THE UNIVERSITY OF SYDNEY

Department of Planning Industry and Environment
4 Parramatta Square
12 Darcy Street
Parramatta NSW 2150

Attn: Mr David Gibson – Team Leader Social Infrastructure

25 August 2020

Re: University of Sydney- Engineering and Technology Precinct – Mod 1 (SSD - 8636_Mod_2)
Request for Additional Information

Dear Mr Gibson,

01 / A Final Description of Proposed Courtyard Designs:

Northern Courtyard
The developed design is accordance with the University's Wingara Mura design principles encouraging the return of the indigenous flora and fauna with more planting, less paving, creating a sustainable landscape or "bush library" to facilitate cultural and academic teachings and stories.
The major courtyard continues the starfield geometry established as part of Paul Carter's original 2005 'Golden Grove' exploration as a natural extension of Cadigal Green's constellation of spaces
Design changes include:

- Gently curved forms juxtapose the rectilinear nature of the building and relate to the strong circular gestures of Cadigal Green while creating individuality of expression.
- Improved circulation and wayfinding providing three main spines connecting Maze Crescent, the Northern J03 building entry and the wider engineering precinct via 'engineering walk'. The landscape levels have been simplified and therefore, the disabled access experience has improved.
- Generous and flexible outdoor courtyards allow for a full variety of everyday uses, from small intimate study groups to larger teaching spaces and Informal recreation areas with integrated seating spaces. Generous lawn spaces feature additional tree plantings and to provide cool summer settings for extended occupation and increased comfort.
- Increase in planting beds and decreased paving provides a softer approach and landscape setting for J03; increasing site porosity and decreasing heat build up
- Changes result in net gains in human comfort and greater amenity in recreational and outdoor teaching environments. Shade trees are located in spaces that cater for a range of occupation, from informal gatherings, teaching and study spaces
- Northern courtyard tree quantity increases from 27 as previously proposed in SSDA approved design, to 30 under current plans

Eastern Courtyard
A Small breakout courtyard with study and recreation space immersed in planted understorey and palm tree plantings. The courtyard remains largely the same as the SSDA approved design with exception to the following improvements:

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- Addition of an awning at the eastern entry of the building which provide weather protection and an improved user experience. The glass awning is a continuation of the main pedestrian pathway through the precinct known as 'Engineering Walk'.
- A solid awning over the proposed end of trip bike racks to improve the end of trip experience.

Southern Courtyard

- The amended basin provides the same performance as the previously proposed basin, reducing flood hazard for the proposed design to low with an increase in usable space.
- Changes from SSDA Scheme to address the conditions of consent:
    - A 400-450 mm high seating wall has been implemented in the Southern landscape to protect the building from the 1% AEP flood level.
    - The amended basin has been shallowed to approximately 400mm deep This achieves a low flood hazard category and includes a 1:4 slope to design out any risk of tripping or falling into the basin thereby avoiding the need for a fence.
    - The bioretention basin deals with stormwater as an asset not a liability, putting engineering on display and acting as a reminder of the healthy waterbodies that once criss-crossed the area.
- Overall configuration including planting has been developed in order to improve circulation and amenity spaces within the courtyard and continues the starfield constellation arrangement of adjacent Cadigal Green.
  Design changes include:
    - The scheme provides DDA compliant access from Maze Crescent to the Southern entry of the building through the basin area, improving the disabled access experience and the connection to the J02 PNR (Peter Nicol Russel) Building.
    - Introduction of defined gathering and meeting spaces promoting informal teaching, learning and recreation
    - Inbuilt seating wall along the bio retention basin activates the space in front of the building entry and around the basin
    - The ground plane has improved activation, connectivity and accessibility.
    - Generous gravel forecourt and Jacaranda plantings shade in summer and allow sunlight in winter
    - The developed design features 6 x *Jacaranda mimosifolia* that allow for a greater range of informal recreation under their canopy and prove a more desirable tree species for the new ETP building spill out space. Changes result in net gains in human comfort with deciduous Jacaranda's providing summer shade and allow winter sun

02 / Clarifications

- Justification re: reduced / increased planting changes

Please note there is no reduction in overall tree quantities. Previous drawing issue for the south plaza contained an error in tree quantity and locations that has subsequently been rectified in the proposed planting plan that is contained in the updated comparison plans attached:

- Southern Courtyard Planting Plan_K33-TCL-LAS-DRG-00400_Rev C5. (additional tree clouded)

Based on the revised planting plans the total quantity is maintained at 44 trees, aligning with the SSDA approved tree total quantity. Please also refer to the updated tree schedule in the attached updated comparison plans. Extract has been included here:

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A1714_University of Sydney - ETP

TREE SCHEDULE								
Rev. 02_21.08.2020								
SSDA Design		Current Design						
Code	Scientific Name	Scientific Name	Available Pot Size(mm)	Supplier	Northern Courtyard	SouthernCourtyard	Eastern Courtyard	All Courtyards
SSDA Design		Current Design						
Ac	*Archontophoenix cunninghamiana*	*Archontophoenix alexandrae*	200L	Andreasens Green (02 9826 1911)			8	8
Bc	*Backhousia citriodora*	*Backhousia citriodora*	200L	Andreasens Green (02 9826 1911)	11			11
Ca	*Cupaniopsis anacardioides*	*Cupaniopsis anacardioides*	400L	Andreasens Green (02 9826 1911)	7			7
Er	*Eleocarpus reticulatus*	*Eleocarpus reticulatus*	400L	Andreasens Green (02 9826 1911)	6			6
Jm	*Jacaranda mimosifolia*	*Jacaranda mimosifolia*	200L	Andreasens Green (02 9826 1911)	4	6		10
Sl	*Syzygium luehmannii*	*Waterhousea floribunda*	200L	Andreasens Green (02 9826 1911)	2			2
	Total							44

NOTE:
No change to the plant species from the previous SSDA plant schedule (refer to the Overall Plant Schedule), except a couple of tree species as highlighted in red above, due to the advanced size availability.

The substituted similiar species have been approved by University of Sydney, dated 22nd July 2020.
All species are taken from the approved University of Sydney and City of Sydney plant lists.

We have added 1 x *Jacaranda mimosifolia* to south courtyard to align with the currently approved SSDA quantity of 44 trees total.
See in blue above, and revised planting plans.

The total combined Garden Bed area has increased by nearly 25% with the current design (approx. 1,530m2), in comparison to the previous SSDA scheme (1,170m2).

- Justification re: reduced / increased planting changes

Western Boundary Planting
Changes to the sites western boundary proposed planting and layout are as follows:

- Relocation of proposed trees along Maze Crescent due to underground services and in compliance with the relevant services authorities nominated clearance requirements.
- Trees have been relocated as mentioned in the above summary points, with an increase of trees in the Northern Courtyard.
- Loss of trees and shading along Maze Crescent is offset by an overall improvement of amenity of the space in the following ways:
    - an increase in garden bed planting and softscape spaces (inc. along Maze Cres)
    - a net reduction in hard paved areas (and associated heat generation)
    - addition of a landscape edge along Maze Crescent providing clear separation between Maze Crescent pedestrian footpath and vehicles.

- Clarification re: overall height of awning
Please refer to the following updated proposed Engineering Walk Awning drawings which can be found in the attached updated comparison report.

- External Works – Engineering Walk Awning – Sheet 1 – K33-COX-ARC-DRG-16-20 rev 3
- External Works – Engineering Walk Awning – Sheet 1 – K33-COX-ARC-DRG-16-21 rev 3

Yours sincerely

Stephane Kerr
University Town Planner
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