

Multiplex for
UNSW Biological Sciences Project

SSD 7865

Architectural Design Statement

17 October 2016

**WOODS
BAGOT™**

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01

Executive Summary

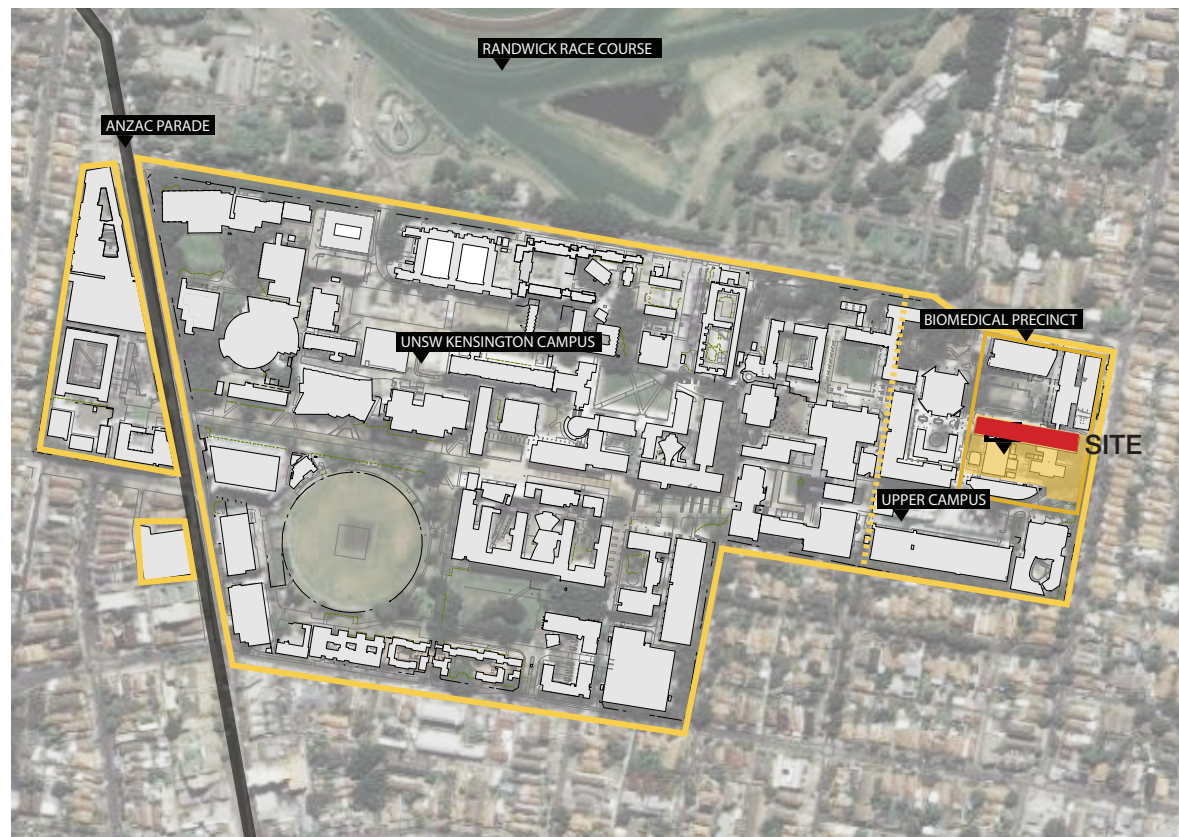


Fig. 1 - Location of the site



Fig. 2 - Consented SSD 6674, looking from Botany Street, Gate 11

This Architectural Design Statement forms part of a combined application to further develop the UNSW Biological Sciences precinct.

The proposed application will consist of a newly proposed SSD (SSD 7865) and a Section 96 application (SSD6674).

The diagram in Figure 3 shows how the proposed applications will be split. This is as follows:

S96 Amendments to Building D26 proposals

- Ground Floor Layout
- Facades
- Awning and Terrace
- Rooftop plant enclosure including Levels 7, 8 and Roof

SSD Application

- Proposals for Internal layouts for Lower Ground Floor and Levels 1, 2, 3, 4, 5 and 6

SSD Application

This report covers the SSD application.

The proposal is for the refurbishment of the internal spaces of Building D26 which currently houses the existing UNSW Schools of BEES and BABS.

The schools will be decanted into a combination of the consented Building E26 which is currently in construction due for completion in May 2017, and the existing Biolink building.

Once decanted, Building D26 is proposed to be partially demolished retaining the existing concrete structure and construction of a new facade and internal spaces.

This SSD is for the internal spaces on Lower Ground Floor and Levels 1 to 6. The Ground Floor is covered under the Stage 1 SSD and a separate application (S96) is made for amendments to the layout.

The following is a summary of the functions:

- Lower Ground Floor - Storage and expansion of plant
- Ground Floor - Teaching, Cafe, Student Centre (covered under separate S96 application)
- Level 1 - Anatomy and Teaching Lab
- Levels 2-5 - Research (including Lab and Workplace)
- Level 6 - Animal House
- Levels 7-8 - Plant (covered under separate S96 application)

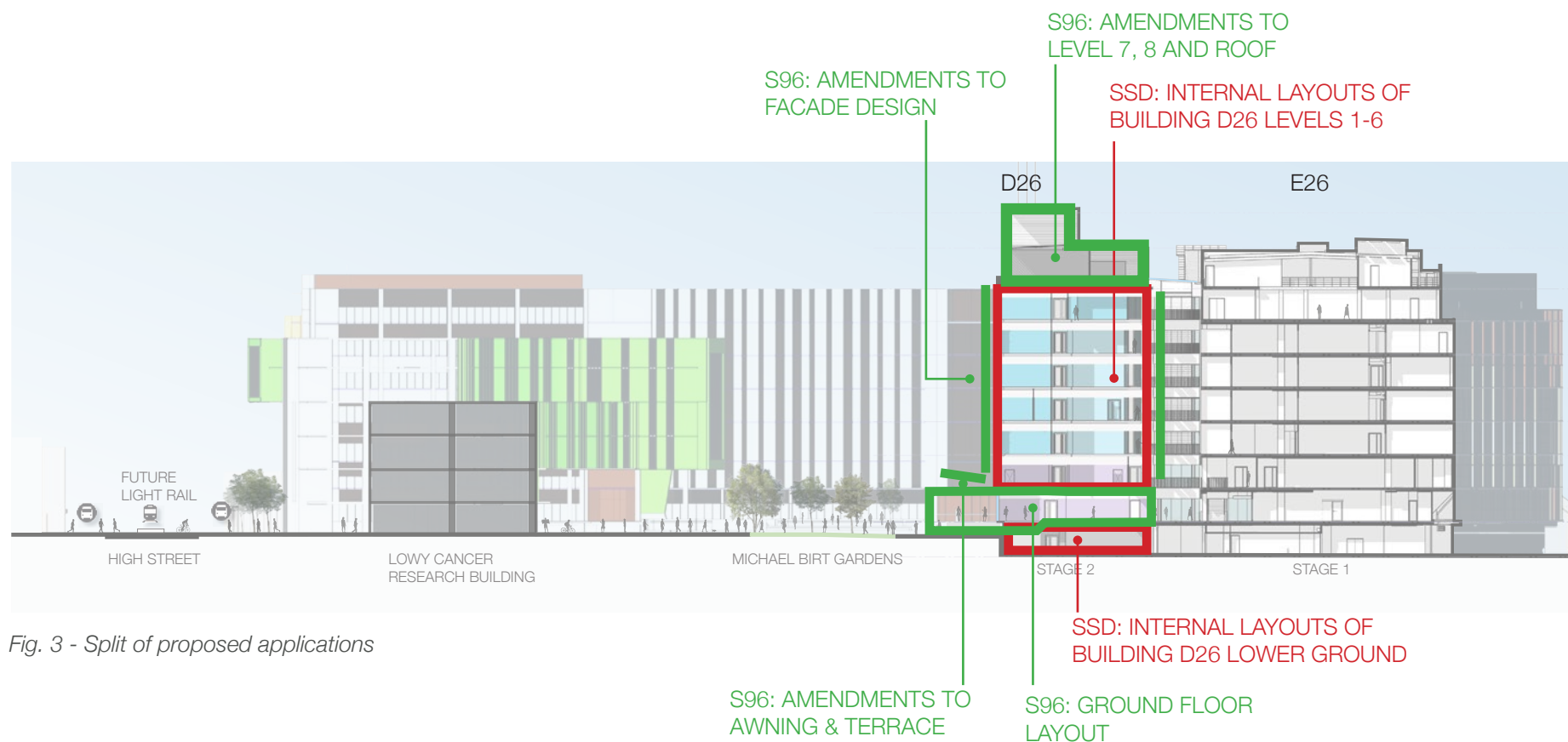


Fig. 3 - Split of proposed applications

02

Extent of Works

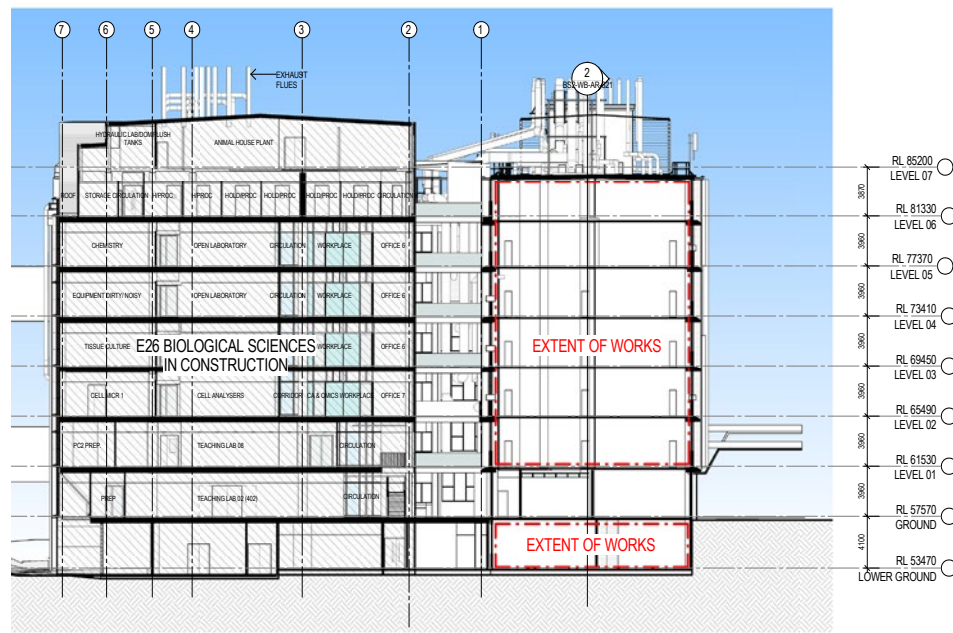


Fig. 5 - Proposed SSD Section showing Extent of Work

The extent of works covers internal spaces of Building D26 on the following Levels:

- Lower Ground
- Level 1
- Level 2
- Level 3
- Level 4
- Level 5
- Level 6

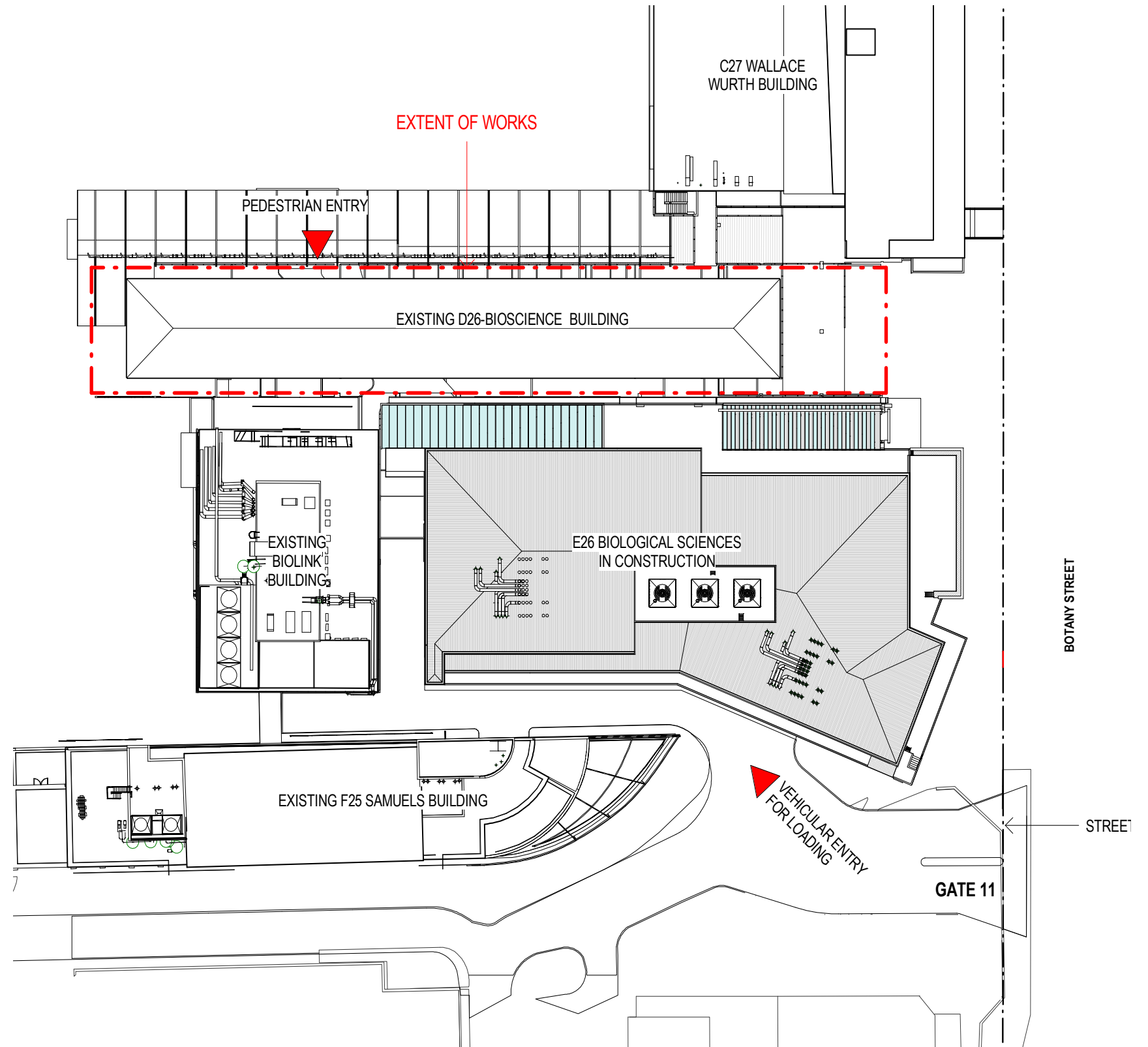


Fig. 4 - Proposed SSD Site Plan showing Extent of Work

03

Functional Organisation

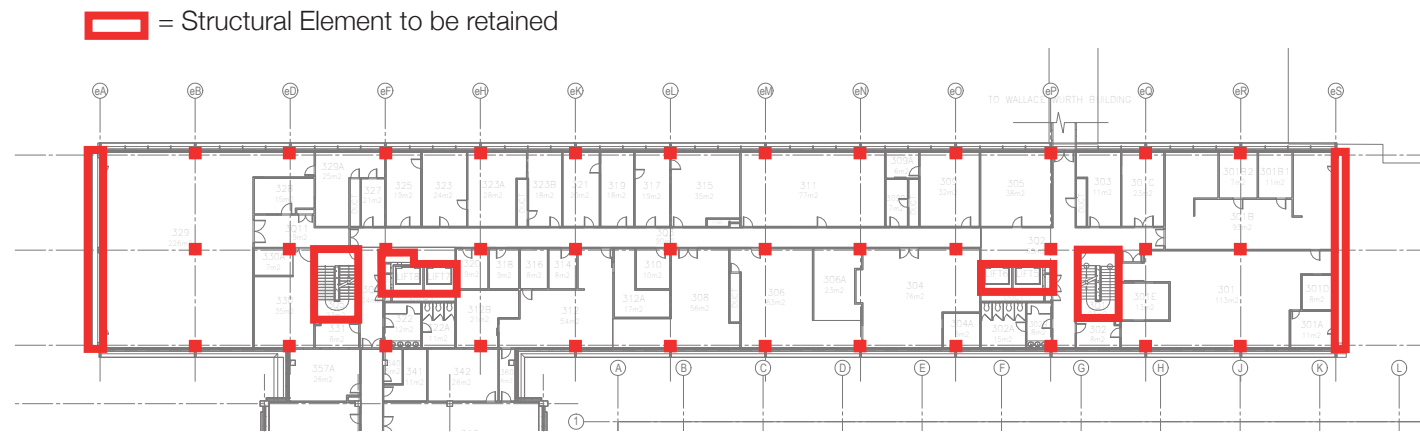


Fig. 6 - Diagrammatic plan showing typical structural elements to be retained

The internal spaces will be typically demolished with the main elements of the structure retained as shown in Fig. 6. These are columns, shear walls at the east and west ends, stair cores and lift cores. Some plant is retained on the Lower Ground Floor. The space remaining is then proposed to be fitted out with laboratory-based functions as shown in Fig. 8.

Fig. 7 shows how usage is stacked in a similar way to Stage 1 with teaching levels featuring at Ground and Level 1 for ease of student/public access with the more private research spaces at the upper levels.

Organisation on plan for a typical research level is centred around the main circulation route being the atrium that separates Stage 1 and 2. Workplace research is arranged at each end of the building and lab spaces in the centre. The open lab is on the south and facing the atrium enabling light and activation of the atrium to animate the circulation experience.

The support labs are mainly arranged on the centre-north side of the building.

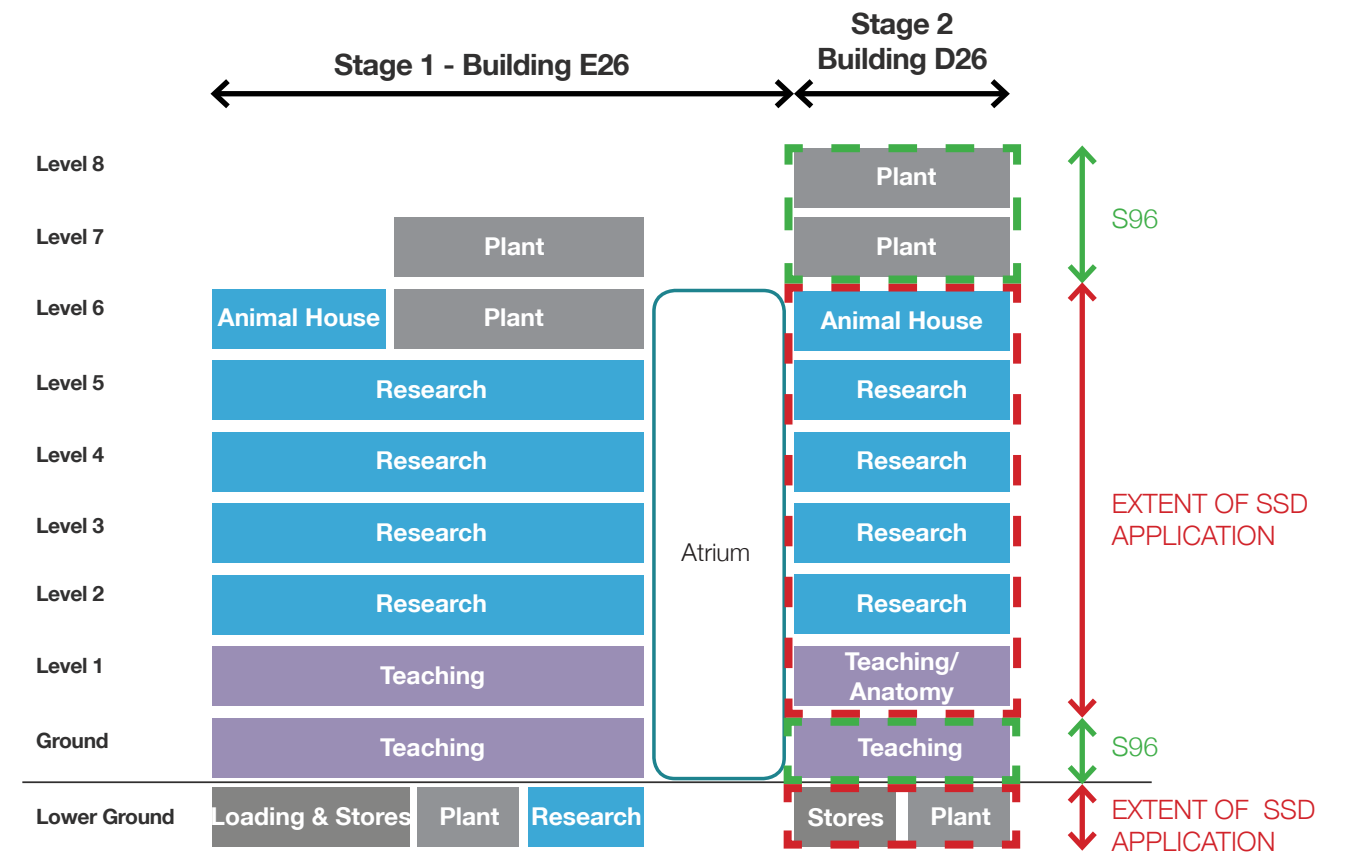


Fig. 7 - Diagrammatic section showing functional organisation

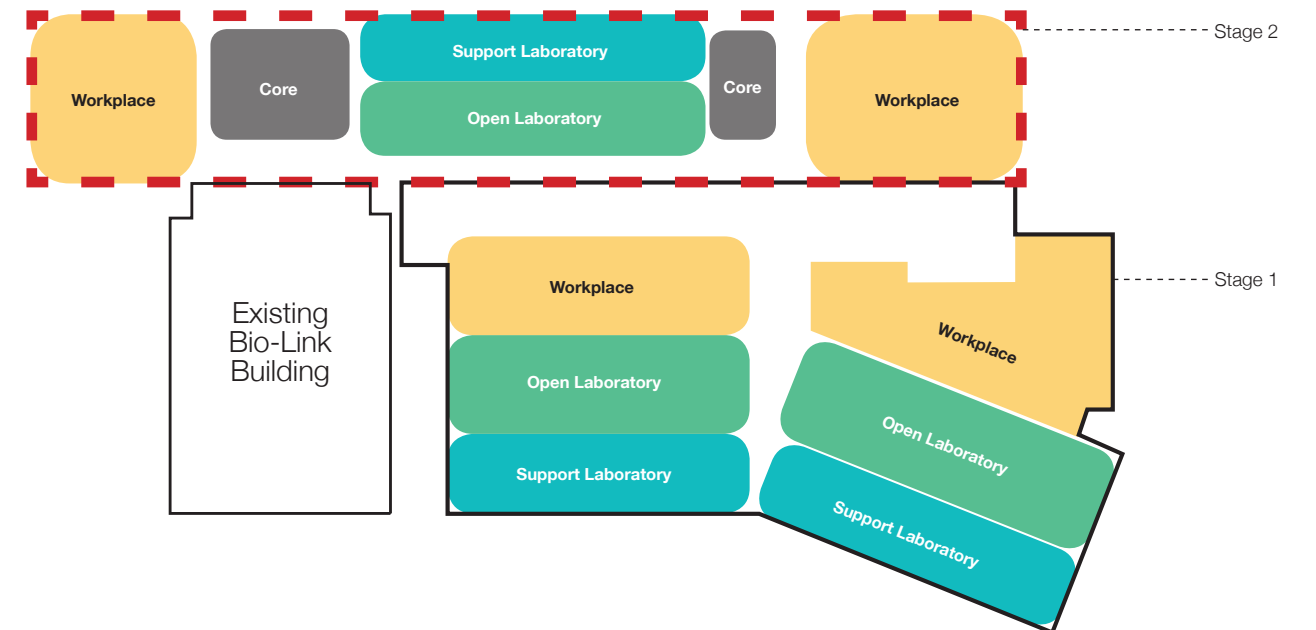


Fig. 8 - Zoning Plan showing typical zonal relationship for Stages 1 and 2

04 Functional Organisation

Circulation

The proposed completed building utilises a common circulation strategy surrounding the atrium. Fig. 9 shows how the circulation is arranged.

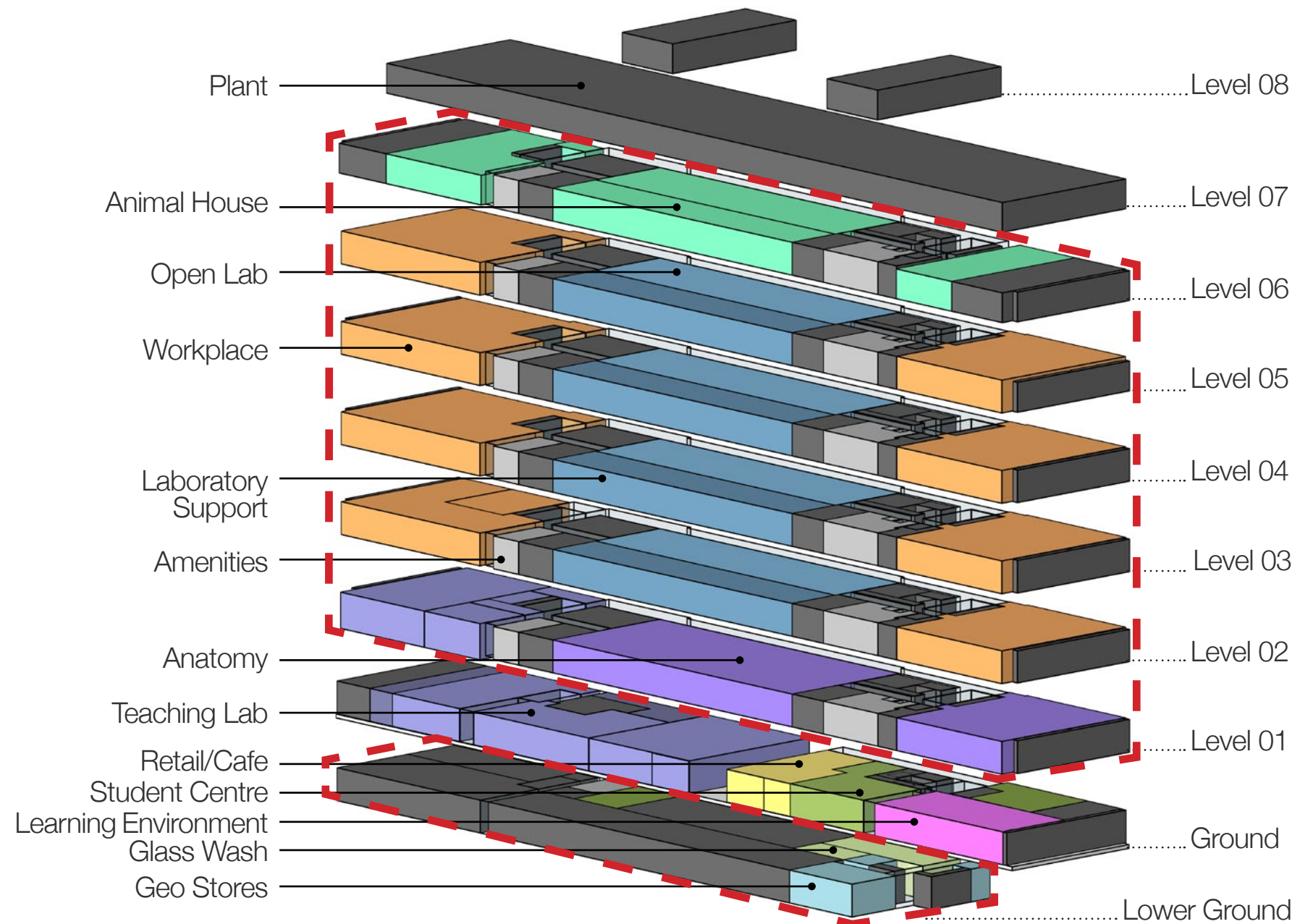
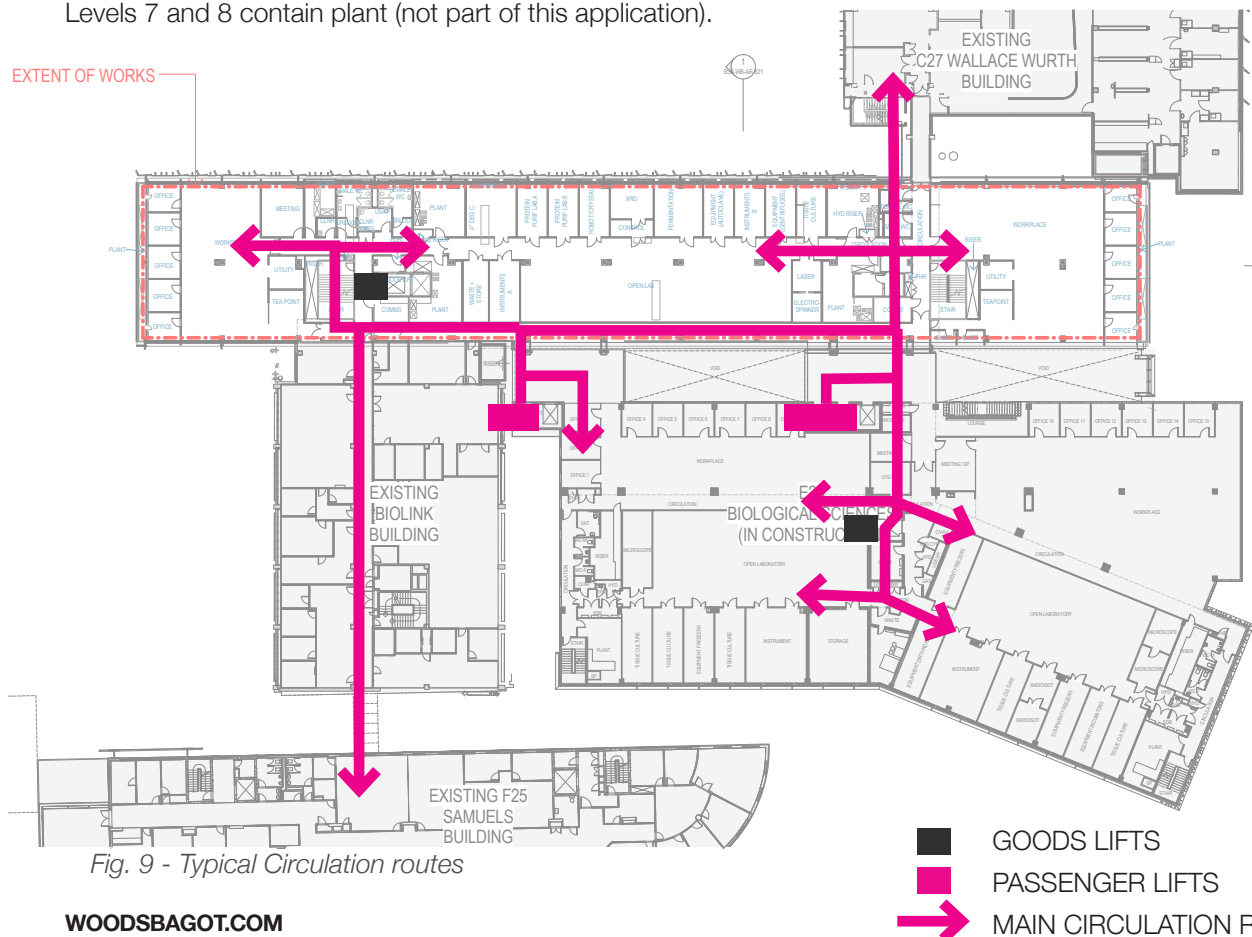
There are two groups of passenger lifts in E26 which open up onto lobbies within the atrium. From there routes are provided into Building D26 and E26 for Biological Sciences and beyond into Samuels Building via Biolink and Lowy Centre via Wallace Wurth Building.

The two existing passenger lifts in the western core of D26 (black rectangle) are replaced with a goods lift providing a second goods lift to supplement the one provided within Stage 1.

Blocking and Stacking

The Lower Ground Floor contains Precinct management functions including main stores, rock stores, glasswash and plant. Ground Floor (not part of this application) contains Teaching Labs, a Cafe, Student Centre and Learning Environments (a UNSW centrally allocated teaching space).

Level 1 contains Anatomy teaching lab and a Teaching Lab for BABS. Typical floors are found on Levels 2-5 containing Research functions. Level 6 contains an Animal House and Levels 7 and 8 contain plant (not part of this application).



The proposed Lower Ground Floor expands the precinct facilities established in E26 which contain the loading dock, waste stores, field gear and dive stores, bulk gas stores etc.

In D26, selected existing plant that services Wallace Wurch Building (C27) is retained and further plant space allocated.

The Main Stores room is expanded into D26 and a glasswash facility is included along with Geo Stores.

An end of trip facility is provided with Male and Female showers adjacent to the E26 amenities which already contain accessible toilet and shower.

A wide equipment access route is provided (hatched pathway) through the plant area into the Service Tunnel leading to Lowy Building (C25) and circulation is maintained to Wallace Wurch (C27).

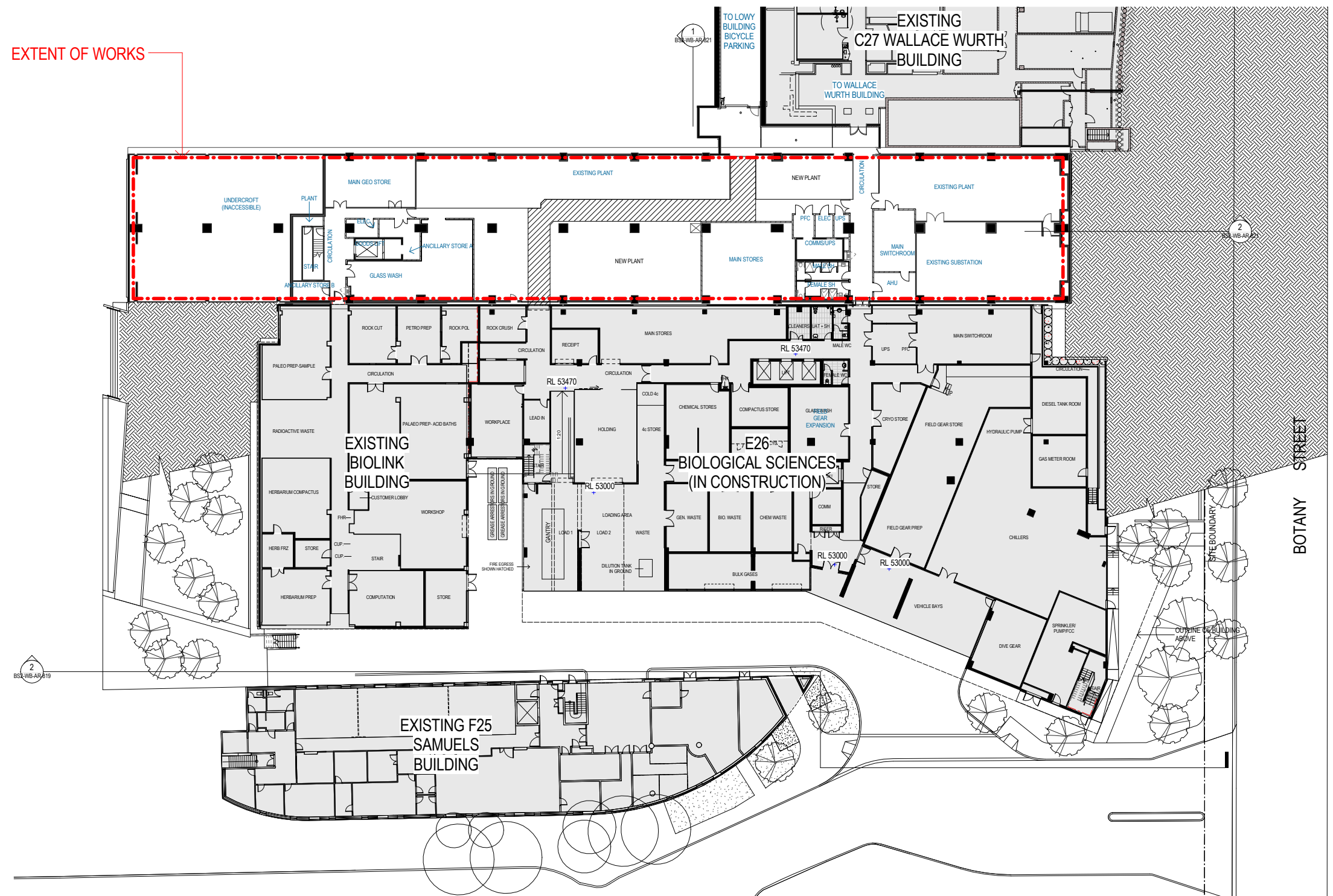


Fig. 11 - Proposed SSD Lower Ground Floor Plan

The proposed Level 1 contains Teaching-based functions similar to Stage 1. It predominantly contains an Anatomy Lab facility which takes up the majority of the floor plate. On the eastern end a Wet Teaching Lab and support space is provided.

Amenities are provided to serve the entire level including Stage 1, and accessed from the main corridor.

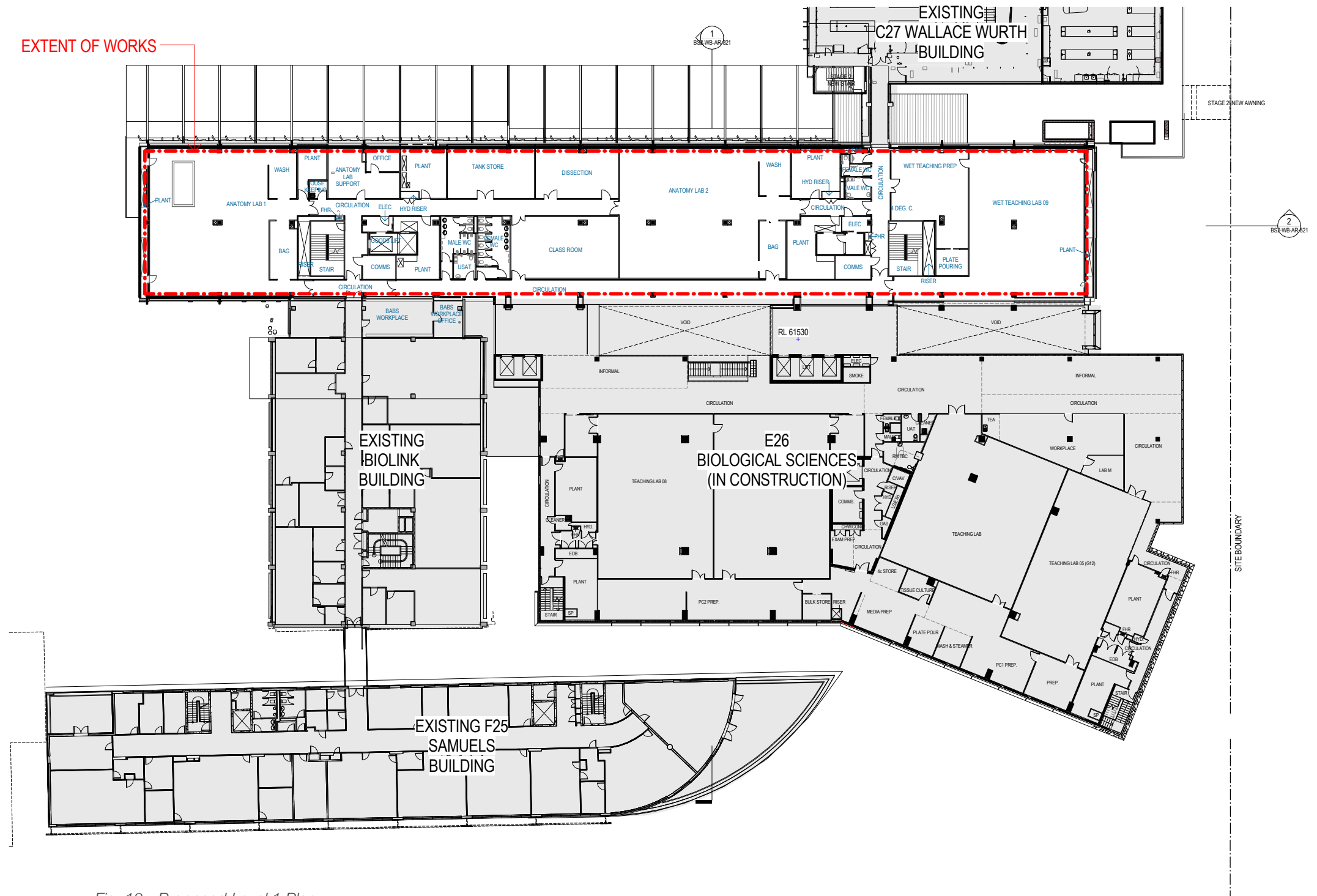


Fig. 12 - Proposed Level 1 Plan

Typical Research Levels 2-5

Levels 2-5 are laid out in a typical arrangement. Workplace Research is located at the east and west ends and is made up of both cellular and open plan office space.

These are separated from the centrally located lab spaces with cores that contain on-floor plant, amenities, escape stairs, risers, goods lift etc.

The lab spaces feature open lab areas facing the atrium to be separated by glazed partitions in order to activate and animate the atrium circulation experience. On the north side are support labs which vary in type for each level (see architectural drawings for further details).

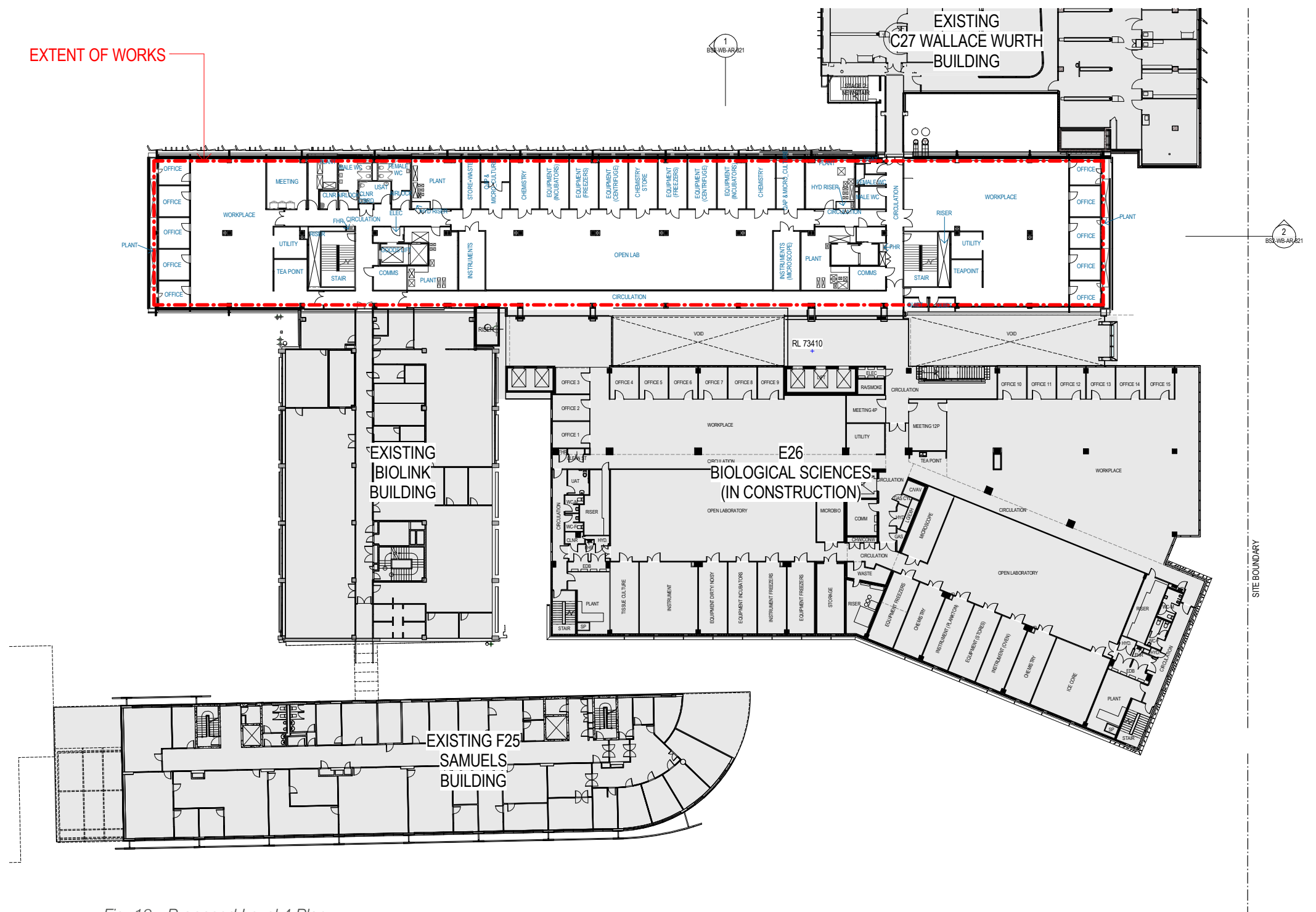


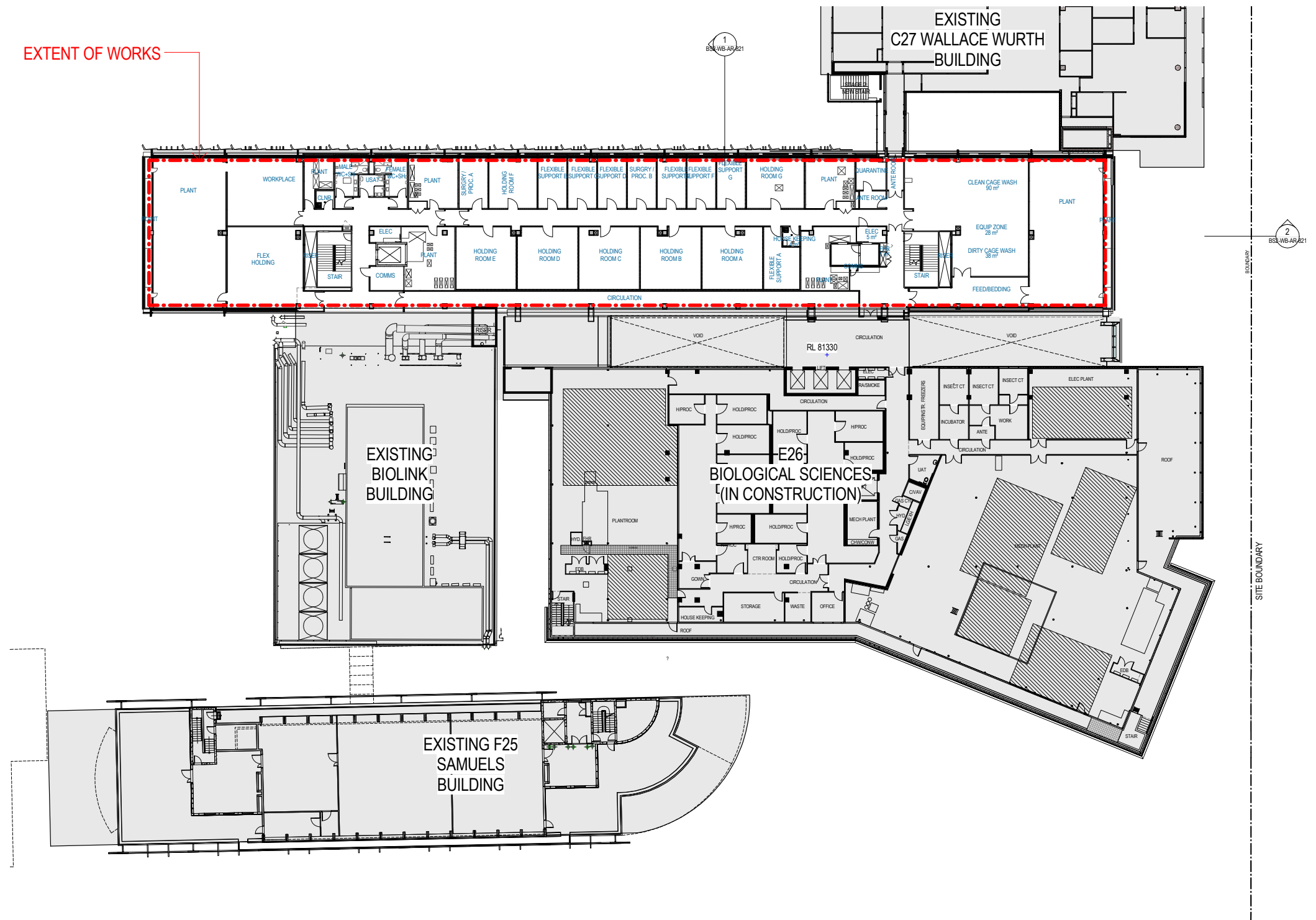
Fig. 13 - Proposed Level 4 Plan

The Animal House is viewed as the last opportunity to build a new Animal House in the precinct for the foreseeable future and is a PC2 rodent facility, with potential for small mammal holding.

This proposal locates the cage washing and processing function at the eastern end, separate from the main holding facility, and at the opposite end workplace plus flexible use space which could be more holding or storage in the future.

The plan allocates larger holding rooms on the south side of the facility corridor, and smaller holding, procedures, and behavioural testing rooms on the other side, providing a variety of space sizes as well as flexibility in how those spaces are used.

Plant is located at each end which serves the workplace levels below.



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