

Our ref: Alterations and Additions to Barker College (SSD-31822612)

Ms Georgina Augustesen
Projects Manager
BARKER COLLEGE
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123 Pitt Street
Sydney New South Wales 2000

22 February 2023

Subject: Response to Submissions – Department’s Key Issues

Dear Ms Augustesen

The exhibition of the development application and environmental impact statement (EIS) for the Alterations and Additions to Barker College (SSD-31822612) ended on 10 Feb 2023.

We have placed all submissions on the NSW planning portal at <https://pp.planningportal.nsw.gov.au/major-projects/search?combine=barker>.

We now require a written response to issues raised in the submissions and in Government agency advice, as required under section 59(2) of the Environmental Planning and Assessment Regulation 2021.

As advised in the Department’s correspondence dated 13 February 2023, you are required to provide a response to key issues raised by the Department in its preliminary assessment of the EIS.

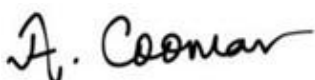
The Department’s key issues are provided at **Attachment 1**.

The Department also procured the services of an independent expert to undertake peer review of the Traffic Report provided with the EIS. The Department requests that the matters raised in the peer review (**Attachment 2**) be addressed as part of the Response to Submissions (RtS).

Please lodge your submissions report via the NSW planning portal <https://majorprojects.planningportal.nsw.gov.au/>.

If you have any questions, please contact Kevin Kim, on 02 8289 6728 or via email at kevin.kim@dpie.nsw.gov.au.

Yours sincerely,

A handwritten signature in black ink that reads "A. Coomar".

Aditi Coomar
Team Leader, School Infrastructure Assessments
as delegate for the Planning Secretary

ATTACHMENT 1

Key Issues

1. Assessment against the State Environmental Planning Policies

The State Environmental Planning Policy – Transport and Infrastructure 2021 (SEPP) requires all State Significant Development (SSD) application for schools to demonstrate compliance with the Design Quality Principles, as outlined in Schedule 8 of the SEPP. These principles cover a range of design factors, including context, built form, landscape and heritage, among others. Compliance with these principles is essential for any proposed school development to be considered acceptable under the SEPP.

While the EIS states that this assessment has been undertaken in Appendix F (Architectural Design Report), it has not been included in that Appendix. You are requested to provide an addendum to the Design Report which addresses each of these principles in detail.

In this regard, please note that the Design Principles need to be addressed separately for the Concept proposal and the Stage 1 works, per the structure of the SEARs.

2. Relationship of the future building envelopes with the built environment

The proposed height of the Performing Arts and Exams centre (PA) and Aquatic and Tennis centres (AT) exceed the maximum height limit of 8.5m under the Hornsby Local Environmental Plan (HLEP) by approximately 103% (17.3m max height for PA) and 110% (17.95m for AT centre), respectively. The EIS justifies the exceedance in height by stating that the building envelopes are consistent with other similar school buildings on the site and that strict compliance with the height limit would lead to a suboptimal planning outcome, given the functional requirements of the school. Furthermore, the EIS states that the proposed building envelopes provide appropriate landscape setbacks to offset the exceedance in height.

The Department notes that reference designs have been provided in the Design Report which identify that the main reasons for the height exceedances are related to the tennis court nets (for AT) and the plant rooms (for PA). The EIS justifies that the exceedances in heights are appropriate. However, the Department considers that further justification would be required to demonstrate that the building envelopes fit in the context of the existing school buildings within the site as well as with the surrounding low density character of Unwin Road and Clarke Road. In this regard, the Department requires you to provide:

- additional design guidance (in the Design Report) or concept diagrams demonstrating how façade articulation would be achieved along Clarke and Unwin Roads for both the PA and AT facades, to reduce the overall building bulk. This may include stepping the buildings to reduce the perceived height from the public domain (especially along Unwin Road).
- design options that would result in reduction of the building heights through alternative designs for the rooftop plant (PA) and/or the tennis court nets (AT).

- additional mitigation measures to reduce impacts of the building bulks (for PA and AT) on the existing visual environment. These may include (but not be limited to) landscape treatments within setback areas, increasing the setbacks from Clarke Road and/or Unwin Road, further height modulation and building articulation.
- additional streetscape analysis to demonstrate that the proposed PA enhances and results in a positive impact on the streetscape of Clarke Road and Unwin Road.
- addendum to the Visual Impact Assessment (VIA) by including additional photomontages demonstrating how the buildings would step back from the street frontage and be screened by the existing vegetation along the street frontages.
- additional visual impact analysis of the views from 29-33 Unwin Road, 22-26 Yardley Avenue and 34-42 Unwin Road in particular, along with other surrounding low-density residential properties, which was a requirement of the SEARs, to demonstrate that the buildings would not have an unreasonable visual impacts on the above properties.

Overall, additional visual analysis, photomontages and design guidance should be provided to demonstrate how the proposal would fit into the existing character of the site/surroundings as well as have a positive impact on the low-density residential environment, to comply with Principle 1 of Schedule 8 of the SEPP.

The Government Architect NSW (GANSW) have also provided feedback on the built form of the Concept proposal (attached to this letter). The Department requires you to address all comments and recommendations raised by GANSW as part of the RtS.

3. Traffic impacts of Concept proposal

The Concept proposal involves two separate land uses being the PA and the AT. Both the buildings would be used outside the school hours and on the weekends.

While the Department acknowledges that details of the uses are required at this stage, the traffic report should acknowledge the overall impacts of the addition of the two new uses within the site in the future. In this case, the traffic report only includes an assessment of traffic impacts due to increased enrolment of students with no consideration for the two new uses.

The assessment of Stages 2 and 3 relates to the parking provisions only. The Department considers this to be an unsatisfactory traffic assessment noting that the two proposed land uses would have the potential to generate significant traffic on the surrounding streets, which are already operating at capacity. Given the above, the traffic report must be amended to include:

- an assessment of worst case scenario of traffic impacts due to the usage of the PA and AT considering that 750 capacity recital hall (as indicated in the EIS) and the use of AT for community members in addition to the school use.
- the impacts of the extended operating hours (the operating hours being consistent with the submitted Acoustic Assessment Report and the EIS).

- details of the anticipated maximum capacity and the frequency of use of the centres and the calculate the subsequent traffic generation.

The proposed future stages of the development cannot be supported unless it is demonstrated that the proposed land uses are suitable for the site and would not have unreasonable impacts on the surrounding road network.

4. Structure of the Traffic Report

The TIA has not been structured correctly. The proposal in a Concept proposal and Stage 1 application where the SEARs has been issued in two separate parts and the EIS and appendices are required to address each part separately. Consequently, the amended TIA is required to be structured so that it assesses the impacts of the overall Concept proposal separately (as per the above discussion) to the detailed assessment of the Stage 1 works involving increase in student numbers.

5. Traffic peer review and agency advice/submission

As indicated previously, the Department requests that the matters raised in the traffic peer review (contained in **Attachment 2** of this letter) be addressed in the RtS (please note that the traffic peer review is preliminary only).

The Department notes that Transport for NSW (TfNSW) have provided comments and recommendations to mitigate the development's impact on the surrounding transport network by improving the Green Travel Plan.

Hornsby Shire Council have also raised a number of concerns and suggested mitigation measures in their comments.

These comments and recommendations are included in their advice. The RtS must address all comments and recommendations raised by TfNSW and Hornsby Council.

6. Pick Up and Drop Off (PUDO) Rationalisation

It is noted that the existing boom gate would be relocated and the 3-6 PUDO relocated/replaced, as part of the Stage 1 works to rationalise the PUDO operations.

To enable a detailed assessment of the proposal, it is necessary to provide detailed plans and documents that clearly depict all improvements and/or works connected to the PUDO rationalisation. These plans and documentation must include, but not be limited to:

- the number of lanes that would be required for the proposed traffic movements within the site (separate for K-6 and 7-12).
- whether any further internal road widening would be needed to accommodate the revised vehicle movements.
- identification of the designated PUDO parking bays, traffic arrows, turning circles, circulation flow, wayfinding signs within the pre-school car park.

- operational methods and/or traffic control measures that would be implemented to ensure that the parking spaces (dedicated for use by pre-school staff or parents) are not compromised or blocked by the vehicles utilising the PUDO facility in the pre-school car park.
- an unobstructed pedestrian path for safe movement of for K-Year 6 students within the preschool carpark.
- calculations and modelling to show that the proposed number of PUDO spaces would be sufficient to accommodate the anticipated number of vehicles utilising this facility. This would require the identification of PUDO peak hours, modelling the anticipated number users of this facility (based on modal split and other factors), the likely dwell time for each vehicle and the total number of spaces proposed to accommodate the modelled number of vehicles.
- confirm how the relocation of the boom gate improves the traffic flow and PUDO arrangements when compared to the existing condition, with evidence based queuing analysis (discussed in **Attachment 2**) that demonstrates the reduction of queuing on the surrounding streets due to the rationalisation.

The plans and documentation for the PUDO rationalisation should be included in the Stage 1 architectural plans.

A preliminary Operational Traffic and Access Management Plan should be submitted to demonstrate how the PUDO facility would operate safely and efficiently.

7. Noise Assessment

The Noise Assessment Report provides an overall assessment of maximum noise that may be generated by the future stages involving the AT and the PA.

The report indicates that an acoustic barrier may be required along the road frontage to reduce noise from this development. In this regard, an approximate estimate of height of this acoustic wall would be needed in principle to ascertain its visual impact on the street frontages.

Additionally, an estimate of the number of the number of patrons in this centre and the maximum noise that may be generated (as a worst case scenario) would also be required to ascertain the suitability of the use of the AT at the proposed location.

For the PA, the noise assessment must demonstrate that the accommodation of 750 patrons in the recital hall up to 10pm at night (weekdays and weekends) would not cause any unreasonable impacts on the neighbourhood.

Hornsby Shire Council has also raised similar concerns in their comments which must be addressed as part of the RtS.

8. Social Impact Assessment (SIA)

The Social Impact Assessment (SIA) has underassessed the potential negative impacts on adjacent neighbours, both in the Concept proposal and the Stage 1 works. This is due to the SIA and traffic report assumption that the only impacts on the neighbourhood would be due to the traffic generated by the increased number of students and staff proposed in Stage 1. The SIA has not considered the impacts of the use of the future PA and AT (including additional weekend events, community use, weekend use) on the lifestyle of the neighbourhood.

In terms of operational impacts from the Concept proposal, the Department considers it reasonable that the likelihood of traffic impacts is *'likely'* or *'almost certain'* rather than the *'possible'* concluded by the SIA. Any potential impacts should be thoroughly evaluated to determine the appropriate mitigation measures to minimise the impact on neighbouring properties.

Overall, the cumulative social impacts of the Concept proposal and the Stage 1 must be reassessed and submitted as part of the RtS.

In addition, the SIA recommends continued consultation with Transport for NSW (TfNSW). Evidence of such consultation with TfNSW (if any) should be provided to support this recommendation.

9. Student and staff numbers

Confirmation of the number of students and staff currently attending the school is required.

The Traffic Report states that during school term 4 2022, the current number of students and full time equivalent (FTE) staff attending the school exceeded the approved school population cap, which was established under DA/1194/2016 and DA/1015/2020 issued by Hornsby Shire Council. The parking and traffic assessment has been undertaken based on the current number of students and FTE staff as summarised in Table 5.1 of that report (net increase in student number from current enrolment is 258 and staff is 12). As such, the Traffic report and travel survey indicate 2592 students and 506 FTE staff attending the school in March 2021.

The student numbers/staff numbers considered in the Traffic report is inconsistent with the EIS and SIA. The social impact of the proposal was assessed on the basis of a net increase of 430 students and 141 FTE staff.

The RtS must provide details on the approved student numbers on the site and the existing student numbers. If there is an unauthorised student intake within the school, it should be acknowledged in the RtS and approvals sought accordingly.

Furthermore, the RtS must confirm the sufficiency of classroom capacity and associated facilities, including but not limited to, compliance with the Building Code of Australia (BCA)/ National Construction Code (NCC) upgrade provisions, as well as the provision of relevant Australian Standards and NCC related to Disability Discrimination Act (DDA) requirements,

to accommodate the projected increase in number of students and staff associated with this application.

10. **Flooding**

The Hornsby Floodplain Risk Management Study and Plan 2015 (FRMSP) indicates that the site would be partially impacted by the flooding. Therefore, the application must address the Secretary's Environmental Assessment Requirements (SEARs) regarding flooding impacts on all components of the concept proposal. The application does not sufficiently address the SEARs.

The Department's Environment and Heritage Group (EHG) have also provided feedback on the inadequacy of the flood analysis in the concept proposal. These comments and recommendations are included in their advice. It is strongly recommended that the applicant address all comments and recommendations raised by EHG as part of the RtS.

Please note that if the flood assessment leads to any changes to the heights of the future buildings, then all of the supporting documentation should be amended to reflect such changes.

11. **Contamination**

The submitted contamination assessment includes a preliminary assessment only. The contamination report states that a detailed investigation of the site is required. However, this has not been submitted along with the remediation action plan (where required in Stage 1).

The RtS must include the above information to demonstrate that the site is suitable for future developments.

ATTACHMENT 2

Preliminary Peer Review – Transport and Accessibility Impact Assessment

A preliminary peer review of the Traffic report has been undertaken by the Department's independent traffic consultant (JMT Consulting). Findings of the review are outlined below. You must address all of the matters raised below in the RtS.

1. Baseline student and staff numbers

As indicated in the previous section, the Department requires confirmation of the existing school population to properly understand the incremental traffic impacts of the proposal – including discrepancies with the current school population cap. These population numbers should align with those in February 2021 given this coincides with the date of the traffic surveys used in the traffic analysis (unless the traffic analysis is updated).

2. Baseline traffic conditions

The traffic counts underpinning the analysis and modelling were undertaken in February 2021. While it is acknowledged that this was outside any formal 'stay at home' orders associated with the COVID-19 Pandemic, various restrictions were still in place and travel behaviours at the time are unlikely to be representative of current conditions. The traffic volumes collected may therefore not accurately represent current traffic conditions in the area.

Validation of the traffic volumes used in the assessment should be undertaken by conducting surveys at the intersection of Unwin Road and Pacific Highway. The 2023 data should be compared to that collected in 2021 to confirm the suitability of the baseline data collected for the assessment. This comparison will also be useful in understanding the extent of traffic growth that has occurred on Unwin Road in recent times, given the very high growth forecast in the TfNSW strategic model.

3. Traffic growth forecast

The traffic assessment has utilised outputs from the TfNSW Sydney Strategic Traffic Forecasting Model (STFM) to determine the extent of traffic growth along key roads. While this is generally industry practice, the STFM outputs indicate significant traffic growth along key roads – particularly Unwin Road in the AM peak hour of 9.1% per annum.

This is considered an unrealistic growth rate given the lack of development proposals in the area. Traffic growth on other roads, including the Pacific Highway, is high at 4% per annum or more which is heavily influencing the outcome of the future year modelling.

Considering the above, additional justification / analysis should be undertaken to confirm the suitability of the traffic growth rates adopted. The STFM plots, given their base year of prior to 2020, may not be appropriate given the opening of NorthConnex in 2021. Validation of traffic flows (as advised above) will assist with this exercise. Modelling should be updated based on the outcomes of this investigation.

4. Design of PUDO

No swept paths, as required under the SEARS, have been provided in the transport assessment for the proposed alterations to the drop off and pick up areas. It is important to understand whether the proposed amendments, including new boom gate location and circulation of vehicles through the preschool car park, are feasible from a design perspective.

Vehicle swept path analysis should be provided indicating the revised PUDO arrangements.

5. Demand for PUDO

The transport assessment notes that approximately 360 junior students and 460 secondary students currently utilise the PUDO at the school. This number will rise in future due to the proposed increase in the school population cap. No assessment has been undertaken of the capacity of the PUDO areas to accommodate the expected demands.

This assessment would typically involve a queuing assessment using a poisson (or similar) distribution profile taking into consideration number of available spaces, vehicle dwell time and forecast demands.

Consistent with Department's request in the previous section of this letter, further details to be provided regarding the expected management of the on-site PUDO areas to ensure these operate efficiently and the additional demands are not accommodated on surrounding residential streets.

6. Car parking

The car parking assessment relies upon the future use of car parking areas that are currently non-operational. The footnote in Table 6.1 of the Traffic report, however states that "the non-operational car parks are anticipated to be reinstated in the future".

Confirmation should be provided that the school commits to reinstating the non-operational car parking areas as part of any future development.

7. Road upgrade proposals

The transport impact assessment identifies a number of measures to mitigate the impacts of the proposal including upgrades to the surrounding roads such as Unwin Road/Pacific Highway intersection. It is unclear whether the Applicant has committed to delivering these upgrades as part of the proposal to mitigate the traffic impacts. As such, any upgrades to the intersection of Unwin Road/Pacific Highway would require support from TfNSW, and no evidence of consultation with TfNSW has been provided which indicates they would be in support of these works. You are requested to address this issue.

8. Servicing

No details are provided in the transport assessment in relation to the servicing on the future buildings on site. You must clarify the loading and servicing arrangements for the future buildings associated with the Concept proposal.