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12 March 2012 2012/030.L02 CM/sm

Strathfield Council
C/o HWL Ebsworth Lawyers
Level 14, Australia Square
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SYDNEY NSW 2000

ANNEXURE "A"

Attention: Mr David Baird
Dear David,

INDEPENDENT REVIEW OF SUBMITTED TRAFFIC & PARKING REPORT WITH DUE REGARD TO TRAFFIC, SERVICING & PARKING EFFECTS OF THE PROPOSED ACU STRATHFIELD CAMPUS EXPANSION

The transport and accessibility report prepared for the proposed expansion of the ACU campus at Strathfield contains many inaccuracies and is not supported by adequate justification of the transport, traffic and parking impacts.

Indeed the report glosses over the limitations placed upon its operation by the NSW L&E court in 1994. Those limitations with respect to student numbers and hours of operation were intended to contain the impacts so as not to destroy the fabric of the low scale residential character of the immediate locality.

Justice Talbot imposed both daytime and night time limits of the student numbers to some 510 and 247 students respectively at any one time as well as requiring ACU to cease its operation by 8pm on weekday evenings. On weekends much tighter restrictions on campus population and hours of operation were also conditioned or if they were not the expectation would be that some relief of ACU traffic parking and nose impacts is an appropriate outcome for the low scale residential character of the precinct.

The subject master plan seeks to significantly increase student population levels that occur on the site at any one time to 2,400 students which is some 3 times greater than the day time combined ACU and EC limit of 750 students and 10 times greater than the night time limit.

The relevant analysis to be prepared involves the re-assessment of an appropriate BASE LINE condition for the identified LOCAL PRECINCT in terms of peak hourly traffic flows, daily traffic flows and kerbside parking demand that would arise for the current maximum on-site population levels (at any one time) as set out in the L&E judgment and Council consent for the Edward Clancy (EC) site. This would involve identification of the local precinct, detailed traffic and parking surveys of this precinct and travel mode surveys of students & staff at the ACU & EC sites in order to remove the layers of traffic flows & kerbside parking demand that exceed the limits in order to achieve the INTENDED BASE LINE CONDITION.

Notwithstanding the need to fully detail the current intensification of activity associated with the ACU & EC sites, it is anticipated that the proposed increase in population above the determined and appropriate BASE LINE CONDITION will be of such a significant magnitude that the resulting traffic and parking impacts will become INTOLERABLE in terms of localised traffic congestion, significantly increased over spill parking impacts (including potential for private driveways to be blocked) and adverse residential amenity impacts.

The existing public transport accessibility conditions will need to be further detailed in order to understand the current and planned public transport accessibility levels. This is an extremely important matter as the ability to shift student private car travel to other modes (bus, rail, walk etc) is vital to maintaining an appropriate amenity condition for nearby residents. The impacts both at nominated nearby rail station or stations will need to be fully explored as well as at the campus frontage in order to establish an appropriate public transport system that will deliver the required travel mode split.

The undersigned is aware that recent survey information conducted in March 2012 that clearly indicate that ACU campus exceeds current on-site population levels resulting in significant complaints from local residents regarding ACU associated traffic activity and overspill parking effects onto local residential streets. This existing condition is untenable and needs to be urgently rectified.

The following discussion provides a summary of the requested review of the lodged documents.

REVIEW SUMMARY

Reference is made to your request for an independent review of the traffic & parking report prepared by ARUP dated 14 December 2011 titled *"Australian Catholic University (Strathfield Campus) Transport & Accessibility Study"*.

Following a detailed review of the ARUP report and recent site inspections, the undersigned raises the following matters that are considered to be of such significance so as to question the validity of the proposed development (as well as current operating conditions):

1. Current & Projected Student Numbers

   Section 1.2 (3rd paragraph) of the ARUP report makes reference to the 1994 Land & Environment Court (L&E) consent for the existing Australian Catholic University (ACU) Strathfield Campus acknowledging the following L&E court imposed limits:

   - 325 on campus parking.
   - 510 maximum student numbers on site at any one time.

   The ARUP report failed to also state the following qualifications to the maximum number of students on-site during the day & night, as imposed by the L&E court:

   - 510 maximum student numbers on site at any one time during the day.
   - 247 maximum student numbers on site at any one time at night.
   - 190 staff.

   The following extract from condition 32 of the 1994 L&E consent is relevant:

32. The number of students enrolled at the University at any one time shall not exceed 1,100 by day and 700 by night and the number of teachers employed shall not exceed 190, without the prior approval of council. The number of students in attendance on the site at any one time shall not exceed 510 between the hours of 8.00 am and 5.00 pm Monday to Friday and 247 between 5.00 pm and 9.00 pm Monday to Friday.

The above student and staff numbers apply only to the main campus and not to the Edward Clancy campus, which is subject to conditions imposed by Strathfield Council that state a limit of 240 students on campus at any one time and 38 off-street parking spaces.

After acknowledging the student, staff and car parking limits set by the L&E court for the main campus and by Strathfield Council for the Edward Clancy campus the ARUP report fails to adequately justify the increase in the student numbers currently occurring on-site (underlining a potential breach of an existing consent condition) plus the proposed increase in students, staff & on-site car parking particularly in regard to:

- Proposed vehicular access arrangements, particularly with regard to RMS / Council consultation on the form of the proposed arrangements.
- Sensitivity testing of student & staff generation levels in terms of low, medium & high levels of student & staff loads by peak time of day by season of year.
- Adequacy of projected increased car parking to accommodate student & staff generation levels.
- Public transport accessibility limits of the site.
- Impacts of proposed vehicular access arrangements on existing bus stops.
- Proposed public transport improvements to accommodate student & staff generation levels.
- External traffic impact, particularly in regard to traffic flow efficiency, road safety and residential amenity consideration with due regard to sensitivity testing of student / staff ranges in terms of arrival / departure patterns. The assessment needs to identify key / sensitive road elements within the area of influence of the ACU campus.
- Impact of parking overspill effects on nearby streets.
- Detailed traffic and parking management plan.

The ARUP report makes a number of statements and presents diagrams that are inconsistent with regard to the existing number of students on-site at any one time. Some of these inconsistencies are highlighted below:

- Section 1.2 ... 510 ACU + 240 EC = 750 students combined.
- Section 3.8.2 ... *"Currently Strathfield campus is allowed to hold a maximum of 2,200 students at any one time."*
- Section 3.9 ... *"In 2008 Semester 1, the peak student capacity reached 884 students attending lectures and tutorials where room capacity being 1,585 at that time... Therefore in Strathfield campus the maximum utilisation of students is only 55-60% of its permissible capacity."*
- Figures 15 & 16 show student attendance levels well in excess of the 750 combined population limit.
- Table 3 in Section 4.5 shows an existing student number of 2,200 at any one time increasing to 2,400 students at any one time, thus an increase of 200 students stated as a 9% increase above the 'existing' 2,200 limit.

The student population of 2,200 is almost 3 times greater than the limit of 750 for both the ACU & EC campuses. The term *"permissible"* in Section 3.9 ignores the limits placed on the operational performance levels set by the L&E court & by Strathfield Council. The raw data details from which Figures 15 & 16 were derived should be provided by the applicant for review. The assumption that the figures include both the ACU & EC campuses needs to be confirmed.

If the limit of 750 were used then the 200 increase in students at any one time would yield a 26.7% increase, not 9%. This represents a 3 fold increase in terms of the additional change.

2. Hours of Operation

The L&E consent also specifies the hours of operation which the subject Masterplan seeks to expand without adequate justification in terms of amenity impacts.

Some relief of the impact of ACU traffic at night and on weekends should be further explored in terms of restrictive hours of operation.

3. Vehicular Access Planning

The proposed vehicular access arrangement shown in Figure 17 raises a number of concerns, as follows:

- Creation of an unconventional anti-clockwise shuttle bus movement loop that utilises retained Gates 2 & 3. Internal patron delivery & collection point is non-standard as patrons need to cross internal road to access parked shuttle buses.

- Relocating Gate 1 to the eastern boundary of the ACU site via a new set of traffic signals at the Barker Rd / South St intersection will adversely affect Mt Royal Reserve and potentially the private ROW to the east serving a residential property.

- Creating Gate 4 location at the western end of the site creates a right-left staggered T junction arrangement that is potentially unsafe if the offset distance is inadequate and results in the displacement of an existing bus stop.

4. Loss of On-Street Parking

The ARUP statement in Section 4.4 that there will be no loss of on-street parking as a result of the proposed Barker Rd / South St traffic signals has not been validated by detailed design. It is likely that some loss of on-street parking will result.

5. On-site Car Parking Supply

The ARUP report states that a total of 346 spaces are provided on both the ACU (310) & EC (36) sites with 251 allocated for students and 90 for staff. This has a minor calculation error. Section 3.8.2 of the ARUP report states that with 2,200 students on-site (at any one time) that the student parking rate is 1 space per 9 students (i.e. 2,200 / 251). The student population of 2,200 is almost 3 times greater than the limit of 750 for both the ACU & EC campuses.

Table 3 in Section 4.5 of the ARUP report shows an increase of 298 on-site car parking spaces within the campus ground representing an 86% increase over the existing 346 spaces. The ARUP report states that the on-site parking rate is 1 space per 9 students (11% on-site student car driver); however this is erroneous as it uses the wrong student attendance level at any one time. If the 750 student level were

used then the on-site student parking rate would be 1 space per 3 students (33% on-site student car driver). Again a factor of 3 out.

The total 504 on-site student parking spaces (from Table 3) for the inflated 950 students on-site (at any one time) results in an increase in on-site parking ratio for students from 1 / 3 students to 1/1.9 students or from 33% to 53%. This contradicts the last sentence in Section 4.5 of the ARUP report that states that the *"parking ratio is still reasonably low as per Department of Planning and State Government Target for sustainable transport initiatives."*

In view of the above, reducing car dependence is clearly not achieved by the proposed development. Further, measures to discourage students and staff parking in nearby public streets have not been identified.

Section 4.6 of the ARUP report states higher on-site car parking spaces of 644 spaces (603 at ACU & 41 at EC). The ARUP report identifies that 584 spaces out of the 603 spaces will be provided in a basement car parking area accessed

6. Residential Amenity Impact

The ARUP report fails to adequately address external impact on nearby sensitive residential streets. The traffic volumes of 1,124, 651, 1,424 and 1,196 quoted in the last two paragraphs of Section 3.3 are THROUGHPUT figures only and have no application to determining acceptability in residential terms. The opinion expressed in the last sentence in Section 3.3 is not derived from any stated performance criteria.

7. Student / Staff Travel Mode Characteristics

The ARUP report fails to provide details of the current travel mode of students and staff including car drivers, car passengers, motorbikes, bicycles, walk, train, buses (public scheduled services and private ACU services), taxi and drop-off / pick-up areas. This is best achieved by questionnaire type interview surveys together with room patronage and parking surveys during the day and evening and bus patronage levels. Monthly variations in attendance should also be estimated so that seasonal impacts can be gauged. No such surveys were conducted with the ARUP report providing poor details such as the following extracts:

- Section 3.5 (last sentence) ... *"During the site visits very few students were observed to walk to the campus."*
- Section 3.6 (First paragraph, last sentence) ... *"During the site visit very few students were observed to ride to the campus by bike."*

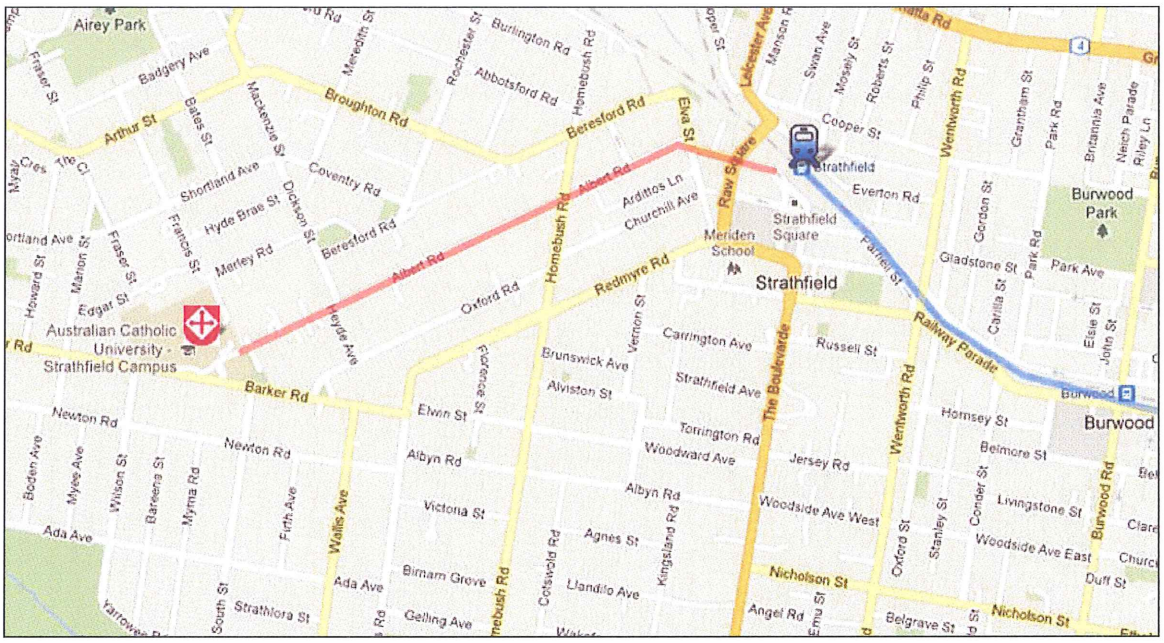
8. Public Transport Improvements

Insufficient detail is provided with respect to current public transport usage rates together with spare capacity of bus services. The statements made in Section 5.5 of the ARUP report are not substantiated. If services are poorly utilised at present it is likely that much greater parking demand will occur with resulting adverse residential amenity impacts in terms of parking demand and peak hourly traffic activity.

The site is located some 1.3km from the nearest train station (Strathfield) and details of scheduled bus route frequency and occupancy levels have not been provide.

The statements that students will be encouraged to travel to and from the site by train, bus, bicycle, car share and walk modes are not supported by details of how that outcome will be achieved and monitored. It is expected that car share schemes would not achieve any significant change in travel mode for students travelling to and from their place of residence.

The site location with respect to proximity to high capacity (train) public transport services is shown below.



Given the long distance from the nearest train station that requires students & staff to use two modes of travel (train & bus) it is expected that higher frequency bus service provision with detailed assessment of bus / rail interchange capacity is required to provide the travel mode shift from car to rail / bus modes. The assessment of bus queuing effects at nearby rail station(s) and at the ACU site needs further detailed investigation.

Without this major investigation into whether public transport (particularly bus services) will deliver the required travel mode shift, it is expected that students and staff will continue to drive their cars to and from the site to the detriment of the local community in terms of increased car based trips and adverse residential amenity impacts.

9. Bicycle Improvements, Disabled & Motorbike Parking

The ARUP report does not identify measures to be implemented that promote sustainable means of bicycle access improvements that encourage or increase this travel mode proportion in accordance with the DGR requirements.

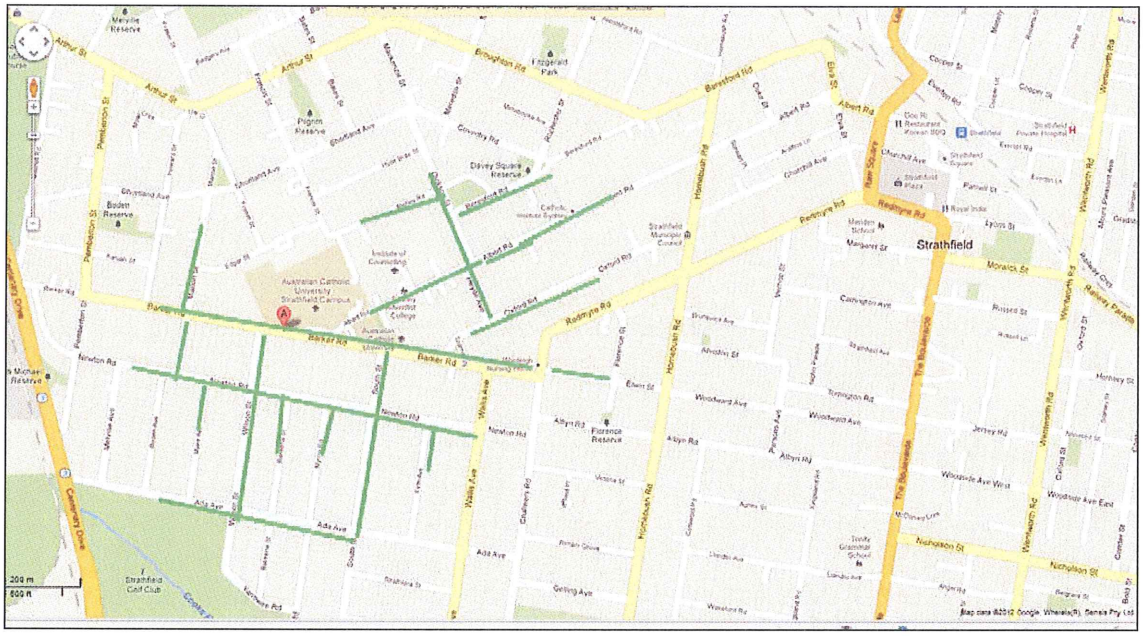
Section 4.9 of the ARUP report uses the 2,400 student population to arrive at a bicycle parking provision for 130 to 250 bicycle spaces based upon a range of 5% to 10%. No detailed bicycle plan has been prepared in the ARUP report.

Section 4.8 of the ARUP report states that 1% to 2% of the total parking supply will be designed for people with disabilities, however no detailed assessment of disabled parking & access is presented in the ARUP report. Section 4.10 of the ARUP report states that 30 to 40 motorbike spaces will be provided on-site no details are provided.

10. Overspill Parking Impact

The overspill parking impact assessment undertaken by ARUP is very limited as the surveys reflect a limited road grid to the south and east. The extent of the parking overspill effect is from 10.30 am to 2.30pm and ought to extend to the evening period

to assess impacts at night. It is considered that the surveys need to be undertaken over a wider area, as shown below.



The parking overspill effect identifies some of the sensitive road elements that ought to be assessed in terms of peak hourly activity. There are other sensitive roads that provide access to the overspill parking areas that also need to be gauged (via peak hour flow changes) in terms of residential amenity impacts (both day & night).

The ARUP report states in Section 5.4 that 2 hour parking restrictions are proposed in some nearby residential streets (refer to Figure 21) for weekdays between 8.30am to 3pm as *"despite the significant increase in campus car parking supply, demand is forecast to exceed supply and hence overflow parking will continue to occur in the surrounding streets."* This proposal requires Council's approval through its local traffic committee and requires consultation with local residents. The likely overspill parking effects at night have not been addressed and would be more difficult to enforce.

The ARUP recommendation relies heavily on Council enforcement, which is of concern in terms of management costs. The ARUP management plan is insufficient in detail and is likely to displace ACU parkers into residential streets further afield. The likely increase in overspill parking effects needs to be more rigorously determined based upon seasonal changes in on-site population, based upon more detailed student & staff travel mode surveys.

11. Traffic Generation & Impact

Section 5.1.2 of the ARUP report states that although the on-site car parking is doubled that the traffic generation increase is adopted as 10% which is based upon erroneous current student population levels.

Further if the AM peak traffic generation of 161 (from Section 5.1.1) is applied to the 251 on-site spaces for students, this equates to 0.64 vehicle trips per space. By applying this rate to the increase of 253 on-site student spaces results in an increase of 162 additional vehicle trips, which is a doubling of current driveway flows.

The above calculation (which excludes overspill parking traffic generation effects) highlights that the 10% increase in peak hourly flows adopted in the ARUP report is seriously flawed .Accordingly, no confidence can be assigned to the conclusions derived in Section 5 of the ARUP report.

12. Travel Demand Management

Section 3.10 of the ARUP report underlines the current deficiency of the ACU in implementing a location specific sustainable travel plan, which is a DGR requirement.

The following extract from Section 3.9 is relevant:

> *"However, there is no information about discouraging the car driving and encouraging the walking and cycling to the campus. There is also no information about the bike and motorbike parking within the campus."*

The statements that students will be encouraged to travel to and from the site by train, bus, bicycle, car share and walk modes are not supported by details of how that outcome will be achieved and monitored. It is expected that car share schemes would not achieve any significant change in travel mode for students travelling to and from their place of residence.

13. Service Vehicle Provision

Section 4.6 of the ARUP report states that 9 service vehicle spaces are proposed with no justification of the quantum necessary nor of the size of the service bays.

No swept path tests have been undertaken of the service bays. Indeed the ARUP report states in Section 4.7 that *"a swept path will be undertaken by Auto Track program in due course to ensure the adequate manoeuvre by the delivery vehicles."*

14. Other Inaccuracies in ARUP report

The ARUP report also makes the following inaccuracies in its report:

- Refers to *"Blacktown and Mt Druitt hospital development proposal"* in Section 2.1, first paragraph.
- Site maps in Figures 2, 3 & 4 are different with all figures including part or all of the St Patrick's College site as part of the ACU site.

15. Data to be Provided for Further Review

In order to further review the report findings, the applicant should submit the electronic SIDRA files and provide electronic copies of swept path tests of design vehicles using the proposed vehicular access conditions plus bus shuttle loop in accordance with AUSTROADS requirements. Detailed design of vehicular access points (Figures 17, 18 & 20) and any resulting loss of on-street parking and relocated bus stops to be provided for review.

In addition, detailed information of student attendance from which Figures 15 & 16 were derived should be provided by the applicant.

Given the long distance from the nearest train station that requires students & staff to use two modes of travel (train & bus) it is expected that higher frequency bus service provision with detailed assessment of bus / rail interchange capacity is required to provide the travel mode shift from car to rail / bus modes. The assessment of bus queuing effects at nearby rail station(s) and at the ACU site needs further detailed investigation.

Please contact the undersigned should you require further information or assistance.

Yours faithfully
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