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Mr John Sung
Campus Infrastructure and Services
The University of Sydney
Services Building G12
22 Codrington Street
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5 April 2011

Dear John

**Re: The University of Sydney
Centre for Obesity, Diabetes and Cardio-Vascular Disease (CODCD)
Proposed Modifications to Approved Development (Section 75W)
Assessment of Modified Car Parking and Vehicle Access Arrangements**

It is understood that The University of Sydney will be submitting a Section 75W application to modify the approved CODCD project. These modifications include a reduction to the number of car parking spaces provided on site and associated vehicle access arrangements.

Halcrow has reviewed the proposed modifications and undertaken an assessment of the traffic and parking implications of the development.

Overview of Proposed Modifications

With regard to traffic and parking the relevant modifications to the proposed CODCD project are described in Table 1.

In particular it is noted that the modified development proposal will reduce the useable floor area of the building by approximately 20%. Similarly the total staff / researchers accommodated with the CODCD building will be reduced by approximately 20%.

The provision for staff car parking will be reduced from 200 spaces to 91 spaces.

Table 1 – Overview of Proposed Modifications

	Approved Part 3A Proposal	Modified Proposal
Useable Floor Area (ie Research areas, educational areas and ancillary support areas)	35,110 m2	29,673 m2
Total Building Population	2,175 people	2,467 people
Total Staff / Researchers	1,140 staff	911 staff
New Staff / Researchers to USyd Campus	200 staff (approx.)	200 staff (approx.)
Car Parking Spaces		
- basement parking	200	91
- at grade visitor parking	15	15
Bicycle Parking Spaces	125	125
Vehicle Access to Basement Parking	Parramatta Rd via Orphan School Creek Western Ave / Blackburn Circuit	Parramatta Rd via Orphan School Creek

Traffic Generation

Traffic generation by the University is typically a function of the amount of car parking spaces provided on site.

As part of the Part 3A Project application for the approved CODCD project, Halcrow prepared a Traffic and Transport Report¹ which considered the traffic implications associated with the approved development.

Surveys of University car parks provided an indication of generation rates:

- AM Peak Hour : 0.61 vehicle trips / hour / parking space
- PM Peak Hour: 0.38 vehicle trips / hour / parking space

It is considered that reducing the number of on site staff parking spaces as proposed from 200 to 91 spaces will reduce potential traffic generation from 122 trips to 56 trips in the AM peak hour and 76 trips to 35 trips per PM peak hour compared to the approved development.

Therefore overall the proposed modifications will significantly reduce the number of additional vehicle trips accessing the site compared with the approved development.

¹ The University of Sydney – Centre for Obesity, Diabetes and Cardiovascular Disease Part 3A Project Application Traffic and Transport Report (Halcrow MWT November 2009)

The Traffic and Transport Report for the approved development indicated the surrounding road network could adequately accommodate estimated traffic generation associated with an additional 200 staff parking spaces.

Thus it can be concluded that the modified development with a reduced total vehicle generation will also be satisfactorily accommodated by the surrounding road network.

It is noted that the vehicle access arrangements to the basement parking area will be amended as part of the modified development proposal. The operation of the site access is described further below.

Car Parking Provision

The provisions for visitor and clinical trial patients drop off areas and at grade visitor parking will remain unchanged by the proposed modified development.

Furthermore the approved development did not propose to provide on site student car parking facilities. Similarly the modified development will not provide student car parking on site.

South Sydney DCP 11 provides guidelines for the provision of on site car parking. For tertiary education establishments DCP 11 specifies a staff parking rate of 1 car space / 2 staff.

It is proposed that that CODCD project will generate an additional 200 researchers / staff to the University Campus.

The application of DCP 11 parking rates to the additional researchers / staff would require the provision of 100 parking spaces.

The provision of 91 staff parking spaces as proposed is consistent with DCP 11 and the University's transport objectives as outlined in Campus 2020 which seeks to minimise the intrusion of vehicles within the Campus and encourage alternate modes of travel.

The provision of 91 staff parking spaces is considered an appropriate balance between satisfying staff parking demands, consistency with the relevant planning controls (DCP 11) and meeting the Campus 2020 sustainable transport objectives.

Bicycle Parking

While the useable building area and population will be reduced under the modified proposal, the total provision of on site bicycle parking and bicycle facilities (ie. showers) will remain unchanged from the approved development.

The provision of bicycle parking and associated facilities is an important part of the University's approach to sustainable transport and encouraging alternate modes to the private motor vehicle.

Vehicle Access Arrangements

The proposed modified vehicle access arrangements to and from the CODCD site are shown in Attachment A.

Vehicle access to the at grade visitor drop off / parking spaces will remain unchanged from the approved development. Access will be provided to these areas via:

- John Hopkins Drive; and
- Western Avenue / Regimental Drive.

The major modification to vehicle access is the removal of the southern access to the basement parking area.

In the approved development a southern access was proposed via Blackburn Circuit at the rear of University Oval No. 1 and grandstand area.

It is now proposed that this access be created as key pedestrian route through this University precinct and the provision of a vehicle access to a car park is not consistent with this improvement to pedestrian amenity.

Therefore all vehicle access to and from the staff basement car parking area will be via Orphan School Creek Lane and the Parramatta Road intersection.

The design of this access at Parramatta Road will remain unchanged from the approved development.

While the total traffic generation of the proposed development is estimated to reduce significantly compared with the approved development, the Parramatta Road / Orphan School Creek Lane intersection will need to accommodate additional traffic flows as it will become the single access to the basement parking area.

The assess the capacity of the proposed access arrangement with the modified development proposal, the intersection was analysed using the SIDRA modelling software and the results compared with the finding of Traffic and Transport Report for the approved development.

The results are summarised in Table 2.

Table 2 – Parramatta Rd / Orphan School Creek Lane Site Access Intersection Operation

Intersection	Control Type	Morning Peak		Evening Peak	
		Ave. Delay (sec/veh)	Level of Service	Ave. Delay (sec/veh)	Level of Service
Approved Development	Priority	14	A	68	E
Proposed Modified Development	Priority	14	A	69	E

Average Delay is for the worst movement at priority and roundabouts.

The SIDRA analysis indicates that there would little to no adverse impact on site access operation at Orphan School Creek Lane with the proposed modified access arrangements.

It is noted that the SIDRA analysis for the PM peak period (worst case) indicated that the 95th percentile queue on the Orphan School Creek Lane exit to Parramatta Road would be no more than 3 vehicles at any one time.

It is concluded that this minimal queue on the access exit, combined with the widened access intersection would not generate vehicle queuing along Parramatta Road and as such are acceptable and consistent with the approved development.

Summary

It is concluded that the proposed car parking and vehicle access modifications to approved CODCD project are consistent with the University's Campus 2020 Masterplan and relevant planning controls (DCP 11) and the existing development approval with regard to:

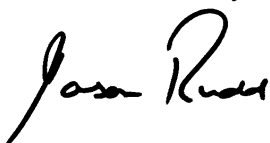
- On site parking provisions;
- Vehicle access arrangements; and
- Promotion of pedestrian links and separation of pedestrian and vehicle movements.

Furthermore the proposed modified access arrangements retain the objective to avoid significant intensification of vehicle traffic along John Hopkins Drive which Council identified during the original traffic and transport assessment process as a sensitive link due to its function as a shared vehicle / pedestrian / cycle route.

With regard to the proposed CODCD project it is concluded that the surrounding road network can adequately accommodate the estimated traffic generation of the modified proposal.

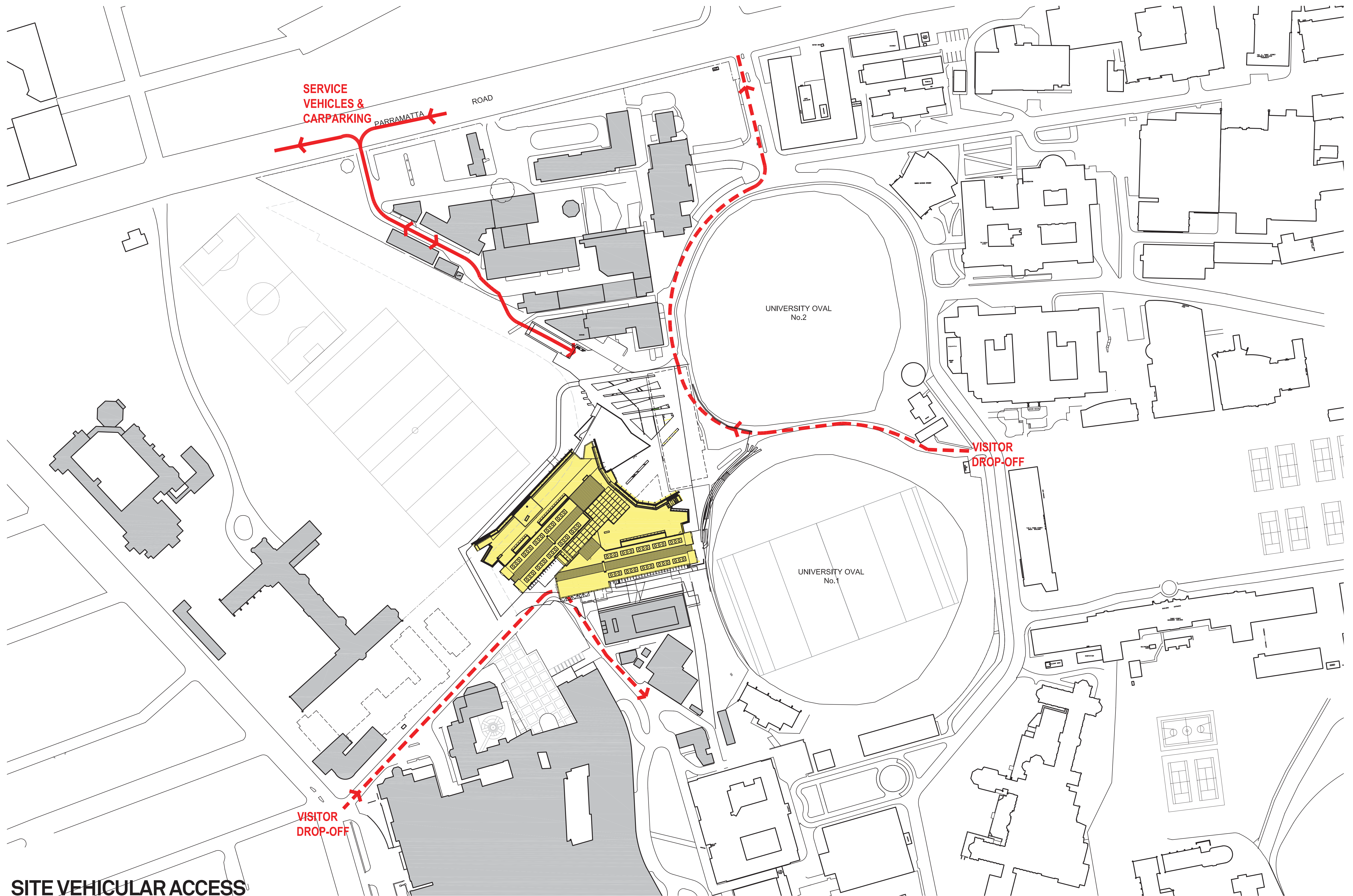
Should you have any queries or require further information regarding the above, please do not hesitate to contact the undersigned.

Yours sincerely



Jason Rudd
Associate Director
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Attachment A - Proposed Vehicle Access Arrangements (April 2011)



SITE VEHICULAR ACCESS



Revision
Issue for Section 75W
04

Date
23-March 2011

Scale
1:1000@A1

Client
The University of Sydney

Project Name
CODCD
The University of Sydney

Drawing
SK-012_02
SITE VEHICULAR ACCESS

HASSELL