker initially advised Council.

The maximum of 339 equivalent fulltime staff are to be employed

The proposed student numbers will increase by 430 or 18% from 2420 to 2850.

The proposed staff numbers will increase by 141 or 42% from 339 to 480.

Traffic

Pacific Highway

Pacific Highway (State Road) six travel lanes with a posted speed limit of 60 km/h. A 40 km/h school zone restriction that apply between 8.00am and 9:30 am and between 2:30pm and 4:00pm Monday to Fridays on School Days.

College Crescent

College Crescent (Regional Road owned and maintained by Council) is a two way road with two travel lanes and two kerbside parking between Pacific Highway and Clarke Road. No speed limit signage is provided along College Crescent, which indicates a default speed limit of 50 km/h. A 40 km/h school zone restriction that apply between 8.00am and 9:30 am and between 2:30pm and 4:00pm Monday to Fridays on School Days.

Unwin Road

Unwin Road (Local Road) is a two-way road with two travel lanes and two kerbside parking between Pacific Highway and Edward Road. The road has a posted speed of 50 km/h. A 40 km/h school zone restriction that apply between 8.00am and 9:30 am and between 2:30pm and 4:00pm Monday to Fridays on School Days.

Clarke Road

Clarke Road (Local Road) between Malsbury Road and Yardley Avenue is a two way road with two travel lanes and limited kerbside parking and bus zone. The road has a posted speed of 50 km/h. A 40 km/h school zone restriction that apply between 8.00am and 9:30 am and between 2:30pm and 4:00pm Monday to Fridays on School Days.

Vehicle Access Arrangements and Traffic Circulation.

The campus currently provides ten vehicle access points which are located off College Crescent, Pacific Highway, Unwin Road and Clarke Road.

6.6. TRAFFIC, TRANSPORT AND ACCESSIBILITY

A Transport Impact Assessment (TIA) has been prepared by The Transport Planning Partnership (TPPP), enclosed in **Appendix N** to assess the anticipated transport implications of the proposal during operational and construction stages of both the concept works and Stage 1 works.

6.6.1. Traffic Generation

The proposal proposes to increase the current student capacity 2850 students and 480 FTE staff. The TIA has utilised the existing school population as the baseline for the increase in traffic generation resulting from the proposed capacity increase.

A comparison between the modelling results of Year 2026 with and without the proposed development scenarios during the AM and PM peaks is provided in Table 7.4 and Table 7.5, respectively.

Table 7.4: Year 2026 AM Peak Hour Intersection Analysis Results

Intersection	Control	Year 2026 Future Base			Year 2026 Future Base + Development		
		Ave Delay (s)	LoS	95 th %ile Queue Length (m)	Ave Delay (s)	LoS	95 th %ile Queue Length (m)
Pacific Hwy-College Cres-Pretoria Pde	Signals	42	C	183	42	C	183
Pacific Hwy-Unwin Rd-Romsey St	Signals	106	F	219	124	F	223
Unwin Rd-The Avenue	Priority	6	A	90	6	A	90
Unwin Rd-Clarke Rd	Priority	22	B	35	24	B	47
Clarke Rd-College Cres	Roundabout	57	E	149	100	F	149

Table 7.5: Year 2026 PM Peak Hour Intersection Analysis Results

Intersection	Control	Year 2026 Future Base			Year 2026 Future Base + Development		
		Ave Delay (s)	LoS	95 th %ile Queue Length (m)	Ave Delay (s)	LoS	95 th %ile Queue Length (m)
Pacific Hwy-College Cres-Pretoria Pde	Signals	39	C	265	39	C	272
Pacific Hwy-Unwin Rd-Romsey St	Signals	52	D	237	61	E	267
Unwin Rd-The Avenue	Priority	6	A	4	6	A	38
Unwin Rd-Clarke Rd	Priority	12	A	10	12	A	11
Clarke Rd-College Cres	Roundabout	15	B	69	16	B	82

Table 7.4 and Table 7.5, indicates that the surrounding network would generally operate well by the year 2026, except for the intersections of Pacific Highway – Unwin Road – Romsey Street and Clarke Road – College Crescent. Both these intersections would be at capacity from background traffic growth alone. Notably, TfNSW's STFM model indicates a growth of 9.1% per annum growth in traffic along Unwin Street which is significant.

The development of the site would have a relatively minor impact on the road network compared to background traffic increases.

7.3.3 Mitigation Measures

The following mitigation measures could be considered:

- Increase the capacity of the Unwin Road approach, by widening it and allowing two approach lanes to Pacific Highway. This would allow a separate left lane and reduce delay on the right and through movements.
- Allowance of a longer green time at the Unwin Street approach to Pacific Highway. This would have to be investigated following consultation with TfNSW, who may not be open to adjustment of cycle times along Pacific Highway.
- A new egress off Clarke Road or Unwin Road to ease the pressure on the southbound movement along College Crescent (this would be more helpful if Unwin Road were also upgraded).

As a sensitivity analysis and to understand the feasibility of improving the intersection operation, the impact of widening Unwin Road has been investigated using the SIDRA modelling software. A 60m through and left turn bay was added to the Unwin Road approach to Pacific Highway, with signal phasing times retained as per existing conditions. The results of the modelling are presented in Table 7.6 and Table 7.7.

Table 7.6: 2021 AM Mitigation Measures

Intersection	Control	Existing + Development			Existing + Development + Upgrade		
		Ave Delay (s)	LoS	95 th %ile Queue Length (m)	Ave Delay (s)	LoS	95 th %ile Queue Length (m)
Pacific Hwy-College Cres-Pretoria Pde	Signals	40	C	152	40	C	152
Pacific Hwy-Unwin Rd-Ramsey St	Signals	60	E	184	36	C	184
Unwin Rd-The Avenue	Priority	6	A	90	6	A	10
Unwin Rd-Clarke Rd	Priority	15	B	18	15	B	18
Clarke Rd-College Cres	Roundabout	64	E	149	66	E	149

Table 7.7: 2026 AM Mitigation Measures

Intersection	Control	Year 2026 + Development			Year 2026 + Development + Upgrade		
		Ave Delay (s)	LoS	95 th %ile Queue Length (m)	Ave Delay (s)	LoS	95 th %ile Queue Length (m)
Pacific Hwy-College Cres-Pretoria Pde	Signals	42	C	183	42	C	183
Pacific Hwy-Unwin Rd-Romsey St	Signals	124	F	223	63	E	223
Unwin Rd-The Avenue	Priority	6	A	90	6	A	90
Unwin Rd-Clarke Rd	Priority	24	B	47	18	B	26
Clarke Rd-College Cres	Roundabout	100	F	149	106	F	149

The intersection of Unwin Road and Pacific Highway is operating a LoS D under existing conditions (without development) which means it is nearing capacity. The upgrade of Unwin Road to provide a second left turn and through short bay, would improve the operation of the intersection, under existing conditions, with it being a LoS C with development.

However, in the year 2026, this upgrade would not be sufficient to accommodate the background traffic growth, especially along Unwin Street resulting from the proposed NorthConnex project.

The modelling results indicate that the intersection of Unwin Road and Pacific Highway, would be over capacity, with or without the proposed development, by the year 2026. The analysed mitigation measure was insufficient to mitigate the problem and additionally, would require the acquisition of property to implement which may render the solution impractical.

Consultation with TfNSW has been undertaken to confirm the reliability of the STFM data and the forecasted 9.1% per annum growth rate along Unwin Road. TfNSW was not able to provide further information in this regard.

7.3.4 Other Measures

Based on site observations, vehicle delay and queueing at the intersection of Clarke Road and College Crescent, can be affected by downstream congestion at the intersection of Malsbury Road and Clarke Road.

Notable queues were observed at the right turn from the eastern leg to the northern leg of the intersection, (which generates traffic from Pacific Highway to other schools located to the east along Clarke Road e.g. Hornsby South Public School) and is required to give way to northbound traffic.

Figure 28 2026 PM Peak Hour Intersection Analysis Results

Intersection	Control	Year 2026 Future Base			Year 2026 Future Base + Development		
		Ave Delay (s)	LoS	95 th %ile Queue Length (m)	Ave Delay (s)	LoS	95 th %ile Queue Length (m)
Pacific Hwy-College Cres-Pretoria Pde	Signals	39	C	265	39	C	272
Pacific Hwy-Unwin Rd-Romsey St	Signals	52	D	237	61	E	267
Unwin Rd-The Avenue	Priority	6	A	4	6	A	38
Unwin Rd-Clarke Rd	Priority	12	A	10	12	A	11
Clarke Rd-College Cres	Roundabout	15	B	69	16	B	82

Source: TTPP

Analysis prepared by TTPP indicates that the surrounding network would generally operate well by the year 2026, except for the intersections of Pacific Highway – Unwin Road – Romsey Street and Clarke Road – College Crescent. Both these intersections would be at capacity from background traffic growth alone.

Based on discussions between TfNSW and TTPP, the significant growth in background traffic is likely related to the development NorthConnex, which has an interchange approximately 1.5 kilometres south-east of the Barker Campus. The current traffic generation is considered a conservative approach, given the uncertainty around regional modelling associated with NorthConnex. Nevertheless, the proposed development of the site and associated increase in students and staff would have a relatively minor impact on the road network compared to background traffic increases associated with regional road infrastructure.

Internal improvements to current drop and pick up arrangements are also proposed to improve the efficiency of on-site circulation. These interventions have been designed with inputs from TTPP. The proposed arrangements aim to ensure that site traffic queues are retained on-site and off the roads.

In addition to the proposed works, the proposed management strategies are to be investigated by Barker:

- Opening the School gates earlier to enable parents who arrive early, to park/ queue onsite rather than on-street
- Further staggering School starting and finishing times. Currently there is a 5- minute stagger between the start times of Year K-2, 3-6 and 7-12. Consideration will be given to further staggering the Junior School years which generate greater traffic.
- For the pick-up period, place student's name plates on car windows, to allow staff to position the relevant student at the pick-up point, for efficient pick up and flow.

Future Traffic Improvements

The Traffic and Road Safety branch has been investigating opportunities to improve traffic facilities in the area to accommodate growth in the area. Barker College contributes to the a large porting of traffic congestion.

These include

- Widening the railway bridge on Clark Road and the intersection of Malsbury Road
- Additional Right turn bay on Unwin Rd to Pacific Highway
- Improve walking and cycling including widening footpaths in the area and connection to Hornsby, Waitara and Normanhurst.

Council has no funding or time frame for the above projects.

The suggested roundabout below on Clark Road and Malsbury Road is not supported due to geometric constraint. The proposed roundabout will reprioritise traffic that will cause traffic congestion along College Crescent towards the Pacific Highway.

Figure 7.10: Roundabout Concept at Clarke Rd and Malsbury Road



Traffic has improved in the area with the opening of NorthConnex with a reduction over 20 % of light traffic volumes on Malsbury Road. See table below from NorthConnex Road Network Performance Review Plan

AECOM

NorthConnex
Road Network Performance Review Plan

26

Site	Location	Dir	Pre-opening scenario (2019)		Post-opening scenario (2022)		Change (vehicles per day)					
			LV	HV	LV	HV	LV	% LV change	HV	% HV change		
A21	Lucinda Avenue south of Pacific Highway	NB	3,183	125	2,642	134	-541	-17%	▼	+9	+8%	▲
		SB	496	31	402	40	-94	-19%	▼	+9	+28%	▲
A22	Ada Avenue south of Pacific Highway	NB	2,468	78	2,401	76	-67	-3%	▼	-2	-3%	▼
		SB	2,544	80	2,378	122	-166	-7%	▼	+42	+53%	▲
A25	New Line Road north of Castle Hill Road	NB	7,841	585	6,812	276	-1,029	-13%	▼	-309	-53%	▼
		SB	7,399	307	7,727	277	+328	+4%	▲	-30	-10%	▼
A27	Highs Road north of Coonarra Avenue	NB	6,314	270	5,248	332	-1,066	-17%	▼	+62	+23%	▲
		SB	5,481	198	4,311	259	-1,170	-21%	▼	+61	+31%	▲
A30	Boundary Road east of New Line Road	EB	12,339	970	10,541	1,294	-1,798	-15%	▼	+324	+33%	▲
		WB	11,372	899	9,972	1,167	-1,400	-12%	▼	+268	+30%	▲
A36	Wood Street south of The Comenarra Parkway	NB	2,023	64	1,653	87	-370	-18%	▼	+23	+35%	▲
		SB	4,055	163	3,009	157	-1,046	-26%	▼	-6	-3%	▼
A37	Malsbury Road south of Clarke Road	NB	8,631	218	6,709	198	-1,922	-22%	▼	-20	-9%	▼
		SB	9,246	228	7,094	138	-2,152	-23%	▼	-90	-40%	▼
A40	Hull Road north of Albert Road	NB	1,160	31	723	48	-437	-38%	▼	+17	+54%	▲
		SB	677	22	746	25	+69	+10%	▲	+3	+13%	▲
A41	Fox Valley Road west of Lucinda Avenue	NB	9,215	299	7,855	166	-1,360	-15%	▼	-133	-45%	▼
		SB	8,851	319	8,324	307	-527	-6%	▼	-12	-4%	▼
A46	Campbell Avenue south of Pennant Hills Road	NB	117	4	202	7	+85	+73%	▲	+3	+75%	▲
		SB	448	19	386	18	-62	-14%	▼	-1	-5%	▼

Revision C – 8 August 2022
Prepared for – Transport for NSW – ABN: 76 236 371 088

There is limited right turn access from the south on to Pacific Highway. There is no right turn from College Crescent to Pacific Highway. Unwin Road is the main right turn movement on to the Pacific Highway in the area. With the increase in population, increase in students and staff at Barker College, more vehicles using the intersection it is expected that the intersection will operating level at a low level of services.

Without the additional proposed right drivers are expected to face lengthy delays.

Buses

Baker College operating its own bus network. Students use both Baker College and public buses. More detail is required regarding the existing and the impact of additional bus movements to cater for the additional student number and if it can be accommodated in the existing bus zone and ensuring buses are not restricting traffic flow in the area.

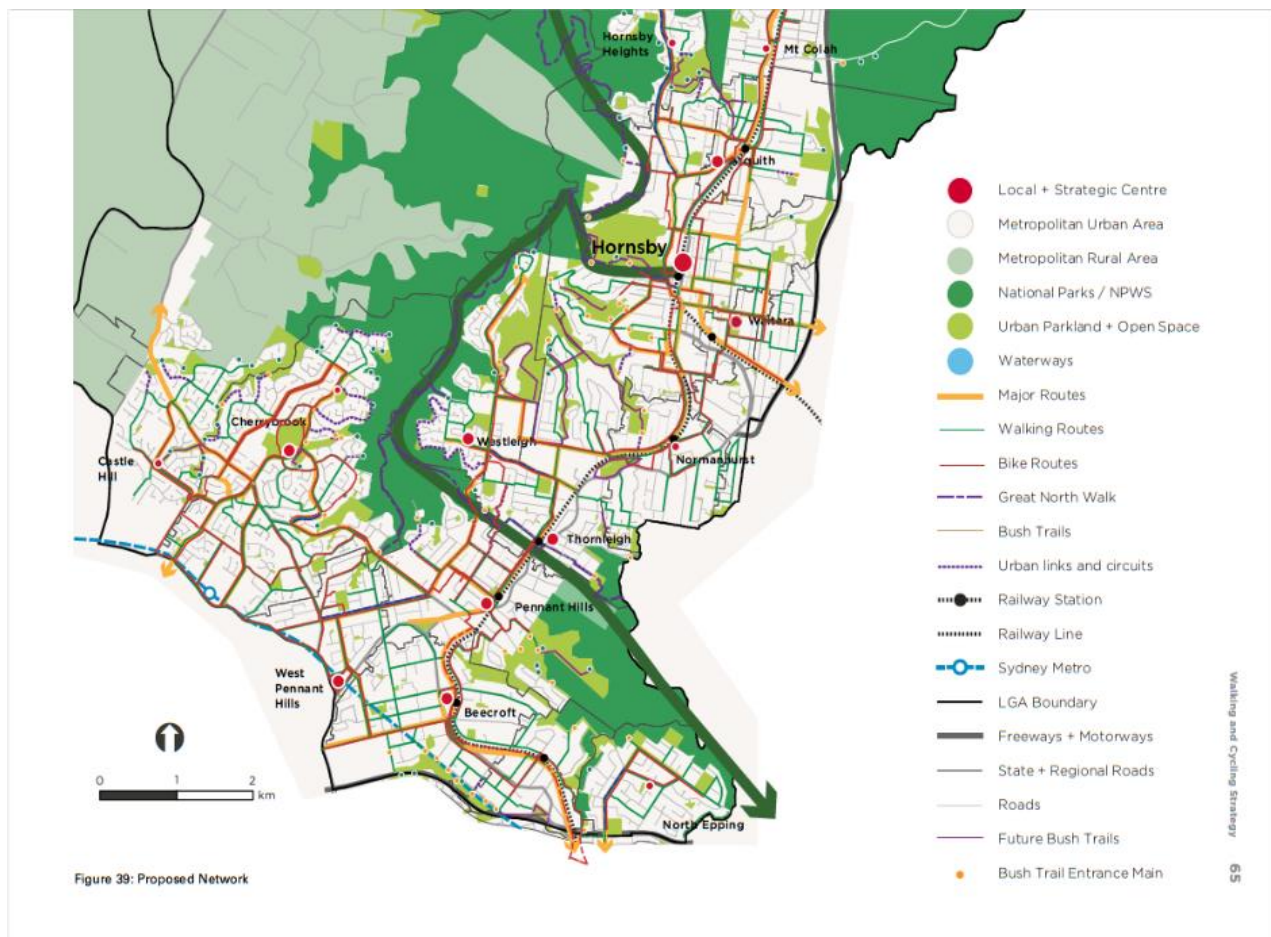
Active Transport (Walking, Cycling & E-Scooters)

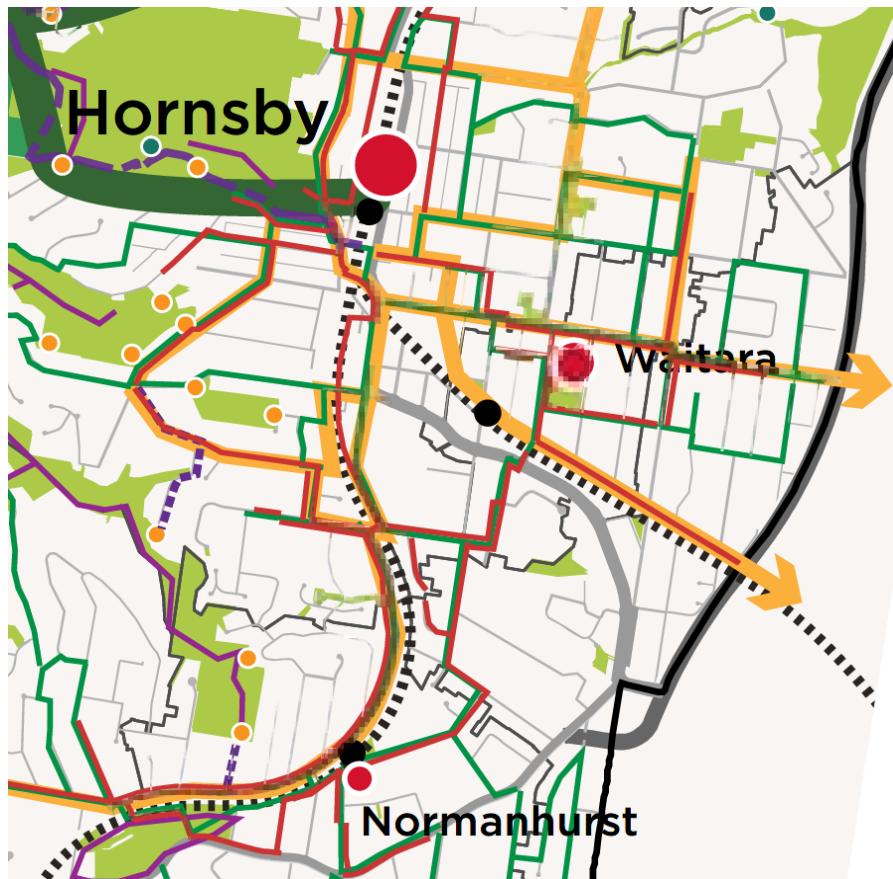
Baker College is only a short distance to Waitara Station (450 m) Hornsby Station (800 m) and Normanhurst Station (1,300 m).

Council has developed walking and cycling strategy to promote active transport across the Hornsby Shire Council area to reduce car dependency. Council is developing future links from Barker College to Hornsby, Waitara and Normanhurst.

Baker College should encourage staff and students to carpool and use active transport to access Baker College where possible to reduce congestion around the school.

A full copy of the report can be downloaded from from Hornsby Shire Council web page.

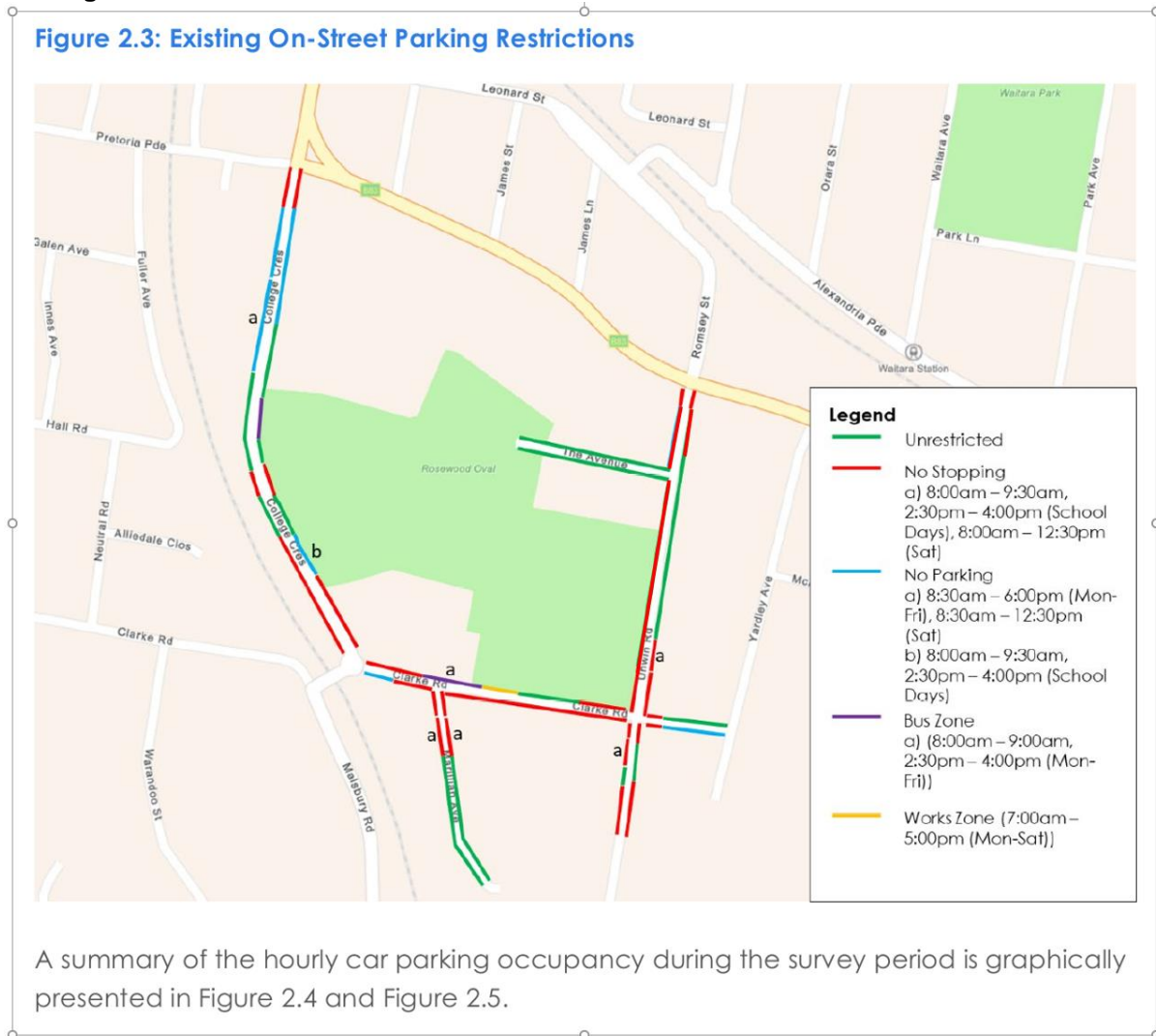




The NSW Government is trialling E-Scooter and if approved will provide an addition incentive to promote active transport to and from Barker College.

Parking

Figure 2.3: Existing On-Street Parking Restrictions



Hornsby Council DCP parking rates for educational establishments is

- 1 space per full time teacher
- 1 space per 2 students of driving age.

Barker College currently has 330 Year 11-12 students of driving age.

Parking requirements is based on the proposed staff number of 480 and 390 students of driving age (330 x 18% increase in students of driving age a total of 390)

675 on-site parking spaces is required to accommodate the addition increase in students and staff.

There are only 484 existing carparking spaces available on site. The development will not provide any additional carparking space.

There is a 28% shortfall or 191 carparking spaces.

There are only limited parking spaces on surrounding street and will also create impacts to residents.

Motorcycle Parking

Council's Hornsby DCP 2013 has a requirement for motorcycle parking at the rate of 1 space per 50 car parking spaces, or part thereof, giving a requirement for 1 motorcycle space. One motorcycle parking space has been provided and is shown on the drawings.

Motorcycle parking spaces are to be designed in accordance with AS/NZS 2890.1:2004 Figure 2.7.

Access

The proposed car park will have vehicular access from Unwin Road via a combined 7.4m wide entry/exit driveway. If the proposed driveway impacts on the location of the NO STOPPING sign on the north side of the existing driveway then this sign is to be relocated to the north side of the proposed driveway.

Any proposed landscaping and/or fencing must not restrict sight distance to pedestrians and cyclists travelling along the footpath.

Recommendation

The Branch has assessed the development application SSD/31822612 for the State Significant Development (SSD) for Stage 1 alterations and additions and concept approval for future extension at Barker College 30A and 32A Unwin Road, Hornsby. Should the application be approved by the Department the following requirements and conditions are recommended:

Barker College generates a significant amount of traffic in the area especially morning and afternoon peak traffic times.

1. Pacific Highway is a State Road. The proposed development is to be referred to Transport for New South Wales for comments regarding traffic generation and impacts.
2. The traffic report be updated with the data available from the NorthConnex Road Network Performance Review Plan.
3. The applicant to provide a more detail report on the number of students and staff uses buses, number of buses required, the existing capacity and storage. Will the existing Bus Zone be adequate to meet the needs of Barker College.
4. The applicant to address the shortfall in on-site parking. 675 car parking spaces is required to accommodate the additional increase in students and staff. There is a 28% or 191 shortfall in carparking spaces.
5. Install new raised pedestrian crossing on Yardley Avenue at the intersection of the Pacific Highway to improve pedestrian safety for students and encourage walking and cycling to Barker College.
6. Install new raised pedestrian crossing on Clarke Road at the intersection of the Unwin Road to improve pedestrian safety for students and encourage walking and cycling to Barker College.
7. Provided financial contributions and not limited to the following projects.
 - Widening the railway bridge on Clark Road and the intersection of Malsbury Road
 - Additional Right turn bay on Unwin Rd to Pacific Highway
 - Improve walking and cycling including widening footpaths in the area and connection to Hornsby, Waitara and Normanhurst.

Parking

1. All car parking including disable parking must be constructed and operated in accordance with Australian Standard AS/NZS 2890.1:2004 – Off-street car parking and Australian Standard AS 2890.2:2002 – Off-street commercial vehicle facilities, AS/NZS 2890.6:2022 Off-street parking *for people with disabilities*.
 - a. All parking areas and driveways are to be sealed to an all weather standard, line marked and signposted approved by Hornsby Council
 - b. Vehicles awaiting loading, unloading or servicing shall be parked on site and not on adjacent or nearby public roads;
 - c. All vehicular entry on to the site and egress from the site shall be made in a forward direction.
 - d. Any proposed landscaping and/or fencing must not restrict sight distance to pedestrians and cyclists travelling along the footpath.

2. If the proposed driveway impacts NO STOPPING signs is to be relocated subject to approval from Hornsby Council.
3. Motorcycle parking spaces are to be designed in accordance with AS/NZS 2890.1:2004

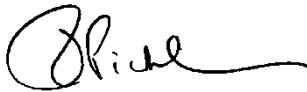
Waste

4. Access for garbage vehicles is to satisfy the requirements of Council's Waste Management Branch.

Construction Conditions

5. All construction vehicles associated with the proposed development are to be contained on site or in a Local Traffic Committee (LTC) approved "Works Zone".
 - The site supervisor to be advised that the Works Zone will be deemed to be in effect, and fees will apply, between the dates nominated by the supervisor, or when parking spaces are managed for the sole use of construction vehicles associated with the site.
 - The Works Zone signs shall be in effect only apply for the times approved by Council, and the time is to be noted on the sign. e.g., 'Works Zone Mon – Sat 7am – 5pm'.
 - The applicant is required to supply a sign posting installation plan for referral to the Local Traffic Committee, noting on it the duration of the Works Zone.
 - The Works Zone is only to be used for the loading and unloading of vehicles. Parking of workers' vehicles, or storage of materials, is not permitted.

Yours faithfully



Rodney Pickles
Manager | Development Assessments
Planning and Compliance Division

TRIM Reference: F2021/00348