

**JOINT REGIONAL PLANNING PANEL
SYDNEY WEST REGION**

JRPP No	JRPP: 2013SYW020
DA Number	DA0489/12
Local Government Area	Ku-ring-gai
Proposed Development	New multi purpose sports hall, car park and sports field - Abbotsleigh school - heritage property
Street Address	1670 Pacific Highway, Wahroonga, 3 Ada Avenue, Wahroonga & 5 Ada Avenue, Wahroonga
Applicant/Owner	Council of Abbotsleigh
Number of Submissions	34 submissions
Recommendation	Approval
Report by	Natalie Piggott-Herridge Development Assessment Officer

DEVELOPMENT APPLICATION

EXECUTIVE SUMMARY

Primary Property	1670 Pacific Highway, 3 & 5 Ada Avenue, WAHROONGA NSW 2076
Lot & DP	Lot 45 Section 2 DP3312 Lot 46 Section 2 DP3312 Lot 2 DP 1006030 Lot 3 DP 1006030 Lot A DP449271 Lot B DP323865
Development application no.	DA0489/12
Ward	COMENARRA
Applicant	Council of Abbotsleigh
Owner	Council of Abbotsleigh
Date lodged	27/11/2012
Estimated cost of works	\$19,540,874.00
Issues	Hours of operation Privacy Visual amenity and lighting Traffic and parking Drainage
Submissions	Yes
Land & Environment Court	N/A
LEGISLATIVE REQUIREMENTS:	
Zoning	Pt. Res. 2(c2), Pt. Special Uses 5(a) (School)
Permissible under Relevant legislation	KPSO SEPP 55, SEPP (Infrastructure) 2007 SREP (Sydney Harbour Catchment) 2005, Draft KLEP 2013 Draft KLEP 218 - Biodiversity KPSO DCP 31 - Access DCP 40 – Waste Management DCP 43 – Car Parking DCP 47 – Water Management DCP 56 – Notification Schools Development Code
Integrated development	No

PURPOSE FOR REPORT

This matter is reported to the JRPP for determination as the application relates to a school (private infrastructure) and has a capital investment value of more than \$5 million (\$19,540,874.00). Pursuant of Clause 6 of Schedule 4A of the Environmental Planning and Assessment Act, 1979, the JRPP is the consent authority.

HISTORY

Abbotsleigh was established as a private college in 1885 and later as a school in 1898 where it remained in private ownership until 1924 when the Church of England purchased the school.

The site has been subject to a number of development applications. The following is a brief summary of the most recent and applicable applications:

- | | |
|------------------|--|
| DA0455/11 | Additions and alterations to Read House, including change of use from residential dwelling to boarding house to accommodate 26 students and a co-ordinator's residence. Approved on 4 November 2011. |
| DA0649/11 | Additions and alterations to Lynton House, approved on 18 January 2012. |
| DA0338/12 | Change of use for Vindin House from a boarding residence to a teaching facility, including additions and alterations to accommodate the teaching facility. Approved on 8 November 2012. |
| DA0431/12 | Additions and alterations to the existing wall and fencing along the northern boundary of the school (along Pacific Highway). Approved on 16 January 2013. |

Pre-DA

A formal Pre-DA consultation was held between Council officers and Abbotsleigh School representatives on 9 August 2012 to discuss the proposed development.

The Pre-DA advice raised the following key issues:

- usage details of sports field and sports hall
- possible acoustic and lighting impacts to nearby residential properties
- location of driveways to be clarified (potential tree and amenity impacts are to be considered)
- tree impacts and flora and fauna impacts
- construction management
- traffic impacts

- disabled access

The following re-design options were discussed/recommended at the meeting:

- retention of Tree 445 *Eucalyptus saligna* (Sydney Blue Gum) located adjacent to aquatic centre forecourt

As detailed within this report and attachments, the above issues have been responded to and addressed.

Development Application history

27 November 2012	The application was lodged.
29 November to 12 December 2012	The application was referred to internal and external bodies.
7 December 2012 to 7 January 2013	The application was notified for 30 days and this was extended to 1 February 2013.
18 January 2013	A response from RMS was received.
6 February 2013	<p>A preliminary assessment letter is sent to the applicant requesting the following information:</p> <ul style="list-style-type: none"> ▪ hours of operation master plan ▪ staged management plan ▪ staged construction details including traffic management ▪ detailed environmental management plan required ▪ additional sections ▪ updated arborist report ▪ additional tree impact assessment ▪ amended landscape plan required ▪ amended architectural plans with all finished levels and tree numbers ▪ relocation of stormwater tank under hockey field required to be shown ▪ details of pedestrian access path concerning tree impacts ▪ updated vegetation management plan to include landscape plantings and off-set area ▪ additional stormwater management details ▪ master plan to be submitted of all existing and proposed parking provisions for the site ▪ waste management plan to be submitted ▪ amended traffic and parking assessment
4 March 2013	A meeting is held with applicant to discuss the issues.

15 March 2013	Additional information and plans are received.
19 April 2013	Additional information request sent to applicant requesting the following information: <ul style="list-style-type: none"> ▪ additional tree impact assessment ▪ amended landscape plan ▪ amended architectural plans ▪ amended vegetation management plan incorporating landscape plan ▪ all previous engineering issues with regards to traffic, stormwater and parking
6 May 2013	Further additional information is received.
7 May 2013	A meeting is held with applicant to discuss the additional information lodged. The majority of the issues discussed at the meeting were stormwater, traffic and parking issues.
10 May 2013	Additional staged construction plans, amended traffic report and structural details are received.
23 May 2013	Amended plans are formally lodged with Council on 23 May 2013 with minor amendments.

THE SITE

Visual character study category:	Pre 1920
Easements/rights of way:	No
Heritage Item:	No
Heritage conservation area:	Yes – UCA No. 26
In the vicinity of a heritage item:	Yes – Lynton House, Vindan House and State Heritage Listed Item Wahroonga Reservoir at 1678 Pacific Highway Wahroonga
Bush fire prone land:	No
Endangered species:	Yes – Blue Gum High Forest
Urban bushland:	No
Contaminated land:	No

Site description

The Abbotsleigh Senior School campus has a number of buildings which include both teaching buildings, boarding accommodation and principal accommodation. The site also includes sport fields, a gymnasium, aquatic centre, tennis courts and on-site parking. The school is approximately 10.5ha in area and is bound by Pacific Highway and Wahroonga Reservoir to the north, Ada Avenue to the east, Lucinda Avenue to the west and residential dwellings and Glade Reserve to the South.



Image 1: Site plan from SEE, p6, JBA

The school extends over a large number of allotments, however the proposed development is limited to the following allotments:

- | | | |
|-------------------------------------|--|------------------------------|
| • 1670 Pacific Highway
Wahroonga | Lot 45 Section 2
DP3312
Lot 46 Section 2
DP3312
Lot 2 DP 1006030
Lot 3 DP 1006030 | Zoned Special
Uses School |
| • 3 Ada Avenue
Wahroonga | Lot A DP449271 | Zoned 2(C2)
Residential |
| • 5 Ada Avenue
Wahroonga | Lot B DP323865 | Zoned 2(C2)
Residential |

Surrounding development

There are a number of heritage items in close proximity, including Lynton House and Vindan House which are part of the Abbotsleigh School campus, and the Wahroonga Reservoir (elevated) at 1678 Pacific Highway which is a state heritage listed item.

The school is in close proximity to the Wahroonga Village to the north where there are a number of commercial premises, with a large Council car parking area located behind these premises. Wahroonga train station along the north shore railway line, which is also a state heritage listed item, is also located within the Wahroonga Village. Knox Grammar School is also in close proximity.

THE PROPOSAL

The application proposes the construction of a new multi-purpose sports hall and artificial sports field with car-parking comprising of the following works:

- demolition works comprising:
 - existing lower sports oval
 - portions of the internal access road from gate 1
 - existing pedestrian path
 - existing aquatic and staff car park
- bulk earthworks
- construction of four level multi-purpose sports hall comprising:
 - level 1: car parking for 42 vehicles, fitness room, and 2 x teaching/function rooms
 - level 2: pedestrian entrance, reception area and office, 3 x indoor sports courts, change facilities, and first aid room
 - level 3: function room, IT room, kitchenette, change facilities
 - level 4: VIP and function rooms within sports hall
 - indoor/outdoor rock climbing wall to the western façade
- construction of sports field comprising:
 - parking for 126 vehicles, including 28 pick-up/set-down spaces and area and connection with Level Three of the proposed multi-purpose sports hall
 - open air artificially turfed sports field, including 100m running track
 - grandstand seating abutting Level Four of the proposed multi-purpose sports hall
- reconfiguration of the internal access road from gate 1
- existing emergency vehicle driveway, gates and brick piers to be demolished and new driveway crossing and driveway to be constructed to accommodate access to sports field car park
- new elevated pedestrian pathways
- landscaping works including removal of 42 trees
- offset planting of Blue Gum High Forest on the site

Additional information and plans dated 15 March 2013

The following additional information and amended plans were submitted by the applicant after a meeting with Abbotsleigh and its consultants was held on 4 March 2013:

- written response to Council's letter dated 6 February 2013 to support additional information and amended plans

- addendum to arborist report
- ecological assessment
- vegetation management plan
- stormwater flow rate comparison
- response to submissions
- supplementary acoustic report
- review on comments to flood lighting
- plan number DA1008 Overlay of arborist report
- plan number DA1009 Extract of arborist report
- environmental management plan number DA1201 issue 3
- construction traffic management plan number DA1202 issue 3
- amended level 1 & 2 plan number 2101 issue 9
- amended level 3 plan number 2102 issue 10
- amended level 4 plan number 2103 issue 7
- amended site works lower level plan number C-0002 ref D
- amended northern driveway detail plan number C-0005 ref D
- new section sheet 1 of proposed driveway plan number C-0006 ref A
- amended landscape plans numbered DA-L000 to DA-L001 rev E, DA-L100 to DA-L101 rev D and DA-L200 rev C
- proposed stormwater diversion plan number SW-05 P2 (2 copies one showing proposed pits)
- proposed hockey field car park stormwater drainage layout plan number SW-03 rev C
- stormwater long section plan number SW-06 P1
- amended cover sheet plan number DA0000 issue 4
- amended site plan number DA1001 issue 7
- additional service vehicles and car parking plan number DA1005 issue 1
- survey extract plans number DA1006 and DA1007 issue 1

The amended plans and additional information detailed the following:

- overlay of proposed development with correct tree numbers and protection zones
- additional information from arborist addressing tree impacts
- master plan detailing proposed staging of works
- details of works to internal access road demonstrating how vehicular access will be maintained with no impacts to existing trees in this location
- details provided showing the construction staging and the operation of the existing car parking areas
- details of existing and proposed waste collection areas
- existing on-site car parking shown on plans
- emergency driveway to be relocated to accommodate the existing tree
- details of levels of the proposal including levels of the new elevated pedestrian access path

The additional information and amended plans did not address all concerns in a satisfactory manner. A number of additional issues were identified as well

as the following issues previously identified in Council's letter of 6 February 2013:

- hours of operation for multi-purpose sports hall and sports field lighting
- master plan identifying construction staging including traffic management details
- inadequate environmental management plan
- landscape and ecology issues
- engineering issues

Additional information and plans dated 6 and 12 May 2013

The following additional information and amended plans were submitted by the applicant:

- written response to accompany additional plans and information
- amended landscape plan number DA-L400 rev B
- revised vegetation management plan dated April 2013
- addendum 3 to arborists report dated 6 May 2013
- amended plan level 3 number DA2102 issue 13
- additional construction vehicle swept path plans numbered DA1205 to 1217 issue 2
- construction management plan notes plan number DA1204 issue 2
- amended site plan number DA1001 issue 8
- amended service vehicle and car parking DA1005 issue 2
- amended construction traffic management plans number DA1202 issue 6 and DA1203 issue 2
- amended stormwater statement and northern driveway detail plan number C-0005 rev E
- amended traffic report dated May 2013
- preliminary structural information and memorandum from Taylor Thomson Whitting

The amended plans and additional information were not notified as the proposal was not amended in any significant way that would increase the likely environmental impacts to the surrounding locality beyond that of the original proposal.

COMMUNITY CONSULTATION

In accordance with Development Control Plan No. 56, owners of surrounding properties were given notice of the application. In response, 34 submissions were received from the following:

1. *D & H Hazelwood, 104/10 Ada Avenue Wahroonga*
2. *CC & JC Huxley, 202/10 Ada Avenue Wahroonga*
3. *R & H Maltby, 101/7 Munderah Street Wahroonga*
4. *VJ & WM Bowring, 301/10 Ada Avenue Wahroonga*
5. *DW & JM Hunt, 201/8 Ada Avenue Wahroonga*

6. *WM & MM Howell, 501/8 Ada Avenue Wahroonga*
7. *Jill McCreery, C301/7 Munderah Street Wahroonga*
8. *Executive Committee Beumont Apartments Strata Plan 77814, 8-12 Ada Avenue Wahroonga*
9. *R & J Hunt, Apt A101/8 Ada Avenue Wahroonga*
10. *JK & RDJ Armitage, 502/10 Ada Avenue Wahroonga*
11. *Mr G Richmond, 501/10 Ada Avenue Wahroonga*
12. *Mr C & Mrs P Stubbs, 302/8 Ada Avenue Wahroonga*
13. *M & J Isabell, 303/10 Ada Avenue Wahroonga*
14. *WK & W Kan, 302, 10 Ada Avenue Wahroonga*
15. *SC Fewtrell, 302/7 Munderah Street Wahroonga*
16. *Mr A & Mrs A Hodgkinson, C102/7 Munderah Street*
17. *PG & JM Eustace, 203/10 Ada Avenue Wahroonga*
18. *PR & SB Dudgeon, 101/10 Ada Avenue Wahroonga*
19. *Nevil Pratt, 401/10 Ada Avenue Wahroonga*
20. *STEP Inc – J Green, Unknown*
21. *Mr M Howie, PO Box 312 Wahroonga*
22. *Mr B Booth, 201/10 Ada Avenue Wahroonga*
23. *M Abraham, 21 The Glade Wahroonga*
24. *Mrs E Spencer, 206/1634 Pacific Highway Wahroonga*
25. *J & S Ing, 9 Ada Avenue Wahroonga*
26. *B Selby, C201/7 Munderah Street Wahroonga*
27. *F Donney, B304/10 Ada Avenue Wahroonga*
28. *K Bell, 7 Ada Avenue Wahroonga*
29. *N Tudor, A402/8 Ada Avenue Wahroonga*
30. *D Otton, B404/10 Ada Avenue Wahroonga*
31. *P & P Buzinskas, 102/10 Ada Avenue Wahroonga*
32. *VJ & WM Bowring, 301/10 Ada Avenue Wahroonga*
33. *G Bowden & V Hughes, 11 The Glade Wahroonga*
34. *MB Town Planning, Ste 2, Level 10, Sth Tower, 1-5 Railway Street Chatswood*

The submissions raised the following issues:

Community consultation

The majority of the submissions raised the issue of insufficient notification period to make submissions. Due to the application being notified over the Christmas period, from 7 December 2012 to 7 January 2013, extensions of time were requested to submit objections. Concerns were also raised that extended notification to the broader community was not carried out.

In response to these requests an extension from 7 January 2013 to 1 February 2013 was given for submissions to be received.

In addition, Abbotsleigh and its consultants held a meeting with the residents of Beumont Apartments on 15 March 2013 to discuss the proposal and address their concerns.

Traffic impacts & congestion

Concerns were raised that the development would increase traffic congestion, particularly at peak times during school start and finish times along Ada Avenue. Access to Ada Avenue was also raised as an issue.

The applicant has provided, on two separate occasions, additional information to address issues raised by Council's Development Engineer and Council's Strategic Traffic Engineer. Extensive consultation between Abbotsleigh's consultants and Council officers has been carried out, and this issue has been resolved to the satisfaction of Council.

Parking

Concerns were raised that the additional provision of parking would impact the congestion along Ada Avenue. Currently onsite the aquatic centre car park and vehicular loop is used to drop off and set down students with only three (3) car spaces provided to facilitate this. The new parking facilities will provide twenty-eight (28) car spaces for drop off and set down of students and this will be provided in the upper sports field car park. The multi-purpose sports facility parking will be used by staff and visitors.

The new parking facilities will effectively consolidate the existing staff parking located at various sites around and off the campus into one area. It will also increase the number of parking spaces to adequately support the parking requirements of the campus. The additional spaces are proposed to accommodate vehicles which are currently using on-street parking and, whilst the traffic report indicates that traffic movement will potentially increase, this increase will not adversely impact the traffic flow or congestion at peak times.

Council officers have assessed the potential increase and have found it acceptable.

Noise

Concerns have been raised regarding acoustic noise from the multi-sports hall, sports field and traffic. These issues include noise from:

- vehicle movement in and out of the site
- sporting activities on the sports field to unspecified times/days
- afternoon and evening activities in the multi-purpose sports facility

The aquatic and staff car park is currently supporting the parking facilities for staff and visitors to the school campus. Traffic noise is not expected to increase as the facilities have not been proposed to be used for commercial activities outside of school hours.

A condition regulating the hours of use for the sports hall and sports field is recommended (**Condition 96**) restricting the hours of use to core school hours, as the applicant has not applied to have the hours of use extended from the school's core hours.

View loss and amenity

Concerns were raised from Beumont Apartments that the significant loss of trees on the site would affect the outlook and views of the site and the amenity of the area.

Additional plantings have been proposed and both Council's Landscape Assessment Officer and Ecological Assessment Officer have reviewed the landscaping provisions and found them acceptable.

As to the potential view loss, an analysis of view sharing has been assessed against the planning principle established by the New South Wales Land and Environment Court. These principles include:

- 1. Description of views enjoyed by adjoining property.*
- 2. Consider from what part of the property the views are obtained. Ascertain whether view expectations are realistic.*
- 3. Assess the extent of the impact for the whole property. The impact should be qualified on a scale from negligible to devastating.*
- 4. Consider the reasonableness of the proposed view loss taking into account any non-compliance that is causing the view loss.*

The apartments overlook the school site and, as such, the vista or view outlook will not be the typical residential and/or natural view that would normally accompany a residential area. Whilst the school is heavily treed, particularly in this area and a number of these trees will be removed to accommodate the development, the impact on existing views from the apartments will not be detrimental as the site would still support a large number of trees and the apartments have a broader view over the school campus. It is also noted that the apartment blocks are elevated due to the topography of the area.

Abbotsleigh School has endeavoured to maintain the treed nature of the campus as is required under the School Facilities Standards – Landscape Standard. There are additional plantings and subsequent off-set plantings proposed on the campus that will reduce the impact of the tree removal.

As such, the proposal, when assessed against the Land and Environment Court's planning principle, the following assessment is provided:

1. The views enjoyed by the apartments are of a treed landscape within a school setting.
2. The views obtained are over the campus of the school and surrounding residential dwellings. The proposed tree loss from the development will not have an overall impact to the broader view that the apartments enjoy.
3. The tree loss is isolated to one area and replenishment planting will be carried out. This isolated area will not detrimentally impact the overall view of the site or surrounding locality to a degree that would measure

- the view loss as being devastating.
4. The reasonableness of the view loss from the removal of landscaping is considered acceptable as the apartment blocks, particularly numbers 8 and 10, overlook the school campus in its entirety, at an elevated level. The tree loss from this vista is not considered to be an unreasonable loss of view.

Location, visual impacts and streetscape

Concerns have been raised regarding the location of the development, particularly with regards to the close proximity of the multi-purpose sports hall to the boundary along Ada Avenue and the elevation of the sports field. Concerns were also raised that the new sports field and multi-purpose sports hall will have the following visual impacts:

- sports field is elevated too high
- multi-purpose sports hall is too close to the boundary of Ada Avenue impacting the streetscape
- loss of trees and lack of screen planting make the bulk and scale of the multi-purpose sports hall unacceptable
- design of the multi-purpose sports hall and roof increase the bulk and scale of the development

Multi-purpose sport hall

The multi-purpose sports hall is designed to be sympathetic to both the treed nature of the campus and existing buildings on site, particularly the aquatic centre. The impact of the building, in terms of bulk and scale, is reduced by the use of the topography of the site and use of materials and finishes that are sympathetic to the surrounding treed environment. The mono-pitch roof was used as a response to the treed nature of the site. There are a number of existing trees located at the front of the development site that are to be retained. As the building will be situated below street level the canopies of these trees will provide a level of screening of the building from the street.

To move the building further towards the aquatic centre would result in further tree removal and other potential impacts. This is not considered to be a desirable outcome for the site, particularly as the link between the hall and the sports field would also need to be relocated. The setbacks proposed for both the sports field and multi-purpose sports hall are considered to be acceptable in terms of separation from the street.

Considering the nature of the development and the use of the building, the design and location of the multi-purpose sports hall is acceptable.

Sports field elevation

The eastern boundary of the site along Ada Avenue slopes up towards Pacific Highway and the levels along this boundary where the sports field will be located at street level are RL 192.73 to RL 196.7. The current sports field is

set below street level with a ground level of RL 190.69. The new artificial sports field will be elevated to have an RL of 193.8. The artificial sports field will therefore only be at or above street level at the south-eastern corner of the field. This is not considered to be a significant change in topography.

Were the scheme to be amended to be lowered this would require further excavation for the car park beneath the sports field which may have potential impacts, such as geotechnical impacts given the proximity to the main teaching building and tree impacts.

Given that the current sports field is already visible from the street and forms part of the current streetscape, the new sports field is not considered to be at a level that will fundamentally change the streetscape character.

Tree loss and landscaping

Concerns have been raised regarding the loss of 42 trees on the site to accommodate the multi-purpose sports hall, sports field and associated car parking structures and lack of landscaping to screen the multi-purpose sports hall.

Council's Landscape Assessment Officer and Ecological Assessment Officer consider the tree removal aspects acceptable and their detailed comments are provided further in this report.

The development will have a number of existing trees that will provide screening to the multi-purpose sports hall at the front boundary. There is also compensatory planting proposed with understorey plantings that will also provide a level of screening to the multi-purpose sports hall.

Lighting from flood lights

Concerns have been raised regarding the proposed flood lighting to the sports field, particularly during extended periods in the evening. Glare from the lighting of the artificial surface has also been raised.

The use of the flood lights will be limited by a condition of consent (**Condition 94**).

Headlight glare

Concerns have been raised that vehicular movement off site from Gate 1 will cause additional headlight glare, particularly to units at 10 Ada Avenue and that the increased parking provisions onsite will exacerbate this impact.

It is noted that currently Gate 1 is used to access the aquatic centre driveway and car park. This car park is also used to drop off and pick up students during school drop off and pick up times. The application proposes that the aquatic centre parking and student drop off and pick up will be carried out from the sports field car park which is located further up Ada Avenue as

demonstrated by plan number DA1005 rev 4. Accordingly, this is required by **Condition 98**.

The driveway access from Gate 1 will be used for the multi-purpose sports hall car park which will be utilised by the staff and visitors of the campus (**Condition 98**). Headlight glare from this driveway will be significantly reduced due to the relocation of the parking arrangements for the aquatic centre. Whilst there will be opportunities for after-hours events being held in the multi-purpose sports hall, this will be restricted to three times per year to a time of 9pm (**Condition 97**) .

Hours of operation and commercial usage

Concerns have been raised that the new multi-purpose sports hall and sports field do not have specific hours of operation and that there is the potential of the facilities being used by outside users for commercial purposes.

The applicant has maintained that the facilities will only be used for school activities during core school hours with no commercial usage intended. The core school hours are currently 7.00am to 6.00pm Monday to Friday and 7.00am to 1.00pm Saturdays and this is addressed by **Condition 96**.

Compliance within zoning

The issue of the development being permissible within the Residential 2(c2) zoning has been raised.

The development is proposed on allotments that are zoned residential 2(c2) for which educational establishments are permissible with consent as set out in Clause 23 of the Ku-ring-gai Planning Scheme Ordinance. The definition of an educational establishment under the KPSO is:

"Educational establishment" means a building used or intended for use as a school, college, technical college, academy, lecture hall, gallery or museum, but does not include a building used or intended for use wholly or principally as an institution

Accordingly, under the current zoning the proposed development is permissible with consent.

INTERNAL REFERRALS

Heritage

Council's Heritage Officer commented on the proposal as follows:

The proposed works are considered satisfactory as the development is not located in close proximity to the surrounding heritage items, particularly those located on site.

Landscaping

Council's Landscape and Tree Assessment Officer commented on the proposal as follows:

Tree impacts

Amended plans were submitted indicating the relocation of the driveway for the sports field to preserve T558 - Eucalyptus saligna (Sydney Blue Gum) located on Ada Avenue nature strip. The relocation of the driveway also allows for the retention of T557 – Cupressus macrocarpa 'Aurea' (Golden Monterey Cypress) which will provide good screening of the development for the properties located on the opposite side of Ada Avenue.

The arborist has satisfactorily addressed impacts on T400g, T420 & T423 - 3 x Eucalyptus saligna (Sydney Blue Gum). Amendments to the plans have been carried out and protection measures recommended by the arborist to preserve these trees will be conditioned.

Tree removal

The majority of the trees to be removed are within the footprint of the proposed multi-purpose hall and were originally planted as part of the aquatic centre development completed in 1999.

A total of 46 trees will require removal for the proposed development works, including 42 trees for the proposed multi-purpose hall and 4 for the proposed hockey field. The tree removal includes:

- 29 locally occurring species (planted specimens known as non-endemic)*
- 3 locally occurring species (remnant)*
- 9 exotic species*
- 5 indigenous species (natives to Australia)*

The majority of the trees are in good health and condition, providing landscape amenity and overhead tree canopy. The trees spatially conflict with the development proposal. Subject to compensatory tree replenishment being undertaken in long term viable locations as outlined below, the proposed tree removal is considered acceptable.

The vegetation management plan includes compensatory tree planting of 48 locally occurring trees to be evenly dispersed throughout the school grounds. The tree planting areas were selected so that they would not be impacted by any future developments. The proposed tree planting excluding Zones 4 & 6 will be completed as part of the deferred commencement conditions.

Landscape plan

The landscape plans are considered acceptable. The planting accurately reflects the tree and understorey planting outlined in the Vegetation Management Plan.

The Biobanking Offset Assessment carried out by the applicant's ecologist required that 3,000m² of Blue Gum High Forest is to be rehabilitated on site. Zones A, B, 2 & 4 have been nominated as rehabilitation areas for the biobank offsetting. A Section 88b Restriction will be placed on the nominated rehabilitation zones to ensure their long term protection.

Staging of the landscape works - the landscaping for the proposed development has been divided into 8 planting zones. Conditions are recommended that require the completion of the landscape works within Zones 6, 7 & 8 and Zones 1, 2, 3, 4 & 5 prior to the issue of the occupation certificates for the hockey field and multi-purpose hall, respectively.

Zones A & B and the compensatory tree planting excluding zones 4 & 6 are to be completed as part of the deferred commencement terms.

Stormwater plan

The following additional information in relation to landscape issues was provided;

- *To enable the existing moisture regime to be maintained for the trees downslope of the sports field, the applicant proposes to divert some of the stormwater collected on the field into a subsoil slotted pipe located along the southern side of the field. The details for this system were considered acceptable.*
- *Amended plans were submitted indicating the relocation of the detention tank beneath the car park for the sports field to preserve T448 – Eucalyptus saligna (Sydney Blue Gum).*

Environmental site management

Condition 21, recommended by Council's Engineer, requires the submission of an Environmental Site Management Plan prior to the issue of the construction certificate. To provide protection of trees during the construction stage the following item will be included in the condition;

- *The arborist shall provide certification in writing that the plan complies with Section 4 of AS4970-2009 – Protection of trees on development sites*

Conclusion

Landscape Services finds the proposal acceptable in relation to landscape issues

Ecology

Council's Ecological Assessment Officer commented on the proposal as follows:

Introduction

Blue Gum High Forest (BGHF) occurs within the proposed Abbotsleigh Senior School development site. This vegetation community is listed as a Critically Endangered Ecological Community (CEEC) under Schedule 1 of the NSW Threatened Species Conservation Act 1995 (TSC Act) as well as being listed under the Environment Protection and Biodiversity Conservation Act 1999.

The BGHF community within the area in which the proposed new buildings are to be sited contains remnant Eucalyptus saligna (Sydney Blue Gum) and Eucalyptus pilularis (Blackbutt) canopy trees within a highly modified understorey dominated by exotic grasses (lawn areas) and car park.

Impacts

The following five Sydney Blue Gums (Eucalyptus saligna)-T396, T-445, T-399, T-489, T-503 are proposed for removal and are remnant trees comprising part of the CEEC Blue Gum High Forest community.

T396, T445 and T489 have been proposed for removal to establish the new sports field, T399 & T503 for the new multi-purpose sports hall (MPSH). These five remnant trees are of a higher ecological value than as they are naturally occurring mature specimens of BGHF.

The proposed development will result in the removal of twenty (24) planted native trees. Tree no; T384a, T396b, T400a, T400b, T400c, T400d, T400e, T405a, T405b, T412b, T417a, T417c, T417d, T417f, T417g, T417h, T417i, T516f & T561g (all Sydney Blue Gums) and T420a and T420b (Grey Ironbark). Twenty trees (20) have been planted within the pool carpark and four (4) along the access road. The abovementioned trees were planted as part of a previous development approval for the Aquatic Centre and associated facilities. All planted trees are less than 20 years in age and have been identified by the arborist as having a high retention value.

Review of flora and fauna assessment

A detailed flora and fauna report has been prepared by Total Earthcare.

The current proposal will require the demolition of the existing car park and sports field along with the removal of some native planted and remnant vegetation within the development footprints and adjoining areas. Specifically, this will include the removal of five specimens of Eucalyptus saligna Sydney Blue Gum that are remnant canopy trees and are part of the Critically Endangered Blue Gum High Forest community. Additionally, twenty four (24) planted specimens of Eucalyptus saligna will be removed.

The report contains an impact assessment (7-part test) prepared in accordance with section 5a of the Environmental Planning & Assessment Act 1979 to assess impacts of the proposal upon CEEC Blue Gum High Forest.

The conclusion of the assessment is as follows:

In light of the consideration of the above seven factors (a-g), the proposed action is not likely to have a significant effect on Blue Gum High Forest within the subject site, study area or wider locality as a result of the current proposal, as:

- The proposal will not adversely affect the lifecycle of the community;*
- The proposal will not remove, modify or further fragment or isolate a significant area of habitat for the community; and*
- The proposal does not significantly contribute to any KTP threatening the community.*

Consequently, a Species Impact Statement is not required to be prepared.

The impact assessment (7-part test) which has been prepared by Total Earthcare is considered to be satisfactory and in accordance with section 5a of the Environmental Planning & Assessment Act 1979.

There are currently Five (5) remnant BGHF trees and twenty-four (24) Blue Gums planted within the car park which are proposed to be removed. The following offsetting has been proposed, which has been calculated by the applicant in accordance with an approved biobanking methodology under the TSC Act.

Four offset areas (A, B, 2 & 4) have been identified to be protected and enhanced through the implementation of a vegetation management plan (VMP). The sum of all four areas of BGHF protection equates to area of 1867m²

The offset areas are to be enhanced through the planting of trees, sub-canopy, shrubs and ground species characteristic of BGHF. The implementation of the vegetation management plan (VMP) by qualified bush regenerators will ensure that offset areas are enhanced and

conserved within the school grounds and adequately compensate the tree loss as a result of the proposed development.

Forty-eight (48) BGHF canopy trees are to be planted throughout the School. These trees will be grown from local provenance plant material collected from remnant trees within the site.

Careful consideration has been given to the selection of areas in which BGHF trees are proposed to be planted to ensure that trees can reach full growing capacity and that no conflicts arise with future development. In relation to ecological impacts, the proposed tree planting and offset areas are considered satisfactory.

Conclusion

The development application is supported on ecological grounds.

Engineering

Council's Development Engineer commented on the proposal as follows:

Stormwater disposal

The development is a Type 9 (Other Development) as per Council's Water Management DCP No.47.

From inspection, the existing stormwater runoff from the eastern portion of the school grounds appears to be collected by inlet pits and conveyed to an existing detention basin system adjacent to the car parking area prior to discharging into the downstream watercourse. The basin did not appear to be acting as a detention facility at the time of the inspection.

A stormwater design summary has been submitted outlining the on-site detention (OSD) requirements. The developed area (Sports Field and Multi-Purpose Sports Hall) was used for the calculations of the on-site detention (OSD) storage and permitted site discharge. The combined impervious area of 8,375m² represents the roof/field surface area for both buildings and the driveways.

The sports field OSD of 176m³ is to be located beneath the proposed car park as an underground concrete tank. Similarly it is proposed to construct an on grade OSD tank of 82m³ beneath the MPSH carpark. The flows from the stormwater facilities are to be connected to the existing system (Council's easement containing a 600mm diameter pipeline) traversing the site, which discharges to the south into a Council stormwater pit and then into Glade Walk which is public road.

Given that the proposed car park structure encroaches over Council's existing 600mm diameter stormwater pipeline and easement, any development consent would be granted on a deferred commencement

basis, subject to a Council resolution agreement to the relocation of Council's easement. There are no technical objections to the relocation of Council's stormwater pipeline.

It was discussed at the meeting on 7 May 2013 that the excavation for the carpark under the sports field would compromise the internal stormwater drainage system. In response the applicant has submitted a preliminary sketch of the structural design details/sections showing the depths of the structural piers and suspended slab. Civil engineering drawing would need to be submitted prior to the issue of the construction certificate with the civil / structural plans to be endorsed by the project arborist.

On-site retention has been provided in a 25,000L rainwater tank located under the carpark of the MPSH with the overflow from the tank directed to the OSD system. The re-use of stored rainwater was suggested to be used for meaningful purposes such as toilet flushing and irrigation. It has been suggested by the project arborist that it may be beneficial to allow some stormwater to discharge onto the embankment south of the hockey field to allow water onto the vegetation in a manner similar to the existing conditions. Revised plans now detail the stormwater trench located at the sports field southern interface with the embankment. The stormwater trench is supported by Council's Landscape Services in relation to existing trees and compensatory planting scheme.

The stormwater management plan(s) have been assessed on merit and as proposed are acceptable for development purposes.

Vehicular access

The access to the sports field car park will be provided at the existing emergency vehicle access driveway that also services the existing sports oval. It is proposed to increase the width of the southern driveway for the MPSH to 6.5m to make it suitable for its intended use. The access driveway will be provided in accordance with the Australian Standards for Off-street car parking facilities AS2890.1:2004.

Driveway longitudinal sections have been shown on the civil plans. The northern driveway (access to sports field) indicates a new layback and a 5.8m wide driveway crossover in the same vicinity as the existing. The driveway, together with a small section of elevated driveway, has a maximum grade of 13.4% which transitions into the car park. Access to the Sports Hall is via the existing access road from Ada Avenue with a maximum gradient of 20%.

The application was referred to Roads and Maritime Services who raise no concerns about the location of the new access in relation to the traffic signals.

The driveway widths, internal circulation, aisle widths, height clearances and driveway gradient comply with Australian Standard 2890.1 (2004) "Off-Street car parking".

Parking provisions

The parking provisions of Council's 'Car Parking' DCP No.43 for Primary and Secondary Schools are as follows:

Parking provisions rate	Staff/Student No.	Required parking spaces
• 1 space per equivalent full time employee	125	125
• 1 space per 8 year 12 students; plus	155	20
• Public Halls – 1 space per 10 seats, for day time parking and 1 space per 6 seats, for Friday / Saturday evening*	1500	150*

Total = 295

Additional parking as a rate of 1 space per 100 students enrolled has also been nominated by the traffic consultant. There are 900 staff/students resulting in 9 parking spaces to be allocated for visitor and/or parent parking.

Following the development there will be 242 parking spaces on site. The proposal requires removal of the existing Aquatic Centre/staff car park comprising 42 spaces and construction of 166 new car parking spaces with a maximum of 40 spaces located beneath the Multipurpose Sports and Assembly Hall, and 134 spaces located under the Sports Field.

It is noted that at present the school does not provide on-site parking for Year 12 students and a proportion of staff and visitors are required to park on street in Ada Avenue. The traffic report specifies some 28 student set-down /pick-up spaces within the new car park beneath the sports field and 20 parking spaces for Year 12 students (to be located at the western end of the campus). The parking provisions satisfy Council's DCP No.43 and the on-site parking will be improved for staff and visitors and parking will also be made available for Year 12 students.

In addition to the car parking, 30 bicycle parking spaces will be provided within the new car park beneath the sports field which satisfies the 2% bicycle parking rate of the DCP No.43.

The MPSH car park provides both one and two-way circulation with an access ramp of 20% which is compliant with AS2890.1:2004.

With regard to parking for persons with a disability, according to the 'Statement of Compliance Access For People With A Disability', the BCA

Access Provisions requires a rate of 1 per 50 for up to 1000 spaces. The proposal seeks to provide 2 accessible spaces in the sports hall parking on level 1 and 4 spaces on the sports field parking on level 3. The parking dimensions including height clearance satisfies the requirements of AS2890.6:2009. The required disabled parking spaces have also been satisfied.

Abbotsleigh has confirmed that neither the multipurpose facility nor the new playing fields are for commercial benefit, available to the wider community or to extend the school's existing hours of operation.

These facilities will be used for co-curricular activities such as before and after school sports training, music, performing arts and other programs offered by the school. It is understood that sports and team training is scheduled before school commences for day students whereas boarders would typically train in the afternoon finishing in the evening. This is acceptable given that boarders would stay on site and accordingly do not require parental or other transportation.

Traffic generation

Traffic counts were undertaken during the school term of weekday morning (before school), weekday afternoon (after school) and Saturday (during sport) periods. The counts were taken at the following locations:

- Pacific Highway/ Ada / Coonanbarra Road*
- Ada Avenue/ Munderah Street, and*
- Fox Valley Road/ Ada Avenue.*

Based on a claimed existing traffic generation rate for on-site parking of 0.3 vehicles per hour per car space during morning and afternoon peak periods, the proposal would generate some 30 vehicles per two-way at peak times at the start and end of the school day. The traffic consultant relies on the existing traffic generation rate for staff parking areas of 0.3 trips per hour per space (refer to Section 3.19 of the traffic report). In response the applicant confirms that no additional on-street car parking surveys are required given that on-site parking is provided and that traffic queues associated with operation do not extend onto Ada Avenue.

Whilst a 'Travel Access Guide' has been discussed within the report, the travel plan has not been submitted with the DA. Council has agreed that it will be conditioned prior to issue of the Construction Certificate that the School is to adopt a 'Travel Access Guide' for staff and Year 12 students that will encourage staff and Year 12 students to travel by public transport, car pooling / car sharing, cycling, walking and being dropped off as alternative to driving. The Travel Plan is to be developed in accordance with the principles identified by Transport for NSW and RMS.

Construction & traffic management

According to the SEE, the development is proposed to be constructed in two stages to minimise the possible impact on staff and students, whilst retaining full school operations and ensuring there is no additional car parking burden on local streets. In order to minimise the impact on parking on the surrounding streets, it is required to retain use as much as possible of the existing carpark for tradesmen and contractor parking.

A Construction Traffic Management Plan (CTMP) has been submitted which is acceptable (in principle) in clearly identifying the truck movements to the site, however, based on the scale of works and expected construction vehicle movements, it will be conditioned that a detailed construction traffic management plan (CTMP) and including a traffic control plan (TCP) for the demolition, excavation and construction stages must be submitted for review by Council Engineers and for concurrence of RMS prior to the issue of the construction certificate.

Based on the swept paths diagram for 12.5 metres rigid truck, it is considered necessary to impose parking restrictions at the following locations, to provide easy access by truck to/from the site:

- 1. Gate no.1 - 3 parking spaces on left side of the driveway (towards Pacific Highway)*
- 2. Gate no.1- 3 parking spaces on the opposite side of the driveway*
- 3. Gate no.2 - no parking restrictions requires on the school side*
- 4. Gate no.2 - on the opposite side of the road, 3 parking spaces on either side of the driveway to the unit (total 6 parking spaces on the opposite side of the road).*

*It has been conditioned (**Condition 8**) that 'No Parking' restrictions to be approved, a traffic report will then need to be prepared by Council Traffic Section for approval by Council's Traffic Committee.*

Construction access to the site will be provided to/from Ada Avenue with trucks entering and exiting the site in a forward direction. The report suggests that in order to minimise construction traffic on surrounding streets, trucks will approach and depart the site to/from the Pacific Highway and Ada Avenue. Given that the intersection at Ada Avenue and Pacific Highway is a signalised junction, this allows construction vehicles to turn either left or right therefore giving vehicles the option of travelling northbound or southbound. This is satisfactory.

*Roads and Maritime Services (RMS) require that no construction vehicles movements are to occur during the school drop-off (8.00am to 9.30am) and pick-up hours (2.30pm to 4.00pm) on school days or during Saturday sport activities held at the school (**Condition 93**).*

Environmental construction management

*An environmental site management plan (ESMP) shall be submitted (**Condition 21**) prior to the issue of the construction certificate to include the following:*

- *a dedicated unloading and loading point within the site for all construction vehicles, plant and deliveries.*
- *material, plant and spoil bin storage areas within the site, where all materials are to be dropped off and collected.*
- *an on-site parking area for employees, tradespersons and heavy construction vehicles.*
- *size of the heavy vehicles proposed for the excavation and construction phases including swept paths showing ingress and egress of construction vehicle leaving the site in a forward direction.*
- *show all tree protection fencing and sedimentation.*

Waste collection

The proposal allows for a garbage storage area located on Level 2 of the Sports Field car park. From discussions with Abbotsleigh School, it was understood that a buggy vehicle will be used to access the garbage collection room and deliver the bins to the existing loading and unloading point within the school grounds as currently operating.

Geotechnical investigation

Excavation to depths approximately 5m to 6m at the north-eastern corner below the existing ground surface will be required for the MPSH car park.

The subsurface conditions for the MPSH comprise existing pavements, shallow to moderately deep fill, natural silty clays that graded into weathered shale bedrock at depths ranging from 1.5m to 8.5m. Groundwater was encountered in several of the boreholes at depths ranging from 2.0m to 13.3m. It is anticipated that localised groundwater flow may occur during excavation. Monitoring during and on completion of the excavation is required.

Any works on Council's road reserve or rock anchors extending outside of the boundaries would be subject to separate approval under the Roads Act.

*All recommendations, including any survey required prior to commencement of works, shall be carried out as specified within the report which has been included in **Condition 1**.*

Recommendations

From an engineering perspective there are no objections to the approval of this application.

Environmental Health

Council's Environmental Health Officer commented on the proposal as follows:

Lighting

There are possible impacts from the illumination of the sporting fields as well as cars leaving the site at night and, as such, the general DA condition on illumination shall be included.

Noise

The main potential sources of noise impact from the proposed multi-purpose hall and sports field would include:

- people noise - children using the playing fields/hall as well as from spectators*
- sports equipment - whistles, starting guns/buzzers/etc for the running track, games*
- noise from amplified sound equipment/speakers both inside and outside the hall*
- noise from mechanical plant, including air intake/discharge points for the underground car park area; and*
- traffic noise associated with the use.*

The above issues are further discussed below:

a. Traffic

In relation to traffic noise, it is noted that the acoustic consultant states that 'It is anticipated that there will be no significant increase in vehicle movements'. A large scale sporting event/function with up to 1700 children, and associated people utilising the 126 carparking spaces to be provided, could be regarded as significant. The current traffic in this location would not typically be of this nature, particularly late at night. Noise assessment of this aspect is therefore warranted should any future proposal be submitted for the facilities to be utilised for evening use. The impact for this would be assessed at that time.

b. Noise associated with multi-purpose hall and sporting fields

The acoustic consultant has indicated that there will not be 'offensive noise' generated from the activities proposed in this application and, as such, is satisfactory.

Offensive noise is defined under the Protection of the Environment Operations Act 1997 and includes noise that: '(ii) interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted, and (b) that is of a level, nature, character or quality prescribed by the regulations or

that is made at a time, or in other circumstances, prescribed by the regulations’.

Whilst the standard test is to apply background + 5 dB(A), the entire definition should be considered.

In this regard, a school would typically operate from around 7am to around 6pm weekdays with the occasional awards night once or twice a year. The surrounding community might reasonably expect noise associated with such use.

Large scale late night sporting events requiring floodlights, starter guns, amplified sound equipment; continual weekend use on Saturdays and Sundays; and multiple late night functions would not be considered typical. The proposed use between 6.30am and 9pm 7 days a week, all year, has the potential for interfering ‘unreasonably’ on the comfort of surrounding residents.

*To address any potential noise impacts to the surrounding residents the hour of use for the multi-purpose sports hall and sports field shall be limited to core school hours of 7.00am to 6.00pm Monday to Friday and 7.00am to 1.00pm Saturdays (**Condition 96**).*

Building Unit

Council's Senior Building Surveyor commented on the proposal as follows:

The car park is class 7 and the multi-purpose sports hall is a class 9b under the Building Code of Australia.

The sighted BCA assessment report by Blackett, Maguire + Goldsmith dated 26 November 2012 and the Access report by Accessible Building Solutions dated 22/11/12 has been found acceptable.

*The proposed building design complies in general with the Building Code of Australia, subject to conditions (**Conditions 39 and 85**)*

EXTERNAL REFERRALS

Roads and Maritime Service of NSW

In accordance with Clause 104 of SEPP (Infrastructure) 2007, the application was referred to the Road and Maritime Service of NSW and the following comments were received:

1. *All works/regulatory signposting associated with the proposed development are to be at no cost to RMS.*

2. *To ensure the safety of children and the smooth flow of traffic on the road network during peak traffic periods, no heavy vehicle movements are to occur during AM and PM traffic periods, school zone periods, or during Saturday sport activities held at the school.*
3. *A Construction Traffic Management Plan (TMP) detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control should be submitted to Council and RMS for approval prior to the issue of the Construction Certificate. The TMP must detail the traffic impact of the construction works on the local area and the means proposed to manage construction works to minimise such impacts. In particular, the report must consider the impact on any on-street parking during construction, the movement of trucks to and from the site, the location of any site sheds, and the use of any cranes and concrete pumps.*

The Construction Traffic Management Plan is to be concurred with by RMS's Traffic Engineering Services prior to the start of any construction activities. All construction/demolition vehicles must be accommodated on-site. A construction vehicle route must be provided in the Construction Management Plan which takes into consideration schools and school zones along the route.

4. *The layout of the proposed car parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths, and parking bay dimensions) should be in accordance with AS 2890.1- 2004 and AS 2890.2 —2002 for heavy vehicle usage.*
5. *The car parking provision is to be to Council's satisfaction.*
6. *The swept path of the longest vehicle (including garbage trucks) entering and exiting the subject site, as well as manoeuvrability through the site, shall be in accordance with AUSTROADS. In this regard, a plan shall be submitted to Council for approval, which shows that the proposed development complies with this requirement.*

In accordance with State Environmental Planning Policy Infrastructure, it is essential that a copy of Council's determination on the proposal (Conditions of Consent if approved) is forwarded to the RMS at the same time it is sent to the developer.

The above requirements are included as **Condition 93**.

STATUTORY PROVISIONS

State Environmental Planning Policy (Infrastructure) 2007

The proposed application is subject to the requirements of SEPP infrastructure. The relevant clauses of the SEPP and an assessment against those clauses are provided below:

Clause 2: Aims of the policy

The Aims of the SEPP essentially seek to improve the delivery of infrastructure to the State. The application has been considered against the provisions of this SEPP and is consistent in all relevant respects.

Division 3 – Educational establishments

This division of the SEPP relates to educational establishments and covers the development proposed by the subject application. Clause 28 (1) prescribes that the proposed works may be carried out on the site with consent.

Clause 32 of the SEPP states several standards that are to be considered in the assessment of any application for works relating to a school. These standards are:

- (a) *School Facilities Standards—Landscape Standard—Version 22* (March 2002),
- (b) *Schools Facilities Standards—Design Standard* (Version 1/09/2006),
- (c) *Schools Facilities Standards—Specification Standard* (Version 01/11/2008).

The application seeks approval for ancillary development to be carried out to an existing school and, as such, a number of the standards do not apply. The applicant has provided a statement confirming the development has been designed with due consideration of the above standards and this is reflected in the submitted plans and accompanying documentation.

School Facilities Standards—Landscape Standard

The School Facilities Standards incorporates four landscape principles as follows:

1. Principles to create a sense of place
2. Principles for a safe landscape
3. Principles for a sustainable landscape
4. Principles for a cost effective landscape

The four principles primarily relate to the design and development for new schools, however these principles are to be maintained when additions and alterations are proposed to existing schools.

The applicant has given the four principles consideration, particularly within the context of the removal of 42 trees. The proposal has offset the loss of trees by planting replacement trees elsewhere on the campus. This has been included in the vegetation management plan and landscape plan. It is therefore considered that the landscape standard has been adequately considered.

Schools Facilities Standards—Design Standard and Schools Facilities Standards—Specification Standard

As the application is for a multi-purpose sports facility and sports field there are a number of design and specification standards that will not be applicable.

The applicant has demonstrated that the new sports facilities have been designed taking the above standards into consideration and this is reflected in the architectural plans and supporting documentation, such as the arborist report, vegetation management plan and ecological impact assessment. Council is satisfied that the level of detail provided adequately addresses the above standards.

Division 17 - Roads and Traffic

As the overall site of Abbotsleigh has a frontage to the Pacific Highway Clause 101 Development with frontage to a classified road must be considered. However, as the proposed development is located in an area on the site that does not front Pacific Highway, consideration of this Clause is not necessary in this instance.

104 Traffic-generating development

Clause 104 Traffic-generating development is applicable as the development is for an educational establishment with fifty or more students.

A referral to the Roads and Maritime Services (RMS) was carried out and comments and conditions were received with no issues or objections raised to the development. Council's Development Engineer and Strategic Transport Engineer have reviewed the application and found the application acceptable with regard to the accessibility of the site and the potential traffic safety, road congestion and parking implications of the development.

State Environmental Planning Policy No. 55 – Remediation of Land

The provisions of SEPP 55 require the consent authority to consider the potential for a site to be contaminated. The subject site has a history of an educational establishment use and as such, it is unlikely to contain any contamination and further investigation is not warranted in this case.

Sydney Regional Environmental Planning Policy (Sydney Harbour Catchment) 2005

Matters for consideration under SREP 2005 include biodiversity, ecology and environmental protection, public access to and scenic qualities of foreshores and waterways, maintenance of views, control of boat facilities and maintenance of a working harbour. The proposal is not in close proximity to, or within view, of a waterway or wetland and is considered satisfactory. Water re-use measures will minimise the impact on downstream waterways.

Ku-ring-gai Planning Scheme Ordinance

Clause 23 – Permissibility

The area of the site which is to be developed is zoned Special Uses 5(a) (School) and residential 2(c2) under the KPSO. These zonings allow for a school and an educational establishment. An educational establishment is defined as:

“a building used or intended for use as a school, college, technical college, academy, lecture hall, gallery or museum, but does not include a building used or intended for use wholly or principally as an institution.”

A school is defined as an educational establishment and the works proposed, particularly in Residential zone 2(c2), are permissible with consent.

Clause 33 – Aesthetic appearance

The subject site fronts Pacific Highway which is a main road. This clause requires consideration of the aesthetic appearance of the proposed building when viewed from the Pacific Highway. It is noted that the location of the proposal is not in close proximity to Pacific Highway and the development will not be readily seen due to the sloped topography of Ada Avenue. The appearance of the proposal from the Pacific Highway is considered to be satisfactory.

Clause 61D & 61E: Heritage /conservation areas:

The proposal has been considered against the provisions of Clause 61D and 61E and it has been found that the proposed development will not have an unreasonable impact upon the significance of the heritage items located on site.

POLICY PROVISIONS

Development Control Plan 31 – Access

Council's Building Surveyor is satisfied the proposed development will provide adequate accessibility provisions, subject to conditions, including compliance with the Building Code of Australia. Therefore, the proposal is deemed to be

consistent with the matters for consideration set out under this DCP.

Development Control Plan 40 – Construction and Demolition Waste Management

An acceptable Waste Management Plan has been submitted with the application and further conditions will be imposed to ensure appropriate practices are undertaken with regard to site management, pollution control, resource/waste management, tree protection and noise control where applicable.

The construction traffic management plan has been assessed and found acceptable and an environmental site management plan is required under **Condition 21**.

Development Control Plan No. 43 – Car Parking

Council's Development Engineer has assessed the requirements for car parking under DCP 43 and has found the proposal acceptable in terms of compliance with parking provisions.

Development Control Plan 47 – Water Management

Matters for consideration in DCP 47 have been assessed by Council's Development Engineer whose comments have been provided elsewhere in this report.

Draft KLEP 218 - Biodiversity and Riparian land and Heritage Conservation Areas

Draft LEP 218 has been prepared and exhibited and as such is a matter for consideration in the assessment of the application. The draft LEP would insert provisions into the KPSO addressing biodiversity and riparian land as well as heritage conservation. Of relevance to the assessment of this application, the DLEP would include the site in the Biodiversity Map for which it has been identified as "Areas of Biodiversity Significance".

The provisions of Section 79C(1)(a)(ii) of the Environmental Planning and Assessment Act 1979 (EP&A Act) require an assessment to take into account:

the provisions of any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved).

Under the Draft LEP the objective for Biodiversity Protection is as follows:

- (1) The objective of this clause is to protect, maintain and improve the diversity and condition of native vegetation and habitat, including:
 - (a) protecting biological diversity of native flora and fauna, and
 - (b) protecting the ecological processes necessary for their continued existence, and
 - (c) encouraging the recovery of threatened species, communities, populations and their habitats, and
 - (d) protecting, restoring and enhancing biodiversity corridors.

The application was referred to Council's Ecological Assessment Officer who has carried out an assessment of the impacts the proposed development may have to the biodiversity of the site and surrounding locality. The application proposes to carry out off-set plantings which have been found acceptable and the officer has concluded that:

- *the proposal will not adversely affect the lifecycle of the community;*
- *the proposal will not remove, modify or further fragment or isolate a significant area of habitat for the community; and*
- *the proposal does not significantly contribute to any KTP threatening the community.*

Accordingly the application is considered to satisfy the requirements of Draft LEP 218.

Draft Ku-ring-gai Local Environmental Plan 2013 (DKLEP2013)

The subject site is also contained within the catchment of Draft Ku-ring-gai Local Environmental Plan 2013. The DKLEP 2013 is the draft comprehensive or principle Local Environmental Plan that seeks to replace the dated Ku-ring-gai Planning Scheme Ordinance by bringing the principal planning instrument of the LGA in line with the intended state wide practices. This was exhibited to 6 May 2013.

It should be noted that the Draft LEP proposes to rezone the subject site, including the allotments zoned 2(c2), to SP2 – Infrastructure. This rezoning will enable the site to maintain the site's use as a school as indicated in the Agenda for the Ordinary Meeting of Council on 6 March 2012 where it discusses the reasoning behind rezoning schools:

Schools

It is proposed that the draft Principal LEP zone all school sites as SP2 rather than the predominant adjoining zoning. Examples of recently made standard instrument LEPs to include schools in SP2 zones include the Lane Cove LEP 2008, Mosman LEP 2011, Marrickville LEP 2011 and Parramatta LEP 2011.

This approach is favoured for a number of reasons. Firstly, education is the largest single employer in Ku-ring-gai and zoning the sites according to adjacent land use could be construed as encouraging education

providers to relocate. This was reinforced in the Ku-ring-gai & Hornsby Subregional Employment Study. To zone the sites according to the prevailing adjoining land use may send the wrong signals to the education sector about reinvestment in the industry.

Secondly, given the strength and size of the education sector in Ku-ring-gai, even if large private education providers ceased operating, it would be preferable that their facilities be made available to other education providers in the first instance, rather than be made available for alternate development as would occur if they were zoned for high density residential development for example. The quantity and scale of the buildings on many of the school's sites in Ku-ring-gai would lend themselves to reuse for education purposes. There has been no indication that any of the school sites covered by the Principal LEP are likely to be used for alternate purposes in the foreseeable future. In regard to the zoning of schools, PN 10-001 offers the following advice:

It is anticipated that only a minority of TAFEs and schools across NSW could be considered a 'strategic site', however, to assist in the initial assessment the following criteria should be used:

- is it 20 hectares or more in size; and/or*
- does it provide a wide range of facilities (meeting rooms, halls, pool, sports fields, tennis courts and the like) that can also be used by the surrounding community; and/or*
- is it of regional significance (i.e. the only school servicing a large region).*

It is not an unreasonable argument to suggest that many of Ku-ring-gai's private schools fall within the meaning of "large complexes or strategic sites", and that if they were ever to become "surplus", a comprehensive planning assessment would need to be undertaken prior to zoning the sites for alternate uses.

It should also be noted that if schools were zoned other than SP2 in the Principal LEP, they would by necessity have to be included in dwelling yield calculations, which would as a consequence, be distorted.

It must be noted that the draft land zoning maps at the time of exhibition did not indicate the specific land use for each SP2 site. It is anticipated that this detail will be included on the land zoning maps upon the gazettal of the LEP.

The proposal has been considered against the provisions of this Draft Instrument and has been found to be acceptable in all relevant respects.

Schools Development Control Code

Council's School's Development Code sets out a variety of objectives and controls intended to ensure the development of school sites is undertaken in a manner that is in keeping with the character of Ku-ring-gai, particularly with

respect to the amenity of neighbouring properties. The Code also looks to facilitate the controlled growth of schools in terms of student numbers in a manner consistent with objectives of the policy. Section 3 contains the aims of the code and section 4 outlines requirements in the areas of playground area, site area, building and landscaping, car parking and environmental impact assessment.

Of relevance to this application is Section 4 parts c), Car parking, d) Buildings and Landscaping and e) Environmental Impact Assessment which have been assessed as follows:

Car parking

The application has proposed additional car parking onsite to both consolidate existing onsite parking over the whole campus and to increase staff and visitor parking. Council's Development Engineer has assessed the parking provisions and traffic movements and found them acceptable.

Buildings and landscaping

This aspect of the application has been satisfactorily addressed with the submitted plans and documentation. The new multi-purpose sports hall has been designed to:

- be sympathetic to the topography of the site
- utilise an area of the campus that will not reduce usable play areas
- maintain setbacks for privacy and provide and retain adequate landscaping for ecological and visual amenity
- provide measures to maintain acoustic privacy
- have no additional unreasonable solar access impacts to surrounding residential sites. All surrounding residential sites will maintain four (4) hours of solar access

Environmental impact assessment

The application included a statement of environmental effects and additional reports detailing the proposed development.

With regard to Section 3, whilst a master plan for the overall site has not been provided, the development application is considered to satisfy Section 3 and 4 of the Schools Development Control Code.

LIKELY IMPACTS

All likely impacts of the proposed development have been considered within this report and are considered to be acceptable, subject to conditions.

SUITABILITY OF THE SITE

The site is to be suitable for the proposed development.

ANY SUBMISSIONS

All submissions received have been considered in the assessment of this application.

PUBLIC INTEREST

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments and by Council ensuring that any adverse effects on the surrounding area and the environment are minimised. The proposal has been assessed against the relevant environmental planning instruments and is deemed to be acceptable. Accordingly, the proposal is recommended for approval.

CONCLUSION

Having regard to the provisions of section 79C of the Environmental Planning and Assessment Act 1979, the proposed development is considered to be satisfactory. Therefore, it is recommended that the application be approved by way of a deferred commencement development consent.

RECOMMENDATION

PURSUANT TO SECTION 80(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

THAT the Sydney West Joint Regional Planning Panel, as the consent authority, grant deferred commencement development consent to DA0489/12 for new multi-purpose sports hall and sports field on land at 1670 Pacific Highway Wahroonga, 3 and 5 Ada Avenue Wahroonga, for a period of two (2) years from the date of the Notice of Determination, subject to the following conditions:

SCHEDULE A – Deferred commencement condition

Evidence required to satisfy the following condition must be submitted to Council within twelve (12) months of the date of this consent.

This consent does not operate until the following deferred commencement condition has been satisfied

Approval for trunk drainage works

Prior to the operation of the consent, the applicant shall obtain a resolution from Ku-ring-gai Council as the asset owner that it will consent to the relocation of the existing Council easement for drainage and underground pipe.

A full hydraulic design for the relocation of the pipe is to be prepared in accordance with the requirements of Chapter 9 of Council's DCP 47 *Water*

Management and submitted to Council with the application and the relevant fees. The design must be suitable for construction.

Council's resolution is required for the relocation of the pipe and easement is to be obtained prior to the operation of the consent. Such approval is not guaranteed and conditions may be imposed including monetary incentives to extinguish and relocate easements.

Council's Team Leader Landscape Assessment will also inspect the plan to ensure that deep soil, tree retention and screen planting requirements are not compromised.

Reason: To protect the environment and Council's assets.

Upon receipt of written notification from Council that the abovementioned condition has been satisfied, the following conditions will apply:

SCHEDULE B – The standard conditions of consent are set out as follows:

Conditions that identify approved plans:

1. Approved architectural plans and documentation (new development)

The development must be carried out in accordance with the following plans and documentation listed below and endorsed with Council's stamp, except where amended by other conditions of this consent:

Plan no.	Drawn by	Dated
DA1001 Site Plan	AJ+C	13/04/2013 Rev 8
DA1002 Site Analysis	AJ+C	26/11/2012 Rev 2
DA1005 Service Vehicles and Car Parking	AJ+C	09/05/2013 Rev 4
DA1202 Construction Traffic Management Plan	AJ+C	21/05/2013 Rev 6
DA1203 Construction Traffic Management Plan	AJ+C	21/05/2013 Rev 2
DA1204 Construction Traffic Management Plan Notes	AJ+C	21/05/2013 Rev 2
DA1205 B99 Percentile Car Vehicle Swept Paths	AJ+C	21/05/2013 Rev 2
DA1206 B99 Percentile Car Vehicle Swept Paths	AJ+C	21/05/2013 Rev 2
DA1207 6.4m Small Rigid Vehicle Swept Paths	AJ+C	21/05/2013 Rev 2
DA1208 12.5m Construction Vehicle Swept Paths	AJ+C	21/05/2013 Rev 2

DA1209 12.5m Construction Vehicle Swept Paths	AJ+C	21/05/2013 Rev 2
DA1210 12.5m Construction Vehicle Swept Paths	AJ+C	21/05/2013 Rev 2
DA1211 12.5m Construction Vehicle Swept Paths	AJ+C	21/05/2013 Rev 2
DA1212 10.7m Construction Vehicle Swept Paths	AJ+C	21/05/2013 Rev 2
DA1213 10.7m Construction Vehicle Swept Paths	AJ+C	21/05/2013 Rev 2
DA1214 10.7m Construction Vehicle Swept Path	AJ+C	21/05/2013 Rev 2
DA1215 10.7m Construction Vehicle Swept Paths	AJ+C	21/05/2013 Rev 2
DA1216 8.8m Construction Vehicle Swept Paths	AJ+C	21/05/2013 Rev 2
DA1217 8.8m Construction Vehicle Swept Paths	AJ+C	21/05/2013 Rev 2
DA1218 8.8m Construction Vehicle Swept Paths	AJ+C	21/05/2013 Rev 2
DA1219 8.8m Construction Vehicle Swept Paths	AJ+C	21/05/2013 Rev 2
DA2101 Level 1 and Level 2	AJ+C	13/04/2013 Rev 11
DA2102 Level 3	AJ+C	09/05/2013 Rev 13
DA2103 Level 4	AJ+C	07/03/2013 Rev 7
DA3101 North and South Elevations	AJ+C	26/11/2012 Rev 4
DA3102 East Elevation and West Elevation	AJ+C	26/11/2012 Rev 3
DA3201 Cross Sections	AJ+C	26/11/2012 Rev 6
DA4501 Material Board	AJ+C	23/11/2012 Rev 2
Landscape Plans		
DA- L000 Multipurpose Sports Hall Landscape Cover Sheet	Oculus	20/05/2013 Rev F
DA- L001 Multipurpose Sports Hall Landscape Site Plan	Oculus	20/05/2013 Rev F
DA- L100 Multipurpose Sports Hall Landscape Plan North	Oculus	20/05/2013 Rev E
DA- L101 Multipurpose Sports Hall Landscape Plan South	Oculus	20/05/2013 Rev E
DA- L200 Multipurpose Sports Hall Landscape Section	Oculus	12/03/2013 Rev C
DA- L400 Multipurpose Sports Hall Compensatory BGHF Tree Planting	Oculus	20/05/2013 Rev B
Civil Drawings		
C-0001 Cover Sheet and Drawing Index	BG&E	26/11/2012 Rev C
C-0002 Site Works Lower Level Plan	BG&E	07/03/2013 Rev D

C-0003 Site Works Upper Level Plan	BG&E	26/11/2012 Rev C
C-0004 Section & Details Sheet	BG&E	26/11/2012 Rev C
C-0005 Northern Driveway Detail Plan	BG&E	30/04/2013 Rev E
C - 0006 Sections Sheet 1	BG&E	07/03/2013 Rev A
Hydraulic Drawings		
SW-00 Hydraulic Services Cover Sheet and Legend	Harris Page & Associates	23/11/2012 Rev A
SW-01 Hydraulic Services MPSH Level 1 and Level 2	Harris Page & Associates	23/11/2012 Rev A
SW-02 Hydraulic Services MPSH Roof Plan and Detail Sheet	Harris Page & Associates	23/11/2012 Rev A
SW-03 Hydraulic Services Hockey Field Car Park Stormwater Drainage Layout	Harris Page & Associates	13/03/2013 Rev C
SW-04 Hydraulic Services Hockey Field Stormwater Drainage Layout	Harris Page & Associates	23/11/2012 Rev A
SW-05 Hydraulic Services Proposed Stormwater Diversion	Harris Page & Associates	01/03/2013 Rev P2
SW-06 Hydraulic Services Stormwater Long Section	Harris Page & Associates	01/03/2013 Rev P1

Document(s)	Dated
Supplementary Geotechnical Investigation by JK Geotechnics	23/11/2012
Development Impact Assessment Report by Earthscape Horticultural Services	November 2012
Vegetation Management Plan TEC Job NO. C2726-ABS	30 April 2013
Traffic Report by Colston Budd Hunt & Kafes Pty Ltd	May 2013

Reason: To ensure that the development is in accordance with the determination.

2. Inconsistency between documents

In the event of any inconsistency between conditions of this consent and the drawings/documents referred to above, the conditions of this consent prevail.

Reason: To ensure that the development is in accordance with the determination.

3. Approved landscape plans

Landscape works shall be carried out in accordance with the following landscape plan(s), listed below and endorsed with Council's stamp, except where amended by other conditions of this consent:

Plan no.	Prepared by	Dated
DA-L000 Revision F	Oculus	20/05/13
DA-L001 Revision E	Oculus	13/03/13
DA-L100 Revision D	Oculus	12/03/13
DA-L101 Revision D	Oculus	12/03/13
DA-L200 Revision C	Oculus	12/03/13
DA-L400 Revision B	Oculus	20/05/13

Reason: To ensure that the development is in accordance with the determination.

4. No demolition of extra fabric

Alterations to, and demolition of the existing building shall be limited to that documented on the approved plans (by way of notation). No approval is given or implied for removal and/or rebuilding of any portion of the existing building which is shown to be retained.

Reason: To ensure compliance with the development consent.

Conditions to be satisfied prior to demolition, excavation or construction:

5. Blue Gum High Forest canopy planting & offset works

Prior to the issue of any construction certificate, the following canopy planting as shown on the approved Multipurpose Sports Hall Compensatory BGHF Tree Planting Plan listed below and endorsed with Council's stamp, shall be undertaken in accordance with the requirements of this condition:

Plan no.	Prepared by	Dated
DA-L400	Oculus	20/05/13 Rev B

All weed removal and planting works within A & B detailed within the approved Vegetation Management Plan listed below and endorsed with Council's stamp, in accordance with the requirements of this condition:

Plan no.	Prepared by	Dated
Vegetation Management Plan TEC Job NO. C2726-ABS	Total Earthcare	30 April 2013

All trees/plant material to be planted is to be of local provenance sourced from parent material within Ku-ring-gai or Hornsby LGA's. Trees are to be 45L in size. Evidence of works completed is to be provided in writing to Councils' Ecological Assessment Officer.

Reason: To ensure that Critically Endangered Blue Gum High Forest canopy & offset area are established.

6. Road opening permit

The opening of any footway, roadway, road shoulder or any part of the road reserve shall not be carried out without a road opening permit being obtained from Council (upon payment of the required fee) beforehand.

Reason: Statutory requirement (Roads Act 1993 Section 138) and to maintain the integrity of Council's infrastructure.

7. Tree identification

Prior to works commencing the existing trees shall be numbered in accordance with the arborist report and/or the approved plans. Trees shall be clearly tagged with confirmation from the project arborist that all marked trees correspond with those shown on the approved plan.

Reason: To protect existing trees during the construction phase.

8. 'No Parking' restrictions

The applicant must make a written application to the Ku-ring-gai Local Traffic Committee to install 'No Parking' restrictions. Based on the swept paths diagram for 12.5 metre rigid truck, parking restrictions shall be provided at the following locations, to provide easy access by truck to/from the site:

1. Gate No.1 - 3 parking spaces on left side of the driveway (towards Pacific Highway)
2. Gate No.1- 3 parking spaces on the opposite side of the driveway
3. Gate No.2 - No parking restrictions requires on the school side
4. Gate No.2 - On the opposite side of the road, 3 parking spaces on either side of the driveway to the unit (total 6 parking spaces on the opposite side of the road).

For 'No Parking' restrictions to be approved by the Local Traffic Committee, the applicant must obtain a written copy of the related resolution from the Ku-ring-gai Local Traffic Committee and submit this to the Principal Certifying Authority prior to commencement of any works on site.

In the event the 'No Parking' restrictions are required for a period beyond that initially approved by the Traffic Committee, the applicant shall make a payment to Council for the extended period in accordance with Council's schedule of fees and charges prior to the extended period commencing.

Reason: To ensure that appropriate measures have been made for the operation of the site during the construction phase.

9. Notice of commencement

At least 48 hours prior to the commencement of any development (including demolition, excavation, shoring or underpinning works), a notice of commencement of building or subdivision work form and appointment of the principal certifying authority form shall be submitted to Council.

Reason: Statutory requirement.

10. Notification of builder's details

Prior to the commencement of any development or excavation works, the Principal Certifying Authority shall be notified in writing of the name and contractor licence number of the owner/builder intending to carry out the approved works.

Reason: Statutory requirement.

11. Dilapidation survey and report (public infrastructure)

Prior to the commencement of any development or excavation works on site, the Principal Certifying Authority shall be satisfied that a dilapidation report on the visible and structural condition of all structures of the following public infrastructure, has been completed and submitted to Council:

Public infrastructure

- Full road pavement width, including kerb and gutter, of Ada Avenue over the site frontage, including the full intersection.
- All driveway crossings and laybacks opposite the subject site.

The report must be completed by a consulting structural/civil engineer. Particular attention must be paid to accurately recording (both written and photographic) existing damaged areas on the aforementioned infrastructure so that Council is fully informed when assessing any damage to public infrastructure caused as a result of the development.

The developer may be held liable to any recent damage to public infrastructure in the vicinity of the site, where such damage is not accurately recorded by the requirements of this condition prior to the commencement of works.

Note: A written acknowledgment from Council must be obtained (attesting to this condition being appropriately satisfied) and submitted to the Principal Certifying Authority prior to the commencement of any excavation works.

Reason: To record the structural condition of public infrastructure before works commence.

12. Construction and traffic management plan

The applicant must submit to Council a Construction Traffic Management Plan (TMP), which is to be approved prior to the commencement of any works on site.

The plan is to consist of a report with Traffic Control Plans attached.

The report is to contain commitments which must be followed by the demolition and excavation contractor, builder, owner and subcontractors. The TMP applies to all persons associated with demolition, excavation and construction of the development.

The report is to contain construction vehicle routes for approach and departure to and from all directions.

The report is to contain a site plan showing entry and exit points. Swept paths are to be shown on the site plan showing access and egress for an 11 metre long heavy rigid vehicle.

The Traffic Control Plans are to be prepared by a qualified person (red card holder). One must be provided for each of the following stages of the works:

- Demolition
- Excavation
- Concrete pour
- Construction of vehicular crossing and reinstatement of footpath
- Traffic control for vehicles reversing into or out of the site.

Traffic controllers must be in place at the site entry and exit points to control heavy vehicle movements in order to maintain the safety of pedestrians and other road users.

The plan must be certified in writing by an arborist with a minimum AQF Level 5 qualification, that the plan complies with Section 4 of AS4970-2009 - Protection of trees on development sites

When a satisfactory TMP is received, a letter of approval will be issued with conditions attached. Traffic management at the site must comply with the approved TMP as well as any conditions in the letter issued by Council. Council's Rangers will be patrolling the site regularly and fines will be issued for any non-compliance with this condition.

Reason: To ensure that appropriate measures have been considered during all phases of the construction process in a manner that

maintains the environmental amenity and ensures the ongoing safety and protection of people.

13. Work zone

If a works zone is proposed in Ada Avenue, the applicant must make a written application to the Ku-ring-gai Local Traffic Committee to install the work zone. Work zones are provided specifically for the set down and pick up of materials and not for the parking of private vehicles associated with the site. Work zones will generally not be approved where there is sufficient space on-site for the setting down and picking up of goods being taken to or from a construction site.

If the work zone is approved by the Local Traffic Committee, the applicant must obtain a written copy of the related resolution from the Ku-ring-gai Local Traffic Committee and submit this to the Principal Certifying Authority prior to commencement of any works on site.

Where approval of the work zone is resolved by the Committee, the necessary work zone signage shall be installed (at the cost of the applicant) and the adopted fee paid prior to commencement of any works on site. At the expiration of the work zone approval, the applicant is required to remove the work zone signs and reinstate any previous signs at their expense.

In the event the work zone is required for a period beyond that initially approved by the Traffic Committee, the applicant shall make a payment to Council for the extended period in accordance with Council's schedule of fees and charges for work zones prior to the extended period commencing.

Reason: To ensure that appropriate measures have been made for the operation of the site during the construction phase.

14. Tree protection works for the sports field

To preserve all trees nominated for retention on the approved plans, no work shall commence until the tree protection zone is fenced off to prevent any activities, storage or the disposal of materials within the fenced area.

The tree protection works shall be carried out in accordance with the following approved tree protection plan(s), listed below and endorsed with Council's stamp, except where amended by other conditions of this consent:

Plan no.	Prepared by	Dated
Appendix 7 - Tree Protection Plans T12-11152 Sheet 1 to 4	Earthscape Horticultural Services	23/11/12

The fence/s shall be maintained intact until the completion of all development work on site.

Reason: To protect existing trees during the construction phase.

15. Tree protection works for the multi-purpose hall

To preserve all trees nominated for retention on the approved plans, no work shall commence until the tree protection zone is fenced off to prevent any activities, storage or the disposal of materials within the fenced area.

The tree protection works shall be carried out in accordance with the following approved tree protection plan(s), listed below and endorsed with Council's stamp, except where amended by other conditions of this consent:

Plan no.	Prepared by	Dated
Appendix 7 - Tree Protection Plans T12-11152 Sheet 5 to 8	Earthscape Horticultural Services	23/11/12

The fence/s shall be maintained intact until the completion of all development work on site.

Reason: To protect existing trees during the construction phase.

16. Tree protective fencing type galvanised mesh

The tree protection fencing shall be constructed of galvanised pipe at 2.4 metre spacing and connected by securely attached chain mesh fencing to a minimum height of 1.8 metres in height prior to work commencing.

Reason: To protect existing trees during construction phase.

17. Tree protection signage

Prior to works commencing, tree protection signage is to be attached to each tree protection zone, displayed in a prominent position and the sign repeated at 10 metres intervals or closer where the fence changes direction. Each sign shall contain in a clearly legible form, the following information:

- Tree protection zone/No access
- This fence has been installed to prevent damage to the tree/s and their growing environment both above and below ground
- The name, address, and telephone number of the developer/builder and project arborist

Reason: To protect existing trees during the construction phase.

18. Tree protection measures inspection

Upon installation of the required tree protection measures, an inspection of the site by the project arborist and/or the Principal Certifying Authority is required to verify that tree protection measures comply with all relevant conditions.

Reason: To protect existing trees during the construction phase.

19. Construction waste management plan

Prior to the commencement of any works, the Principal Certifying Authority shall be satisfied that a waste management plan, prepared by a suitably qualified person, has been prepared in accordance with Council's DCP 40 - Construction and Demolition Waste Management.

The plan shall address all issues identified in DCP 40, including but not limited to: the estimated volume of waste and method for disposal for the construction and operation phases of the development.

Note: The plan shall be provided to the Certifying Authority.

Reason: To ensure appropriate management of construction waste.

Conditions to be satisfied prior to the issue of the construction certificate:

20. Green travel plan

Abbotsleigh College is to adopt a green travel plan for staff and Year 12 students that will encourage staff and Year 12 students to travel by public transport, car pooling / car sharing, cycling, walking and being dropped off as alternatives to driving. A green travel plan is to be developed in accordance with the principles identified by Transport for NSW and RMS and must be submitted to the satisfaction of Council's Traffic Engineer, prior to the issue of a Construction Certificate.

The green travel plan is to be implemented prior to the commencement of works.

Reason: Environmental sustainability and parking demand management.

21. Environmental site management plan

An Environmental Site Management Plan (ESMP) would need to be submitted prior to the issue of the construction certificate to include the following:

- a dedicated unloading and loading point within the site for all construction vehicles, plant and deliveries.

- material, plant and spoil bin storage areas within the site, where all materials are to be dropped off and collected.
- an on-site parking area for employees, tradespersons and heavy construction vehicles.
- size of the heavy vehicles proposed for the excavation and construction phases including swept paths showing ingress and egress of construction vehicle leaving the site in a forward direction.
- show all tree protection fencing and sedimentation.

The plan must be certified in writing by an arborist with a minimum AQF Level 5 qualification, that the plan complies with Section 4 of AS4970-2009 - Protection of trees on development sites

The Principal Certifying Authority shall be satisfied that the environmental site management plan has been submitted as required by this condition.

Reason: To ensure that the development is in accordance with the determination.

22. Project arborist

A project arborist shall be commissioned prior to the release of the Construction Certificate to ensure all tree protection measures are carried out in accordance with the conditions of consent.

The project arborist shall have a minimum AQF Level 5 qualification with a minimum of 5 years' experience. Details of the arborist including name, business name and contact details shall be provided to the Principal Certifying Authority with a copy to Council.

Reason: To ensure the protection of existing trees

23. Amendments to approved stormwater plan

Prior to the issue of a Construction Certificate, the Principal Certifying Authority shall be satisfied that the approved stormwater plans, listed below and endorsed with Council's stamp, have been amended in accordance with the requirements of this condition as well as other conditions of this consent:

Plan no.	Prepared by	Dated
S12034 C-0002 Revision D	BG & E	07/03/13

The above plan(s) shall be amended in the following ways:

- The plans shall note that the stormwater trenches within the specified distance of the trunks of T420, T422, T422a and T432 shall be dug by hand and no roots greater than 30mm in diameter shall be injured or severed.

Prior to the issue of the Construction Certificate, the Principal Certifying Authority shall be satisfied that the landscape plan has been amended as required by this condition.

Note: An amended plan, prepared by a qualified engineer shall be submitted to the Principal Certifying Authority with a copy to Council

Reason: To ensure adequate landscaping of the site.

24. Amendments to approved landscape plan

Prior to the issue of a Construction Certificate, the Principal Certifying Authority shall be satisfied that the approved landscape plans, listed below and endorsed with Council's stamp, have been amended in accordance with the requirements of this condition as well as other conditions of this consent:

Plan no.	Prepared by	Dated
DA-L000 Revision F	Oculus	20/05/13
DA-L400 Revision B	Oculus	20/05/13

The above landscape plan(s) shall be amended in the following ways:

- All of the compensatory tree planting shall be planted at a minimum 45 litres container size

Prior to the issue of the Construction Certificate, the Principal Certifying Authority shall be satisfied that the landscape plan has been amended as required by this condition.

Note: An amended plan, prepared by a landscape architect or qualified landscape designer shall be submitted to the Principal Certifying Authority.

Reason: To ensure adequate landscaping of the site.

Note: An amended plan, prepared by a landscape architect or qualified landscape designer shall be submitted to the Certifying Authority.

Reason: To ensure adequate landscaping of the site.

25. Long service levy

In accordance with Section 109F(i) of the Environmental Planning and Assessment Act a Construction Certificate shall not be issued until any long service levy payable under Section 34 of the Building and Construction Industry Long Service Payments Act 1986 (or where such levy is payable by instalments, the first instalment of the levy) has been paid. Council is

authorised to accept payment. Where payment has been made elsewhere, proof of payment is to be provided to Council.

Reason: Statutory requirement.

26. Builder's indemnity insurance

The applicant, builder, developer or person who does the work on this development, must arrange builder's indemnity insurance and submit the certificate of insurance in accordance with the requirements of Part 6 of the Home Building Act 1989 to the Certifying Authority for endorsement of the plans accompanying the Construction Certificate.

It is the responsibility of the applicant, builder or developer to arrange the builder's indemnity insurance for residential building work over the value of \$20,000. The builder's indemnity insurance does not apply to commercial or industrial building work or to residential work valued at less than \$20,000, nor to work undertaken by persons holding an owner/builder's permit issued by the Department of Fair Trading (unless the owner/builder's property is sold within 7 years of the commencement of the work).

Reason: Statutory requirement.

27. Stormwater retention and detention

Prior to the issue of a Construction Certificate, the Principal Certifying Authority is to be satisfied that:

1. A mandatory rainwater retention and re-use system, comprising storage tanks and ancillary plumbing is provided. The minimum total storage volume of the rainwater tank system, and the prescribed re-use of the water on site must satisfy all relevant BASIX commitments and the requirements specified in Chapter 6 of Ku-ring-gai Water Management Development Control Plan 47; and
2. An on-site stormwater detention system must be provided to control the rate of runoff leaving the site. The minimum volume of the required on-site detention system must be determined in accordance with Chapter 6 of the Ku-ring-gai Council Water Management Development Control Plan 47 - having regard to the specified volume concession offered in lieu of installing rainwater retention tanks. The on-site detention system must be designed by a qualified civil/hydraulic engineer and must satisfy the design controls set out in Appendix 5 of DCP 47.

Reason: To protect the environment.

28. Excavation for services

Prior to the issue of the Construction Certificate, the Principal Certifying Authority shall be satisfied that no proposed underground services (ie: water,

sewerage, drainage, gas or other service) unless previously approved by conditions of consent, are located beneath the canopy of any tree protected under Council's Tree Preservation Order, located on the subject allotment and adjoining allotments.

Note: A plan detailing the routes of these services and trees protected under the Tree Preservation Order shall be submitted to the Principal Certifying Authority.

Reason: To ensure the protection of trees.

29. Landscape Plan

Prior to the issue of the Construction Certificate, the Principal Certifying Authority shall be satisfied that a landscape plan has been completed in accordance with Council's DA Guide, relevant development control plans and the conditions of consent by a Landscape Architect or qualified Landscape Designer.

Note: The Landscape Plan must be submitted to the Principal Certifying Authority.

Reason: To ensure adequate landscaping of the site.

30. Noise from plant in residential zone

Where any form of mechanical ventilation equipment or other noise generating plant is proposed as part of the development, prior to the issue of the Construction Certificate the Certifying Authority, shall be satisfied that the operation of an individual piece of equipment or operation of equipment in combination will not exceed more than 5dB(A) above the background level during the day when measured at the site's boundaries and shall not exceed the background level at night (10.00pm -6.00 am) when measured at the boundary of the site.

C1. Note: A certificate from an appropriately qualified acoustic engineer is to be submitted with the Construction Certificate, certifying that all mechanical ventilation equipment or other noise generating plant in isolation or in combination with other plant will comply with the above requirements.

Reason: To comply with best practice standards for residential acoustic amenity.

31. Driveway crossing levels

Prior to issue of the Construction Certificate, driveway and associated footpath levels for any new, reconstructed or extended sections of driveway crossings between the property boundary and road alignment must be obtained from Ku-ring-gai Council. Such levels are only able to be issued by

Council under the Roads Act 1993. All footpath crossings, laybacks and driveways are to be constructed according to Council's specifications "Construction of Gutter Crossings and Footpath Crossings".

Specifications are issued with alignment levels after completing the necessary application form at Customer Services and payment of the assessment fee. When completing the request for driveway levels application from Council, the applicant must attach a copy of the relevant development application drawing which indicates the position and proposed level of the proposed driveway at the boundary alignment.

This development consent is for works wholly within the property. Development consent does not imply approval of footpath or driveway levels, materials or location within the road reserve, regardless of whether this information is shown on the development application plans. The grading of such footpaths or driveways outside the property shall comply with Council's standard requirements. The suitability of the grade of such paths or driveways inside the property is the sole responsibility of the applicant and the required alignment levels fixed by Council may impact upon these levels.

The construction of footpaths and driveways outside the property in materials other than those approved by Council is not permitted.

Reason: To provide suitable vehicular access without disruption to pedestrian and vehicular traffic.

32. Vehicular access grades

Prior to the issue of the Construction Certificate, longitudinal driveway section plans are to be prepared by a qualified civil/traffic engineer and submitted to and approved by the Certifying Authority. These profiles are to be at a recognised scale along the shortest edge of the proposed driveway, starting from the centreline of the frontage street carriageway through to the proposed parking stand. The traffic engineer must provide specific written certification on the plans that:

- all changes in grade (transitions) comply with Australian Standard 2890.1 - "Off-street car parking" - 2004 (refer clause 2.5.3) to prevent the scraping of the underside of vehicles
- maximum gradient of driveway does not exceed 25% (1 in 4).
- if a new driveway crossing is proposed in the road reserve, the longitudinal sections must incorporate the driveway crossing levels issued by Council under the terms of this consent

Reason: To provide suitable vehicular access without disruption to pedestrian and vehicular traffic.

33. Drainage of paved areas

All new exposed impervious areas graded towards adjacent property and/or habitable areas are to be drained via the main drainage system. This may require the installation of suitable inlets pits, cut-off structures (e.g. kerb), and/or barriers that direct such runoff to the formal drainage system. Details of such measures shall be shown on the Construction Certificate drawings, to the satisfaction of the Certifying Authority.

Reason: To control surface run off and protect the environment.

34. Vehicular access and garaging

Driveways and vehicular access ramps must be designed not to scrape the underside of cars. In all respects, the proposed vehicle access and accommodation arrangements must be designed and constructed to comply with Australian Standard 2890.1 - 2004 "Off-Street car parking". Details are to be provided to and approved by the Certifying Authority prior to the issue of the Construction Certificate.

Reason: To ensure that parking spaces are in accordance with the approved development.

35. Energy Australia requirements

Prior to issue of the Construction Certificate, the applicant must contact Energy Australia regarding power supply for the subject development. A written response detailing the full requirements of Energy Australia (including any need for underground cabling, substations or similar within or in the vicinity the development) shall be submitted to the Principal Certifying Authority for approval prior to issue of the Construction Certificate.

Any structures or other requirements of Energy Australia shall be indicated on the plans issued with the Construction Certificate, to the satisfaction of the Principal Certifying Authority and Energy Australia. The requirements of Energy Australia must be met in full prior to issue of the Occupation Certificate.

Reason: To ensure compliance with the requirements of Energy Australia.

36. Utility provider requirements

Prior to issue of the Construction Certificate, the applicant must make contact with all relevant utility providers whose services will be impacted upon by the development. A written copy of the requirements of each provider, as determined necessary by the Certifying Authority, must be obtained. All utility services or appropriate conduits for the same must be provided by the developer in accordance with the specifications of the utility providers.

Reason: To ensure compliance with the requirements of relevant utility providers.

37. Underground services

All electrical services (existing and proposed) shall be undergrounded from the proposed building on the site to the appropriate power pole(s) or other connection point. Undergrounding of services must not disturb the root system of existing trees and shall be undertaken in accordance with the requirements of the relevant service provided. Documentary evidence that the relevant service provider has been consulted and that their requirements have been met are to be provided to the Certifying Authority prior to the issue of the Construction Certificate. All electrical and telephone services to the subject property must be placed underground and any redundant poles are to be removed at the expense of the applicant.

Reason: To provide infrastructure that facilitates the future improvement of the streetscape by relocation of overhead lines below ground.

Conditions to be satisfied prior to the issue of the construction certificate or prior to demolition, excavation or construction (whichever comes first):

38. Infrastructure restorations fee

To ensure that damage to Council Property as a result of construction activity is rectified in a timely matter:

- a) All work or activity taken in furtherance of the development the subject of this approval must be undertaken in a manner to avoid damage to Council Property and must not jeopardise the safety of any person using or occupying the adjacent public areas.
- b) The applicant, builder, developer or any person acting in reliance on this approval shall be responsible for making good any damage to Council Property, and for the removal from Council Property of any waste bin, building materials, sediment, silt, or any other material or article.
- c) The Infrastructure Restoration Fee must be paid to the Council by the applicant prior to both the issue of the Construction Certificate and the commencement of any earthworks or construction.
- d) In consideration of payment of the Infrastructure Restorations Fee, Council will undertake such inspections of Council Property as Council considers necessary and also undertake, on behalf of the applicant, such restoration work to Council Property, if any, that Council considers necessary as a consequence of the development. The provision of such restoration work by the Council does not absolve any person of the

responsibilities contained in (a) to (b) above. Restoration work to be undertaken by the Council referred to in this condition is limited to work that can be undertaken by Council at a cost of not more than the Infrastructure Restorations Fee payable pursuant to this condition.

e) In this condition:

“Council Property” includes any road, footway, footpath paving, kerbing, guttering, crossings, street furniture, seats, letter bins, trees, shrubs, lawns, mounds, bushland, and similar structures or features on any road or public road within the meaning of the Local Government Act 1993 (NSW) or any public place; and

“Infrastructure Restoration Fee” means the Infrastructure Restorations Fee calculated in accordance with the Schedule of Fees & Charges adopted by Council as at the date of payment and the cost of any inspections required by the Council of Council Property associated with this condition.

Reason: To maintain public infrastructure.

Conditions to be satisfied during the demolition, excavation and construction phases:

39. Prescribed conditions

The applicant shall comply with any relevant prescribed conditions of development consent under clause 98 of the Environmental Planning and Assessment Regulation. For the purposes of section 80A (11) of the Environmental Planning and Assessment Act, the following conditions are prescribed in relation to a development consent for development that involves any building work:

- The work must be carried out in accordance with the requirements of the Building Code of Australia
- In the case of residential building work for which the Home Building Act 1989 requires there to be a contract of insurance in force in accordance with Part 6 of that Act, that such a contract of insurance is in force before any works commence.

Reason: Statutory requirement.

40. Hours of work

Demolition, excavation, construction work and deliveries of building material and equipment must not take place outside the hours of 7.00am to 5.00pm Monday to Friday and 8.00am to 12 noon Saturday. No work and no deliveries are to take place on Sundays and public holidays.

Excavation or removal of any materials using machinery of any kind, including compressors and jack hammers, must be limited to between 7.30am and 5.00pm Monday to Friday, with a respite break of 45 minutes between 12 noon 1.00pm.

Where it is necessary for works to occur outside of these hours (ie) placement of concrete for large floor areas on large residential/commercial developments or where building processes require the use of oversized trucks and/or cranes that are restricted by the RTA from travelling during daylight hours to deliver, erect or remove machinery, tower cranes, pre-cast panels, beams, tanks or service equipment to or from the site, approval for such activities will be subject to the issue of an "outside of hours works permit" from Council as well as notification of the surrounding properties likely to be affected by the proposed works.

Note: Failure to obtain a permit to work outside of the approved hours will result in on the spot fines being issued.

Reason: To ensure reasonable standards of amenity for occupants of neighbouring properties.

41. Approved plans to be on site

A copy of all approved and certified plans, specifications and documents incorporating conditions of consent and certification (including the Construction Certificate if required for the work) shall be kept on site at all times during the demolition, excavation and construction phases and must be readily available to any officer of Council or the Principal Certifying Authority.

Reason: To ensure that the development is in accordance with the determination.

42. Statement of compliance with Australian Standards

The demolition work shall comply with the provisions of Australian Standard AS2601: 2001 The Demolition of Structures. The work plans required by AS2601: 2001 shall be accompanied by a written statement from a suitably qualified person that the proposal contained in the work plan comply with the safety requirements of the Standard. The work plan and the statement of compliance shall be submitted to the satisfaction of the Principal Certifying Authority prior to the commencement of any works.

Reason: To ensure compliance with the Australian Standards.

43. Construction noise

During excavation, demolition and construction phases, noise generated from the site shall be controlled in accordance with the recommendations of the approved noise and vibration management plan.

Reason: To ensure reasonable standards of amenity to neighbouring properties.

44. Site notice

A site notice shall be erected on the site prior to any work commencing and shall be displayed throughout the works period.

The site notice must:

- be prominently displayed at the boundaries of the site for the purposes of informing the public that unauthorised entry to the site is not permitted
- display project details including, but not limited to the details of the builder, Principal Certifying Authority and structural engineer
- be durable and weatherproof
- display the approved hours of work, the name of the site/project manager, the responsible managing company (if any), its address and 24 hour contact phone number for any inquiries, including construction/noise complaint are to be displayed on the site notice
- be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted

Reason: To ensure public safety and public information.

45. Dust control

During excavation, demolition and construction, adequate measures shall be taken to prevent dust from affecting the amenity of the neighbourhood. The following measures must be adopted:

- physical barriers shall be erected at right angles to the prevailing wind direction or shall be placed around or over dust sources to prevent wind or activity from generating dust
- earthworks and scheduling activities shall be managed to coincide with the next stage of development to minimise the amount of time the site is left cut or exposed
- all materials shall be stored or stockpiled at the best locations
- the ground surface should be dampened slightly to prevent dust from becoming airborne but should not be wet to the extent that run-off occurs
- all vehicles carrying spoil or rubble to or from the site shall at all times be covered to prevent the escape of dust
- all equipment wheels shall be washed before exiting the site using manual or automated sprayers and drive-through washing bays

- gates shall be closed between vehicle movements and shall be fitted with shade cloth
- cleaning of footpaths and roadways shall be carried out daily

Reason: To protect the environment and amenity of surrounding properties.

46. Post-construction dilapidation report

The applicant shall engage a suitably qualified person to prepare a post construction dilapidation report at the completion of the construction works. This report is to ascertain whether the construction works created any structural damage to adjoining buildings, infrastructure and roads. The report is to be submitted to the Principal Certifying Authority. In ascertaining whether adverse structural damage has occurred to adjoining buildings, infrastructure and roads, the Principal Certifying Authority must:

- compare the post-construction dilapidation report with the pre-construction dilapidation report
- have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads.

A copy of this report is to be forwarded to Council at the completion of the construction works.

Reason: Management of records.

47. Compliance with submitted geotechnical report

A contractor with specialist excavation experience must undertake the excavations for the development and a suitably qualified and consulting geotechnical engineer must oversee excavation.

Geotechnical aspects of the development work, namely:

- appropriate excavation method and vibration control
- support and retention of excavated faces
- hydro-geological considerations

must be undertaken in accordance with the recommendations of the **Geotechnical Investigation Report dated 23 November 2012 Ref: 25676VTrpt2Wahroonga** prepared by **JK Geotechnics**. Approval must be obtained from all affected property owners, including Ku-ring-gai Council, where rock anchors (both temporary and permanent) are proposed below adjoining property(ies).

Reason: To ensure the safety and protection of property.

48. Use of road or footpath

During excavation, demolition and construction phases, no building materials, plant or the like are to be stored on the road or footpath without written approval being obtained from Council beforehand. The pathway shall be kept in a clean, tidy and safe condition during building operations. Council reserves the right, without notice, to rectify any such breach and to charge the cost against the applicant/owner/builder, as the case may be.

Reason: To ensure safety and amenity of the area.

49. Guarding excavations

All excavation, demolition and construction works shall be properly guarded and protected with hoardings or fencing to prevent them from being dangerous to life and property.

Reason: To ensure public safety.

50. Toilet facilities

During excavation, demolition and construction phases, toilet facilities are to be provided, on the work site, at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.

Reason: Statutory requirement.

51. Protection of public places

If the work involved in the erection, demolition or construction of the development is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or building involves the enclosure of a public place, a hoarding or fence must be erected between the work site and the public place.

If necessary, a hoarding is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place.

The work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in the public place.

Any hoarding, fence or awning is to be removed when the work has been completed.

Reason: To protect public places.

52. Certification of footings & excavation adjacent to easements

During demolition and construction, the Principal Certifying Authority shall be satisfied that:

- footings, and any required permanent excavation or drainage easement support, are constructed in accordance with the conditions of this consent relating to footings and excavation adjacent to drainage easements and/or drainage pipes
- footings allow for complete future excavation over the full width of the easement to a depth of the invert of the pipe, without the need to support or underpin the subject structure

Reason: Safety.

53. Recycling of building material (general)

During demolition and construction, the Principal Certifying Authority shall be satisfied that building materials suitable for recycling have been forwarded to an appropriate registered business dealing in recycling of materials. Materials to be recycled must be kept in good order.

Reason: To facilitate recycling of materials.

54. Construction signage

All construction signs must comply with the following requirements:

- are not to cover any mechanical ventilation inlet or outlet vent
- are not illuminated, self-illuminated or flashing at any time
- are located wholly within a property where construction is being undertaken
- refer only to the business(es) undertaking the construction and/or the site at which the construction is being undertaken
- are restricted to one such sign per property
- do not exceed 2.5m²
- are removed within 14 days of the completion of all construction works

Reason: To ensure compliance with Council's controls regarding signage.

55. Maintenance period for works in public road

A maintenance period of six (6) months applies to all work in the public road reserve carried out by the applicant - after the works have been completed to the satisfaction of Ku-ring-gai Council. In that maintenance period, the applicant shall be liable for any section of the public infrastructure work which fails to perform in the designed manner, or as would reasonably be expected under the operating conditions. The maintenance period shall commence once the applicant receives a formal letter from Council stating that the works involving public infrastructure have been completed satisfactorily.

Reason: To protect public infrastructure.

56. Road reserve safety

All public footways and roadways fronting and adjacent to the site must be maintained in a safe condition at all times during the course of the development works. Construction materials must not be stored in the road reserve. A safe pedestrian circulation route and a pavement/route free of trip hazards must be maintained at all times on or adjacent to any public access ways fronting the construction site. Where public infrastructure is damaged, repair works must be carried out when and as directed by Council officers. Where pedestrian circulation is diverted on to the roadway or verge areas, clear directional signage and protective barricades must be installed in accordance with AS1742-3 (1996) "Traffic Control Devices for Work on Roads". If pedestrian circulation is not satisfactorily maintained across the site frontage, and action is not taken promptly to rectify the defects, Council may undertake proceedings to stop work.

Reason: To ensure safe public footways and roadways during construction.

57. Road repairs necessitated by excavation and construction works

It is highly likely that damage will be caused to the roadway at or near the subject site as a result of the construction (or demolition or excavation) works. The applicant, owner and builder (and demolition or excavation contractor as appropriate) will be held responsible for repair of such damage, regardless of the Infrastructure Restorations Fee paid (this fee is to cover wear and tear on Council's wider road network due to heavy vehicle traffic, not actual major damage).

Section 102(1) of the Roads Act states "A person who causes damage to a public road is liable to pay to the appropriate roads authority the cost incurred by that authority in making good the damage."

Council will notify when road repairs are needed, and if they are not carried out within 48 hours, then Council will proceed with the repairs, and will invoice the applicant, owner and relevant contractor for the balance.

Reason: To protect public infrastructure.

58. Services

Where required, the adjustment or inclusion of any new utility service facilities must be carried out by the applicant and in accordance with the requirements of the relevant utility authority. These works shall be at no cost to Council. It is the applicants' full responsibility to make contact with the relevant utility authorities to ascertain the impacts of the proposal upon utility services (including water, phone, gas and the like). Council accepts no responsibility

for any matter arising from its approval to this application involving any influence upon utility services provided by another authority.

Reason: Provision of utility services.

59. Erosion control

Temporary sediment and erosion control and measures are to be installed prior to the commencement of any works on the site. These measures must be maintained in working order during construction works up to completion. All sediment traps must be cleared on a regular basis and after each major storm and/or as directed by the Principal Certifying Authority and Council officers.

Reason: To protect the environment from erosion and sedimentation.

60. Arborist's report

The tree/s to be retained shall be inspected and monitored by an AQF Level 5 Arborist in accordance with AS4970-2009 during and after completion of development works to ensure their long term survival. Regular inspections and documentation from the project arborist to the Principal Certifying Authority are required at the following times or phases of work including date, brief description of the works inspected, and any mitigation works prescribed.

All monitoring shall be provided to the Principal Certifying Authority prior to issue of the Occupation Certificate.

Tree/location	Time of inspection
All trees to be retained and tree protection measures in accordance with Appendix 7 of the Development Impact Assessment Report by Earthscape Horticultural Services dated November 2012	Inspections to be undertaken in accordance with Sections 12.2 & 12.3 of the Development Impact Assessment Report by Earthscape Horticultural Services dated November 2012. Weekly inspections are also required during landscape works

- All works as recommended by the project arborist are to be undertaken by an experienced arborist with a minimum AQF Level 3 qualification.

Reason: To ensure protection of existing trees.

61. Treatment of tree roots

If tree roots and branches are required to be severed for the purposes of constructing the approved works, they shall be cut cleanly by hand, by an experienced Arborist/Horticulturist with a minimum AQF Level 3 qualification. All root and branch pruning works shall be undertaken as specified in AS 4373-2007 - Pruning of Amenity Trees.

Reason: To protect existing trees.

62. Cutting of tree roots

Tree roots of 50mm or greater in diameter located within the specified radius of the trunk/s of the following tree/s shall not be severed or injured in the process of any works for the approved elevated walkway. All root pruning works shall be undertaken by an experienced Arborist/Horticulturist, with a minimum AQF Level 3 qualification as specified in AS 4373-2007 - Pruning of Amenity Trees:

Tree/location	Radius in metres
T400g, T459, T460, T562, T565, T566, T568, T569	Within the designated tree protection zone indicated on the Tree Protection Plans (Appendix 7) of the Development Impact Assessment Report by Earthscape Horticultural Services dated November 2012.

Reason: To protect existing trees.

63. Approved tree works

Prior to works commencing the following works shall be undertaken to the specified trees;

- All trees are to be clearly tagged and identified as per the approved arborist report prior to the removal/pruning of any tree/s on site.
- Canopy and/or root pruning as specified in the following table shall be undertaken by an experienced Arborist/Horticulturist, with a minimum AQF Level 3 qualification
- All root or canopy pruning works shall be undertaken as specified in AS 4373-2007 - Pruning of Amenity Trees.
- All other branches where required shall be tied back and protected during construction, under the supervision of a qualified arborist

Tree/location	Approved Tree Works
T380, T382, T382a, T382b, T382c, T384, T384a, T383b, T835, T386, T396, T396b, T399, T400, T400a, T400b, T400c, T400d, T400e, T400f, T404, T404a, T405a, T405b, T411, T412b, T412d, T417, T417a, T417b, T417c, T417d, T417e, T417f, T417g, T417h, T417i, T418, T420a, T445, T484, T489, T503, T561f, T561g, T561h	Removal

T384d, T441, T444, T445, T450, T451, T453, T455, T456	Minor pruning required to clear roofline. Pruning to be carried out in accordance with Section 12.13 of the Development Impact Assessment Report by Earthscape Horticultural Services dated November 2012.
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Removal or pruning of any other tree on the site is not approved, excluding species and works exempt under Council's Tree Preservation Order.

Reason: To ensure that the development is in accordance with the determination.

64. Excavation near trees

Excavations works within the tree protection zones of the following tree/s are to be carried out in accordance with Section 12.15 the Development Impact Assessment Report by Earthscape Horticultural Services, dated November 2012;

Tree/location
All trees highlighted for special excavation protection measures as per the Tree Protection Plans (Appendix 7) of the Development Impact Assessment Report by Earthscape Horticultural Services dated November 2012. Note: T420 & T423 are also to be included

Reason: To protect existing trees.

65. No storage of materials beneath trees

No activities, storage or disposal of materials shall take place beneath the canopy of any tree protected under Council's Tree Preservation Order at any time.

Reason: To protect existing trees.

66. Removal of refuse

All builders' refuse, spoil and/or material unsuitable for use in landscape areas shall be removed from the site on completion of the building works.

Reason: To protect the environment.

67. Canopy replenishment trees to be planted

The canopy replenishment trees to be planted shall be maintained in a healthy and vigorous condition until they attain a height of 5.0 metres whereby they will be protected by Council's Tree Preservation Order. Any of the trees

found faulty, damaged, dying or dead shall be replaced with the same species.

Reason: To maintain the treed character of the area.

68. Removal of noxious plants & weeds

Prior to completion of building works all noxious and/or urban environmental weeds species as listed in Ku-ring-gai Council's Weed Management Policy shall be removed from the property.

Reason: To protect the environment.

69. On site retention of waste dockets

All demolition, excavation and construction waste dockets are to be retained on site, or at suitable location, in order to confirm which facility received materials generated from the site for recycling or disposal.

- Each docket is to be an official receipt from a facility authorised to accept the material type, for disposal or processing.
- This information is to be made available at the request of an Authorised Officer of Council.

Reason: To protect the environment.

Conditions to be satisfied prior to the issue of an Occupation Certificate:

70. Stormwater pipeline construction

The relocation of the Council stormwater pipeline is to be completed in accordance with the approved plans and any conditions imposed by Council. Works-as-executed drawings are to be prepared by a registered surveyor and the designing engineer is to certify that the works have been carried out in accordance with the design. Council's approval of the works is to be obtained and submitted to the Principal Certifying Authority prior to issue of the Occupation Certificate.

Reason: To protect the environment.

71. Registration of drainage easement

Prior to issue of the Occupation Certificate, the applicant is to submit documentary evidence that the relocated easement has been registered on the title of the property. A registered surveyor is to certify that the pipe is wholly contained within the easement.

Reason: To maintain Council's access to the pipe for maintenance purposes.

72. Vegetation management plan (VMP)

Prior to the release of the Occupation Certificate the following works, as outlined below as detailed within the Vegetation Management Plan, prepared by **Total Earthcare**, dated 30 April 2013, are to be completed.

- All works detailed within the VMP pre-construction activities, plantings of compensatory canopy trees, weed control, revegetation, maintenance and monitoring are to be carried out in accordance with the VMP.
- Planting to be undertaken within the Blue Gum High Forest within the site are to be species characteristic of Blue Gum High Forest in accordance with the Vegetation Management Plan. All trees/plant material to be planted is to be of local provenance sourced from parent material within Ku-ring-gai or Hornsby LGA's.
- All noxious and environmental weeds are to be removed from the Blue Gum High Forest community within the site.
- All works within the Blue Gum High Forest community are to be conducted by a suitably qualified bush regenerator. The minimum qualifications minimum qualifications and experience (for bush regenerator) are a TAFE Certificate 2 in Bushland Regeneration and one year demonstrated experience (for other personnel).

Reason: To ensure the protection and enhancement of Blue Gum High Forest within the site.

73. Blue Gum High Forest canopy planting & offset works -Section 88b instrument

The Certifying Authority is to be provided with evidence of the creation of a restriction on the use of land under Section 88B of the Conveyancing Act 1919, burdening the following Blue Gum High Forest Offset area (A, B, 2 & 4). The terms of restriction must state that any excavation, soil level changes or construction works are prohibited with the exception of works to be undertaken and outline in accordance with the plan below.

Plan no.	Prepared by	Dated
Vegetation Management Plan - TEC Job No. C2726-ABS	Total Earthcare	30 April 2013

Reason: To ensure that Critically Endangered Blue Gum High Forest offset areas are protected.

74. Mechanical ventilation

Following completion, installation and testing of all the mechanical ventilation systems, the Principal Certifying Authority shall be satisfied of the following prior to the issue of any Occupation Certificate:

1. The installation and performance of the mechanical systems complies with:
 - The Building Code of Australia
 - Australian Standard AS1668
 - Australian Standard AS3666 where applicable
2. The mechanical ventilation system in isolation and in association with other mechanical ventilation equipment, when in operation will not be audible within a habitable room in any other residential premises before 7am and after 10pm Monday to Friday and before 8am and after 10pm Saturday, Sunday and public holidays. The operation of the unit outside these restricted hours shall emit a noise level of not greater than 5dbA above the background when measured at the nearest adjoining boundary.

Note: Written confirmation from an acoustic engineer that the development achieves the above requirements is to be submitted to the Principal Certifying Authority prior to the issue of the Occupation Certificate.

Reason: To protect the amenity of surrounding properties.

75. Completion of landscape works for the sports field

Prior to the issue of the Occupation Certificate for the sports field and associated car park, the Principal Certifying Authority is to be satisfied that all landscape works within planting zones 6, 7 & 8, including the removal of all noxious and/or environmental weed species, have been undertaken in accordance with the approved plan(s) and conditions of consent.

Reason: To ensure that the landscape works are consistent with the development consent.

76. Completion of landscape works for the multi-purpose hall

Prior to the issue of the Occupation Certificate for the multi-purpose hall and the associated car park, the Principal Certifying Authority is to be satisfied that all landscape works within planting zones 1, 2, 3, 4 & 5, including the removal of all noxious and/or environmental weed species, have been undertaken in accordance with the approved plan(s) and conditions of consent.

Reason: To ensure that the landscape works are consistent with the development consent.

77. Provision of copy of OSD designs if Council is not the PCA

Prior to issue of the Occupation Certificate, the following must be provided to Council's Development Engineer:

- a copy of the approved Construction Certificate stormwater detention/retention design for the site
- a copy of any works-as-executed drawings required by this consent
- the Engineer's certification of the as-built system.

Reason: For Council to maintain its database of as-constructed on-site stormwater detention systems.

78. Certification of drainage works

Prior to issue of the Occupation Certificate, the Principal Certifying Authority is to be satisfied that:

- the stormwater drainage works have been satisfactorily completed in accordance with the approved Construction Certificate drainage plans
- the minimum retention and on-site detention storage volume requirements of BASIX and Ku-ring-gai Water Management Development Control Plan No. 47 respectively, have been achieved
- retained water is connected and available for use
- basement and subsoil areas are able to drain via a pump/sump system installed in accordance with AS3500.3 and Appendix 7.1.1 of Ku-ring-gai Water Management Development Control Plan No. 47
- all grates potentially accessible by children are secured
- components of the new drainage system have been installed by a licensed plumbing contractor in accordance with the Plumbing and Drainage Code AS3500.3 2003 and the Building Code of Australia
- all enclosed floor areas, including habitable and garage floor levels, are safeguarded from outside stormwater runoff ingress by suitable differences in finished levels, gradings and provision of stormwater collection devices

The rainwater certification sheet contained in Appendix 13 of the Ku-ring-gai Water Management Development Control Plan No. 47, must be completed and attached to the certification. Where an on-site detention system has been constructed, the on-site detention certification sheet contained in Appendix 4 of DCP 47 must also be completed and attached to the certification.

Note: Evidence from a qualified and experienced consulting civil/hydraulic engineer documenting compliance with the above is to be provided to Council prior to the issue of an Occupation Certificate.

Reason: To protect the environment.

79. WAE plans for stormwater management and disposal (dual occupancy and above)

Prior to issue of the Occupation Certificate, a registered surveyor must provide a works as executed survey of the completed stormwater drainage and management systems. The survey must be submitted to and approved by the Principal Certifying Authority prior to issue of the Occupation Certificate. The survey must indicate:

- as built (reduced) surface and invert levels for all drainage pits
- gradients of drainage lines, materials and dimensions
- as built (reduced) level(s) at the approved point of discharge to the public drainage system
- as built location and internal dimensions of all detention and retention structures on the property (in plan view) and horizontal distances to nearest adjacent boundaries and structures on site
- the achieved storage volumes of the installed retention and detention storages and derivative calculations
- as built locations of all access pits and grates in the detention and retention system(s), including dimensions
- the size of the orifice or control fitted to any on-site detention system
- dimensions of the discharge control pit and access grates
- the maximum depth of storage possible over the outlet control
- top water levels of storage areas and indicative RL's through the overland flow path in the event of blockage of the on-site detention system

The works as executed plan(s) must show the as built details above in comparison to those shown on the drainage plans approved with the Construction Certificate prior to commencement of works. All relevant levels and details indicated must be marked in red on a copy of the Principal Certifying Authority stamped construction certificate stormwater plans.

Reason: To protect the environment.

80. OSD positive covenant/restriction

Prior to issue of the Occupation Certificate, the applicant must create a positive covenant and restriction on the use of land under Section 88E of the Conveyancing Act 1919, burdening the owner with the requirement to maintain the on-site stormwater detention facilities on the lot.

The terms of the instruments are to be generally in accordance with the Council's "draft terms of Section 88B instrument for protection of on-site detention facilities" and to the satisfaction of Council (refer to appendices of Ku-ring-gai Council Water Management DCP 47). For existing titles, the positive covenant and the restriction on the use of land is to be created through an application to the Land Titles Office in the form of a request using

forms 13PC and 13RPA. The relative location of the on-site detention facility, in relation to the building footprint, must be shown on a scale sketch, attached as an annexure to the request forms.

Registered title documents, showing the covenants and restrictions, must be submitted and approved by the Principal Certifying Authority prior to issue of an Occupation Certificate.

Reason: To protect the environment.

81. CCTV report of pipe after work

Prior to issue of the Occupation Certificate, a closed circuit television inspection and report on the Council drainage pipeline traversing the site is to be undertaken by appropriate contractors and provided to Council's Development Engineer. The report is to include a copy of the footage of the inside of the pipeline. Any damage that has occurred to the section of the pipeline since the commencement of construction on the site must be repaired in full to the satisfaction of Council's Development Engineer at no cost to Council.

Reason: To protect the environment.

82. Easement drainage line construction

Prior to issue of the Occupation Certificate, the Principal Certifying Authority shall be satisfied that the required easement drainage system has been installed and surveyed under the supervision of a designing engineer or equivalent professional.

Note: At the completion of the drainage easement works, the following must be submitted to the Principal Certifying Authority for approval:

- details from the supervising engineer that the as-constructed works comply with the approved drainage easement design documentation
- a full works as executed drawing of the as built drainage line (dimensions, grades, materials, invert levels) prepared by a registered surveyor, and details from the surveyor that all drainage structures are wholly contained within existing drainage easement(s)

Reason: To protect the environment.

83. Infrastructure repair

Prior to issue of the Occupation Certificate, the Principal Certifying Authority must be satisfied that any damaged public infrastructure caused as a result of construction works (including damage caused by, but not limited to, delivery

vehicles, waste collection, contractors, sub contractors, concrete vehicles) is fully repaired to the satisfaction of Council Development Engineer and at no cost to Council.

Reason: To protect public infrastructure.

84. Mechanical ventilation

Prior to the issue of the Occupation Certificate, the Principal Certifying Authority shall be satisfied at all mechanical ventilation systems are installed in accordance with Part F4.5 of the Building Code of Australia and comply with Australian Standards AS1668.2.

Note: Plans, specifications, reports and certifications of proposed mechanical exhaust/ventilation systems shall be submitted to the Principal Certifying Authority for consideration and approval at the Construction Certificate stage.

Reason: To ensure adequate levels of health and amenity to the occupants of the building.

85. Fire safety certificate

Prior to the issue of the Occupation Certificate, the Principal Certifying Authority shall be satisfied that a Fire Safety Certificate for all the essential fire or other safety measures forming part of this consent has been completed and provided to Council.

Note: A copy of the Fire Safety Certificate must be submitted to Council.

Reason: To ensure suitable fire safety measures are in place.

Conditions to be satisfied at all times:

86. Staging of trunk drainage works

Staging of trunk drainage diversion works must take place in the following sequence:

1. Ku-ring-gai Council approves through resolution the relocation of the Council drainage easement through the site (in accordance with schedule A condition).
2. Plans for the relocation of the pipeline are approved (under Schedule A) and stamped by Council's Director Operations prior to commencement of any works within site (except demolition) and prior to issue of the Construction Certificate by the Principal Certifying Authority. Plan assessment and inspection fees paid to Council.

3. The new pipeline is installed by the Applicant in accordance with the approved drawings and any conditions required by Council and in conjunction with basement excavation works. A flowpath through the site is maintained during pipe laying works.
4. The redundant Council drainage line is decommissioned and the new drainage line made operative.

Reason: To control stormwater and protect the environment.

87. Noise Criteria - multipurpose sports hall and sports field

Noise levels emitted from the multipurpose sports hall and playing field shall not exceed the background (LA90) level by more than 5dBA when measured at the boundary of any residential property. The source noise is to be assessed as a LAeq, 15min and include any correction for the character of the sound as identified in Table 4.1 of the EPA Industrial Noise Policy. The background (LA90, 15 min) level to be determined without the source noise present.

Reason: To protect the amenity of surrounding properties.

88. Acoustic monitoring

Attended acoustic monitoring by a qualified acoustic consultant shall be conducted on at least two occasions during use of the Multi-purpose sports hall and playing fields in the first year of operation and with an initial assessment within six months of occupation to ensure compliance with the external noise criteria. The monitoring is to occur with no prior notice to the users of the facilities.

Should the acoustic monitoring identify breaches of the noise criteria, a report is to be prepared identifying further noise attenuation or management measures necessary to achieve compliance and additional monitoring will be required after installation/implementation of the recommendations to ensure compliance is achieved.

Reason: To protect the amenity of surrounding properties.

89. Signage

Signage shall be prominently displayed at all exit locations within the car park areas with wording to the effect of reminding patrons to leave the premises in a quiet and orderly manner.

Reason: To protect the amenity of surrounding properties.

90. No sale of alcohol

No sale or consumption of alcohol is to occur in association with any events or

activities in the multi-purpose sports hall and sports field.

Reason: To protect the amenity of surrounding properties.

91. Carpark

The floor surface of the basement and undercroft car parking areas shall be treated to eliminate vehicle tyre screech. Noise associated with security/ access gates to the carpark area must not be audible, when assessed at the property boundary.

92. Acoustic management plan

A copy of the acoustic management plan shall be kept on the premises management procedures and action that can be taken to minimise noise impacts to surrounding residents and is to incorporate;

- a) the hours of access/use of the multipurpose playing court, underground car park and waste collection services
- b) procedures for the documentation of noise related complaints and including provisions for further acoustic monitoring and/or any modifications to the acoustic management plan where necessary.
- c) a staff training component detailing how staff should monitor the external areas to the buildings in particular after normal school hours to ensure noise impacts to neighbours are limited.

The requirements of the acoustic management plan are to be complied with at all times.

Reason: To protect the amenity of surrounding properties.

93. Roads and Maritime Services conditions

1. All works/regulatory signposting associated with the proposed development are to be at no cost to RMS.
2. To ensure the safety of children and the smooth flow of traffic on the road network during peak traffic periods, no heavy vehicle movements are to occur during AM and PM traffic periods, school zone periods, or during Saturday sport activities held at the school.
3. A Construction Traffic Management Plan (TMP) detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control should be submitted to Council and RMS for approval prior to the issue of the Construction Certificate. The TMP must detail the traffic impact of the construction works on the local area and the means proposed to manage construction works to minimise such impacts. In particular, the report must consider the impact on any on-street parking during construction, the movement of trucks to and from the site, the location of any site sheds, and the use of any cranes and concrete pumps.

Reason: To ensure compliance with Roads and Maritime Services requirements

94. Outdoor lighting

At all times for the life of the approved development, all outdoor lighting shall not detrimentally impact upon the amenity of other premises and adjacent dwellings and shall comply with, where relevant, AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting.

The lighting to the sports field shall not extend past 7.00pm weeknights and no lighting shall be permitted on weekends.

Reason: To protect the amenity of surrounding properties.

95. Noise control - plant and machinery

All noise generating equipment associated with any proposed mechanical ventilation system/s shall be located and/or soundproofed so the equipment is not audible within a habitable room in any other residential premises before 7am and after 10pm Monday to Friday and before 8am and after 10pm Saturday, Sunday and public holidays. The operation of the unit during the daytime hours of 7am to 10pm Monday to Friday and 8am to 10pm Saturday, Sunday and public holidays, shall emit a noise level of not greater than 5dbA above the background when measured at the nearest boundary.

Reason: To protect the amenity of surrounding residents.

96. Hours of operation

At all times, the hours of operation for the multi-purpose sports hall and sports field are to be restricted to:

Monday to Friday	7.00am to 6.00pm with all people to be vacated by 6.30pm
Saturday	7.00am to 1.00pm
Sunday and public holidays	No permitted use

Commercial use is not permitted for the multi-purpose sports hall and sports field.

Reason: To protect the amenity of the area.

97. Special events

Use up to 9.00pm may be permitted up to three (3) occasions throughout the school year to accommodate larger ceremonies. Notification of events is to be carried out to surrounding residents and any event is to be carried out in accordance with acoustic advice to minimize the impacts.

Reason: To accommodate additional events and protect the amenity of the area

98. Sports field car park

The parking for the aquatic centre and student drop off and pick up shall be provided in accordance with approved plan number DA1005 rev 4. Staff and visitor parking shall be provided under the multi-purpose sports hall.

Reason: To ensure parking provision are in accordance with the determination.

Natalie Piggott-Herridge
Development Assessment Officer

Adam Richardson
A/Team Leader Development Assessment

Corrie Swanepoel
Manager Development Assessment

Michael Miocic
Director Development and Regulation

Attachments:

1. Zoning Extract
2. Location Sketch
3. Architectural Plans
4. Stormwater Management Plans
5. Landscape Plans