Tree Study of a row of Morton Bay Fig located within Sydney University Grounds (Amended 09.07.2024)

Study of a Row of Moreton Bay Fig trees that are located within the School of Life and Environmental Sciences, the University of Sydney.

A site visit was undertaken on Friday 5th July 2024 (between the hours of 11am till midday) to the School of Life and Environmental Sciences at the University of Sydney (located along Princes Highway, Camperdown) by David Gowenlock of Seasoned Tree Consulting to assess development works that have occurred to the north of a row of Heritage Figs.

A total of 75 photos were taken of the health and condition of the Figs and their growing conditions, plus the building to the north of the Figs.

The 4 assessed Fig trees (I have identified as **F1, F2, F3 and F4**) are the same species (Moreton Bay Fig- *Ficus Macrophylla*) as the heritage listed fig (identified as **T6**) located within 2-4 Gladstone Ave / 357-363 Crown St Wollongong.

T6 is likely somewhat older than **F1, F2, F3 and F4**, but in terms of size and original health (before the development occurred directly to the north of **F1, F2, F3 and F4**), both **F1, F2, F3 and F4** and **T6** are extremely similar in size, health and overall condition.

Therefore **F1, F2, F3 and F4** are an excellent example of what a development of high impact including extreme levels of new shading can have on this species.

A review of the following documents has been undertaken for the School of Life and Environmental Sciences at the University of Sydney-

Title	Author	Date	Reference on document
Arboricultural Impact Assessment + Tree Protection Specification	Tree IQ Anna Hopwood + Martin Peacock	11.04.2016	Rev D
Architectural Plans DA01 to DA18	Rice Daubney	17.05.2016	Issue F
Shadow Diagrams *Summer Solstice DA19* *Autumn Equinox DA20* *Winter Solstice DA21*	Rice Daubney	14.04.2016	Issue A

Following this review of all the available documents it is clear that the development impact and especially the increase in shading to the canopy of to **F1, F2, F3 and F4** is vastly higher than the development impact to **T6**.

Canopy and root pruning of **F1, F2, F3 and F4** was also undertaken which will have further increased the development impact. Root pruning of **F1, F2, F3 and F4** was firstly undertaken in August 2016 which has now given us an 8-year period to observe decline from development impact and there has been no decline, only increase in health and condition.

Furthermore, there are no pruning of canopy or roots of **T6** proposed due to the considerable setbacks provided.

A review of the following documents has been undertaken for the proposed development of 2-4 Gladstone Ave / 357-363 Crown St Wollongong -

Title	Author	Date	Reference on document
HERITAGE TREE EYE OF SUN SHEETS COMBINED Drawings A455 A450 A451 A452 A453 A454	BKA Architecture	09.07.2024	Rev 01

The above shadow diagrams show that T6 receives direct solar access at all times of the year, and considerably more than the development that has occurred immediately beside **F1, F2, F3 and F4.**

I am therefore extremely firm in my opinion that T6 is retainable in a viable condition, and pending excellent management of all development works by an experienced project arborist, will improve in overall health and condition, much like the overall health and condition of **F1, F2, F3 and F4** have done.

I have included selected photos taken by myself of the row of **F1, F2, F3 and F4** within the final pages of this report.

I have also included selected screenshots of the Architectural Plans and the Shadow Diagrams from the School of Life and Environmental Sciences at the University of Sydney documents to provide further information from pages 24 onwards.

The whole photo album of 74 photos of **F1, F2, F3 and F4** is available to download here-

https://share.icloud.com/photos/0eaIawDcdWB0ySUUCEKYntMXQ

Please note that this iCloud photo link will expire on August 8th 2024.

Regards

D. Gowenlock

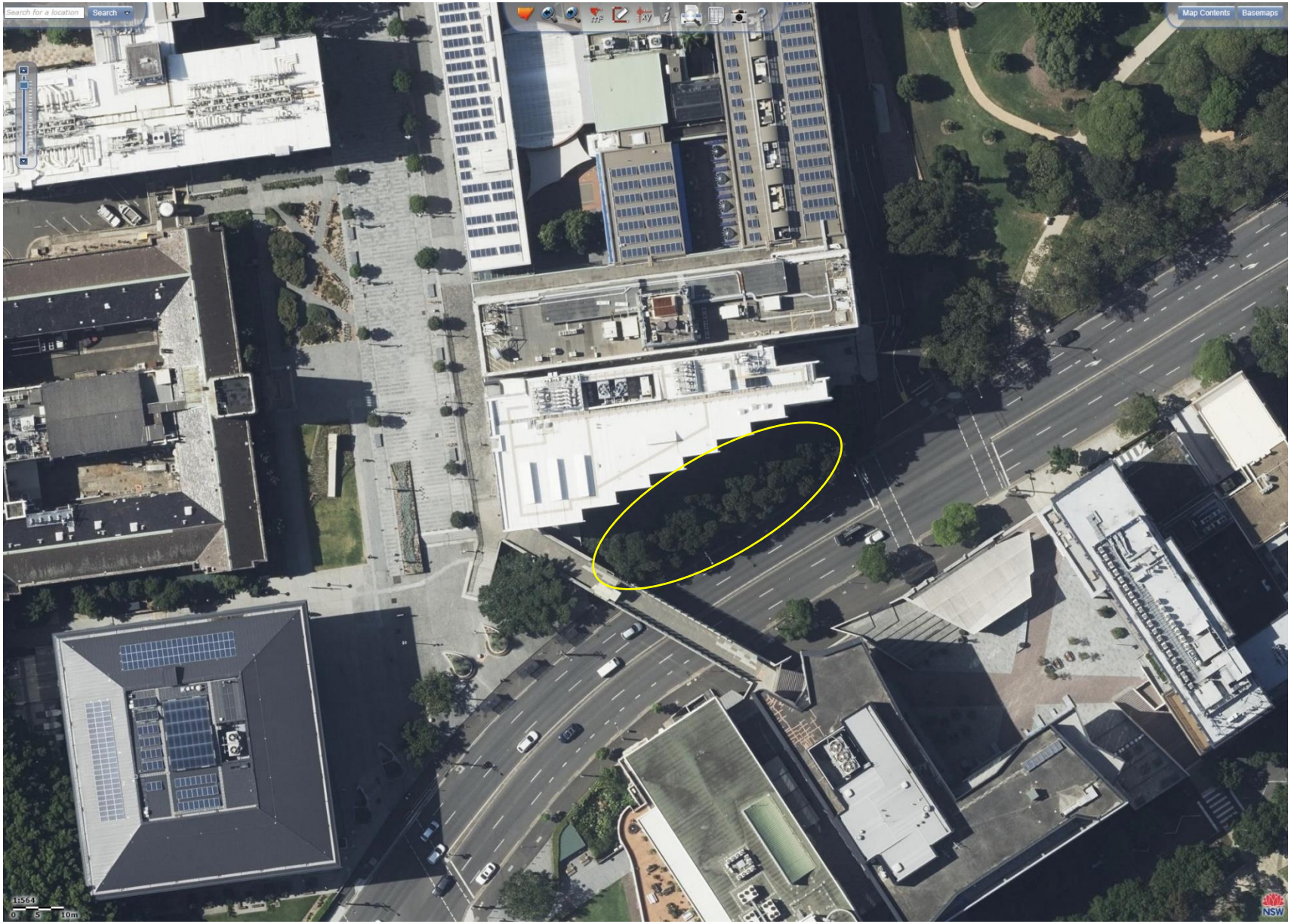
David Gowenlock

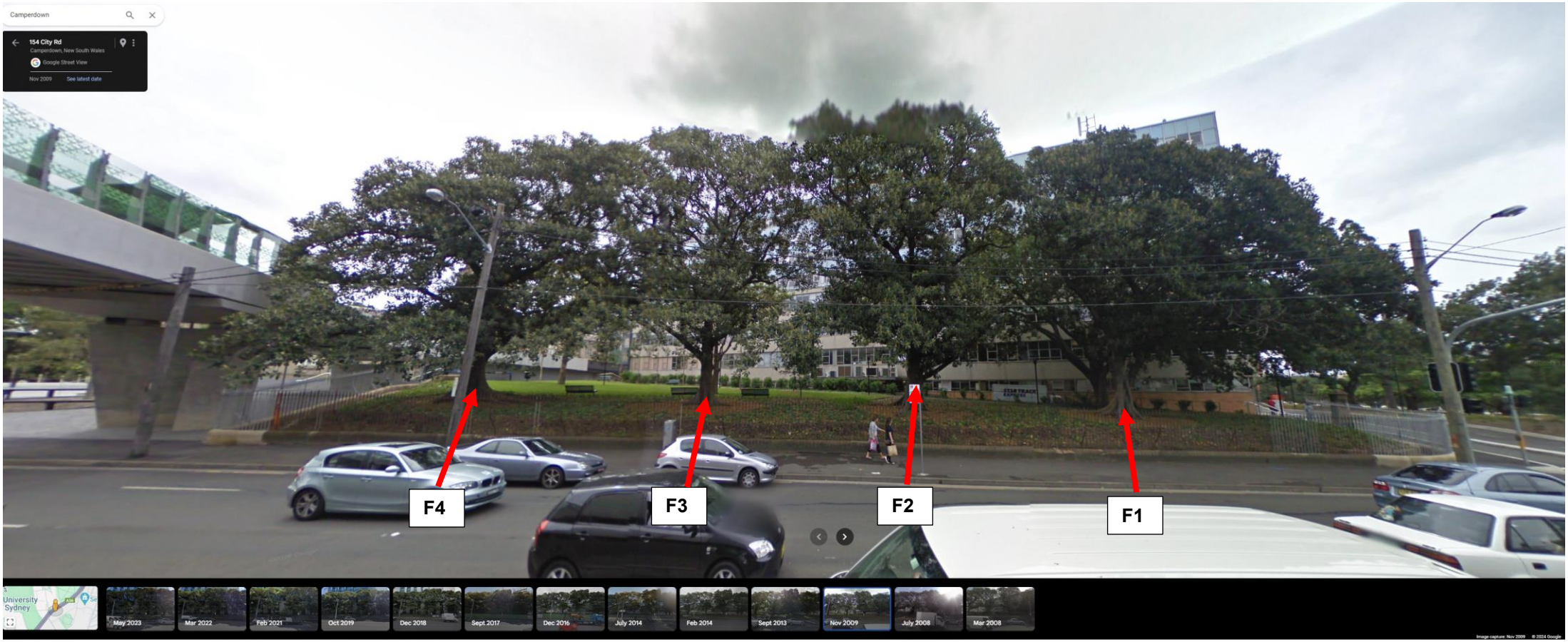
Diploma of Arboriculture AQF5
Diploma of Conservation and Land Management AQF5
TRAQ (International Society of Arboriculture – Tree Risk Assessment Qualification)
VALID Tree Risk Assessment Qualified
AQF2 + AQF3 Arboriculture

Trees **F1, F2, F3 and F4** in 1943 appear mature-

Large building (Carslaw Building) built to the north of the trees prior to 1971

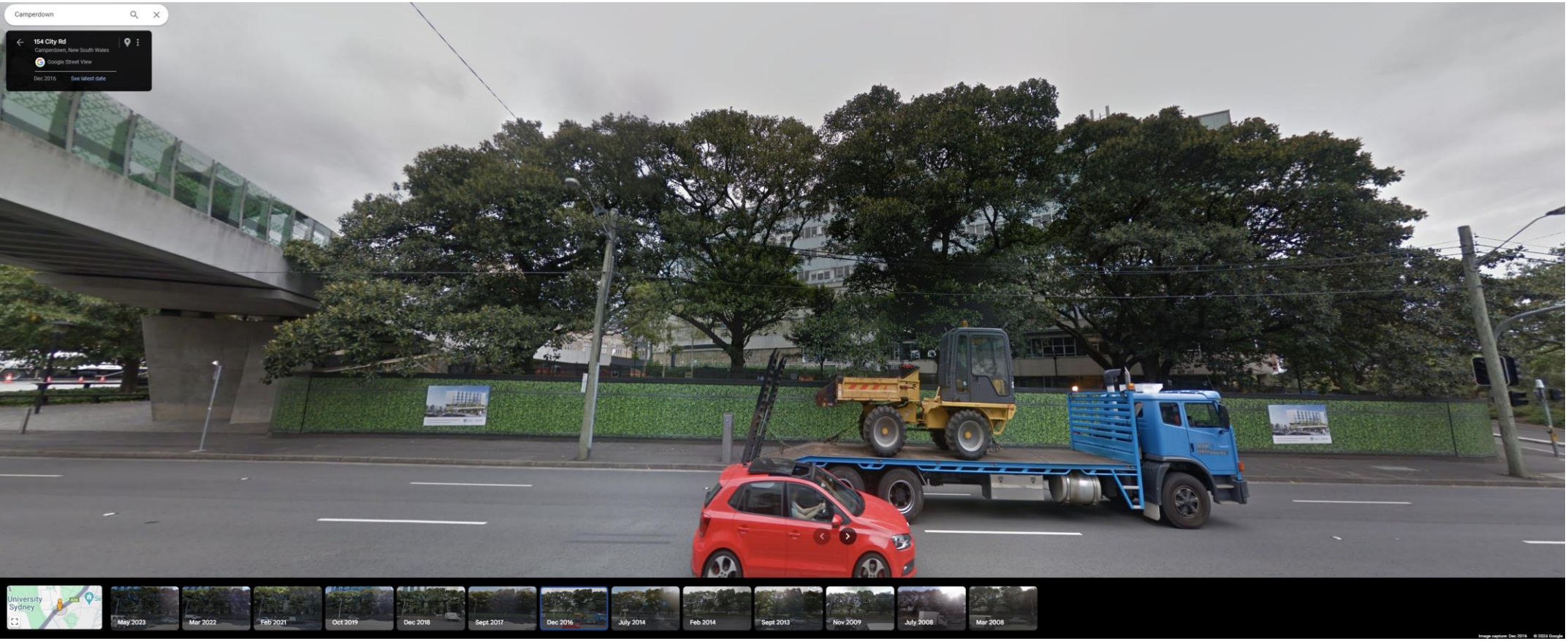
This image most recent satellite image with the row of F1, F2, F3 and F4 circled- massive new construction (built 2016-2017) with large amount of shadowing to the north and west



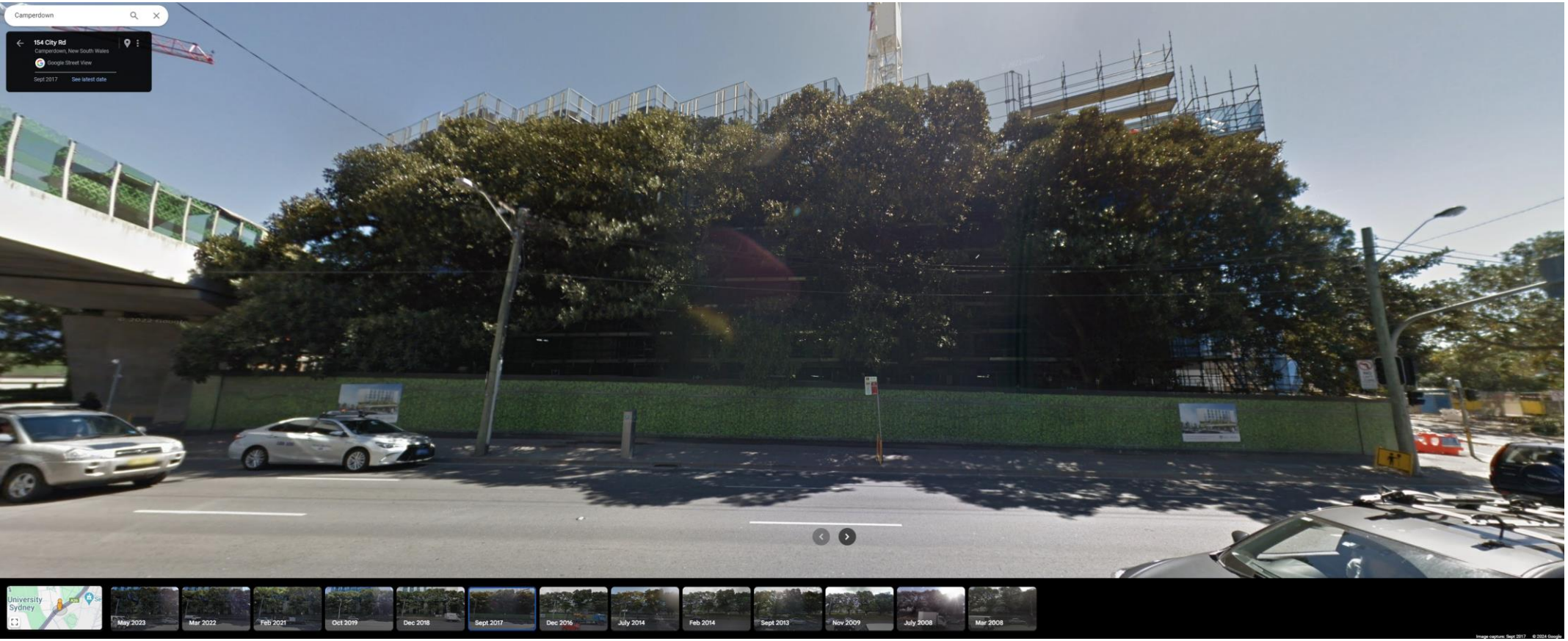


November 2009- Morton Bay Fig trees (**F1, F2, F3 and F4**) in fair to good health (similar health to **T6** at 2-4 Gladstone Ave, 357-363 Crown St, Wollongong)

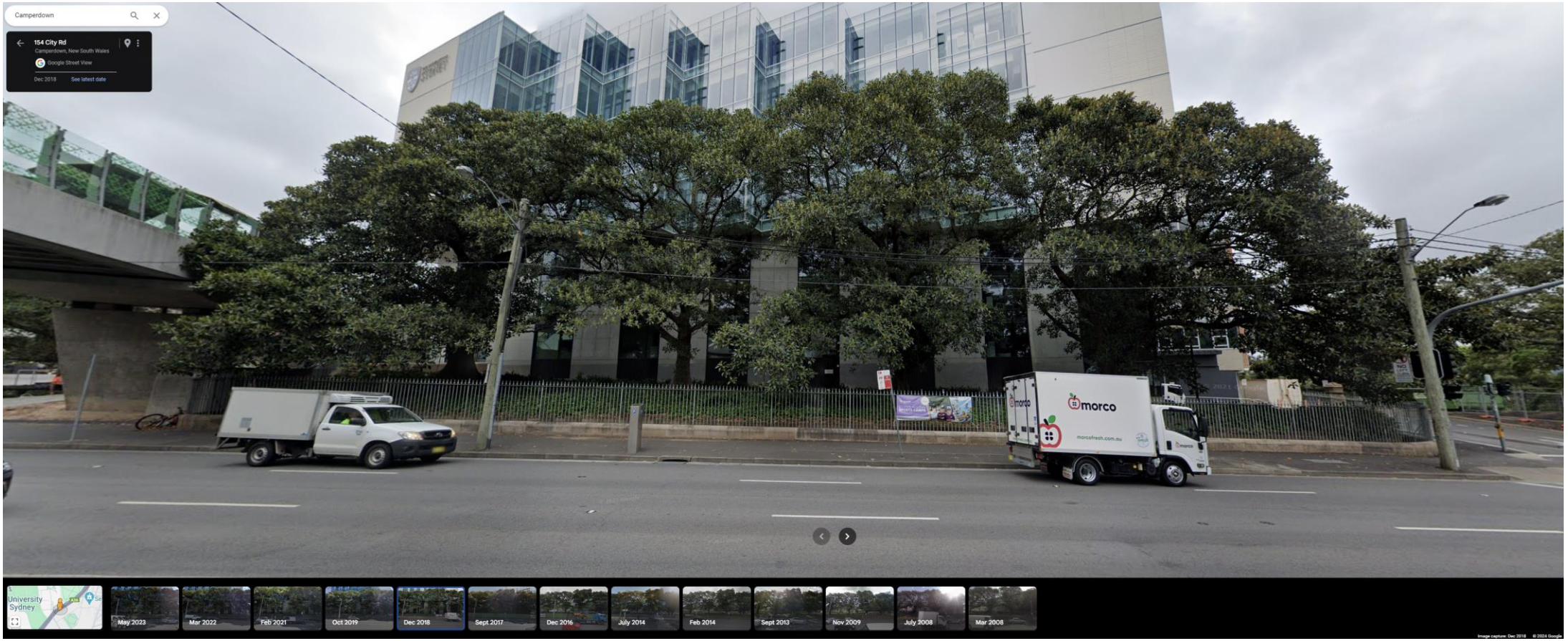
Feb 2014- similar health and condition as 5 years prior



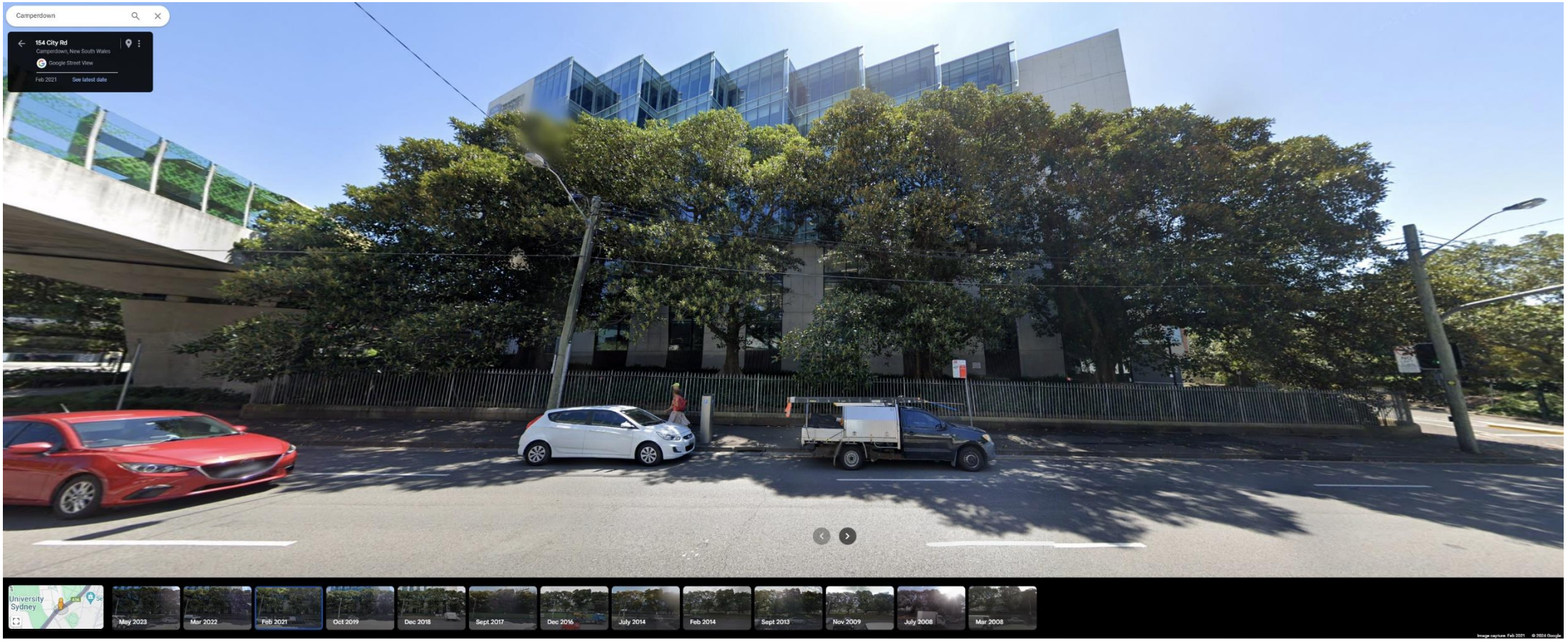
Dec 2016- similar health and condition as prior- Construction appears imminent



Sept 2016- health appears better, glossier leaves, deeper green, construction has started

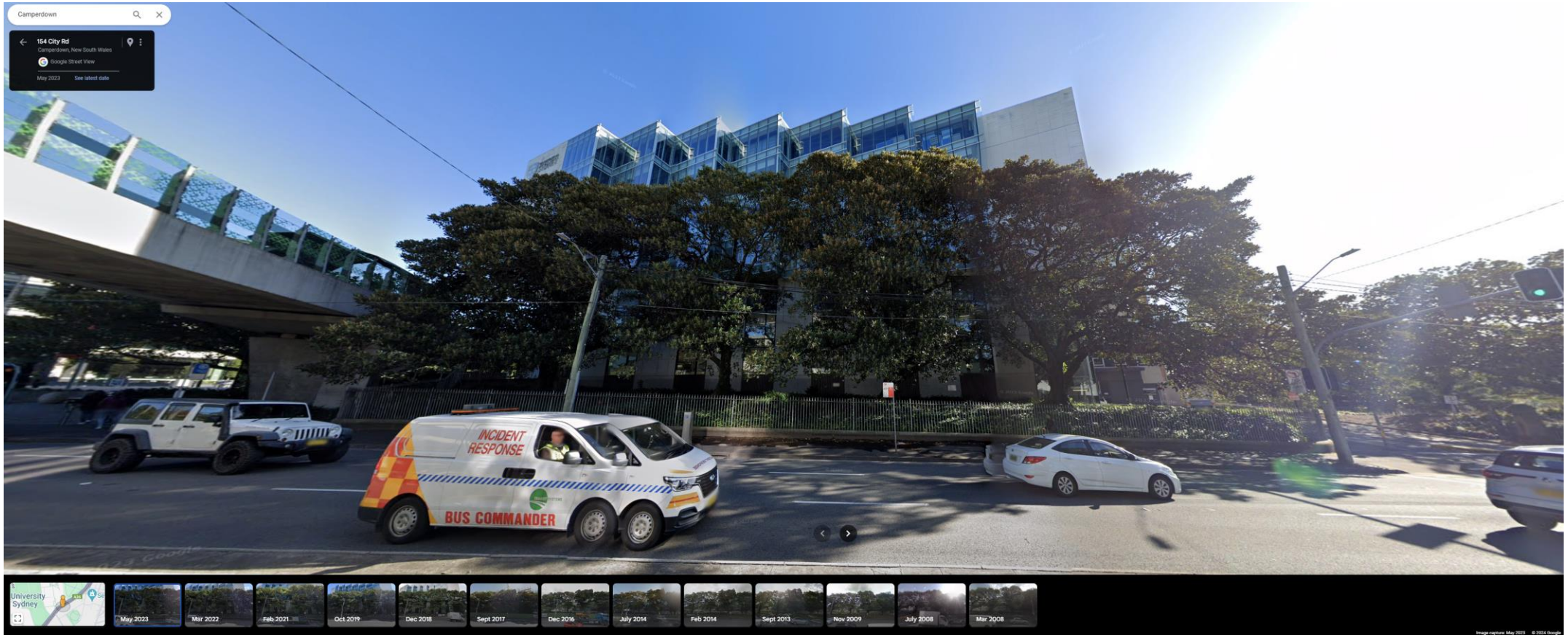


Dec 2018- health appears consistent, construction has finished



Feb 2021- health appears consistent, trees in great condition

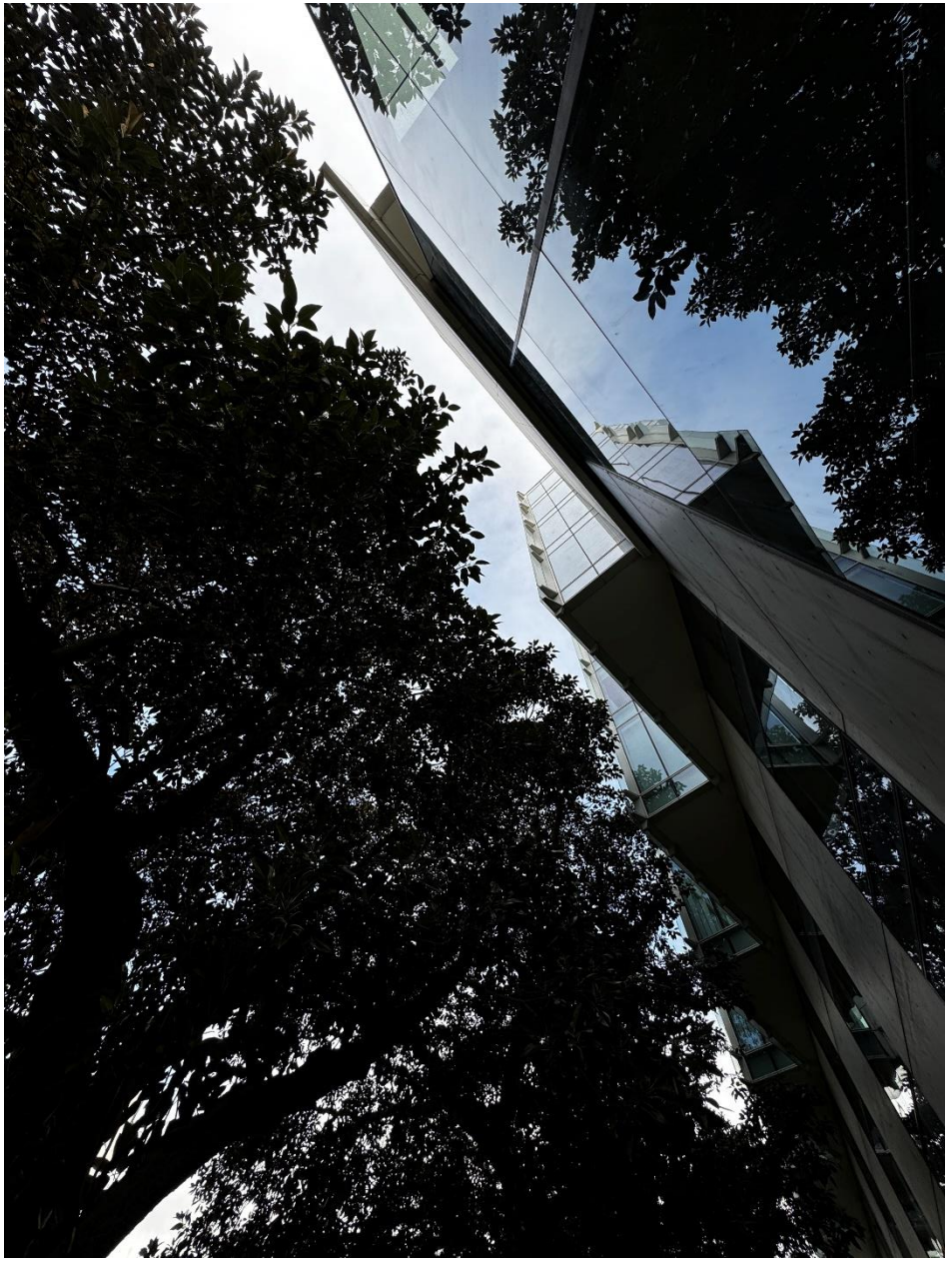
Mar 2022- health appears consistent, trees in great condition

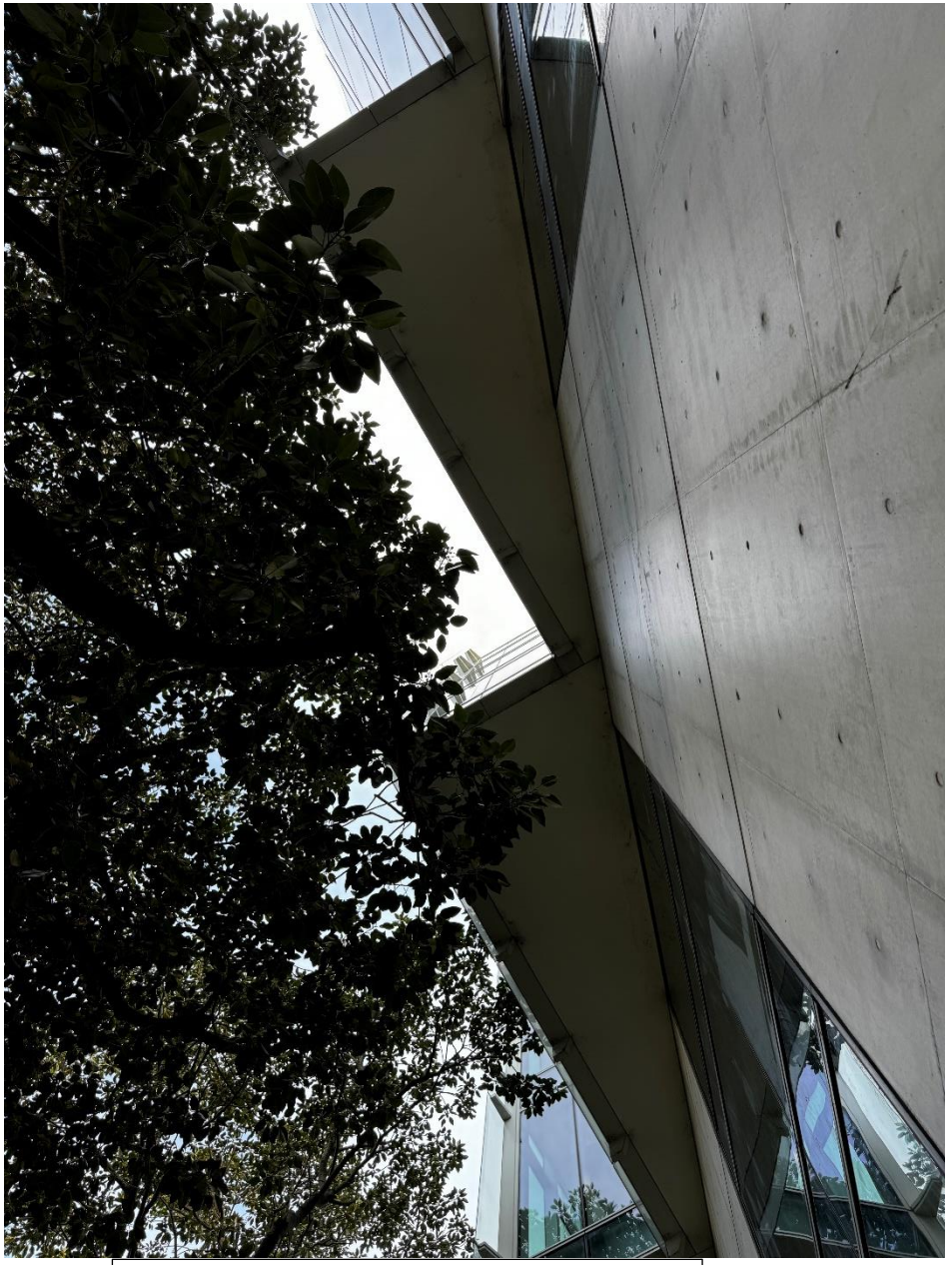


May 2023- health appears even better with lots of new growth over all the canopy, trees in great condition

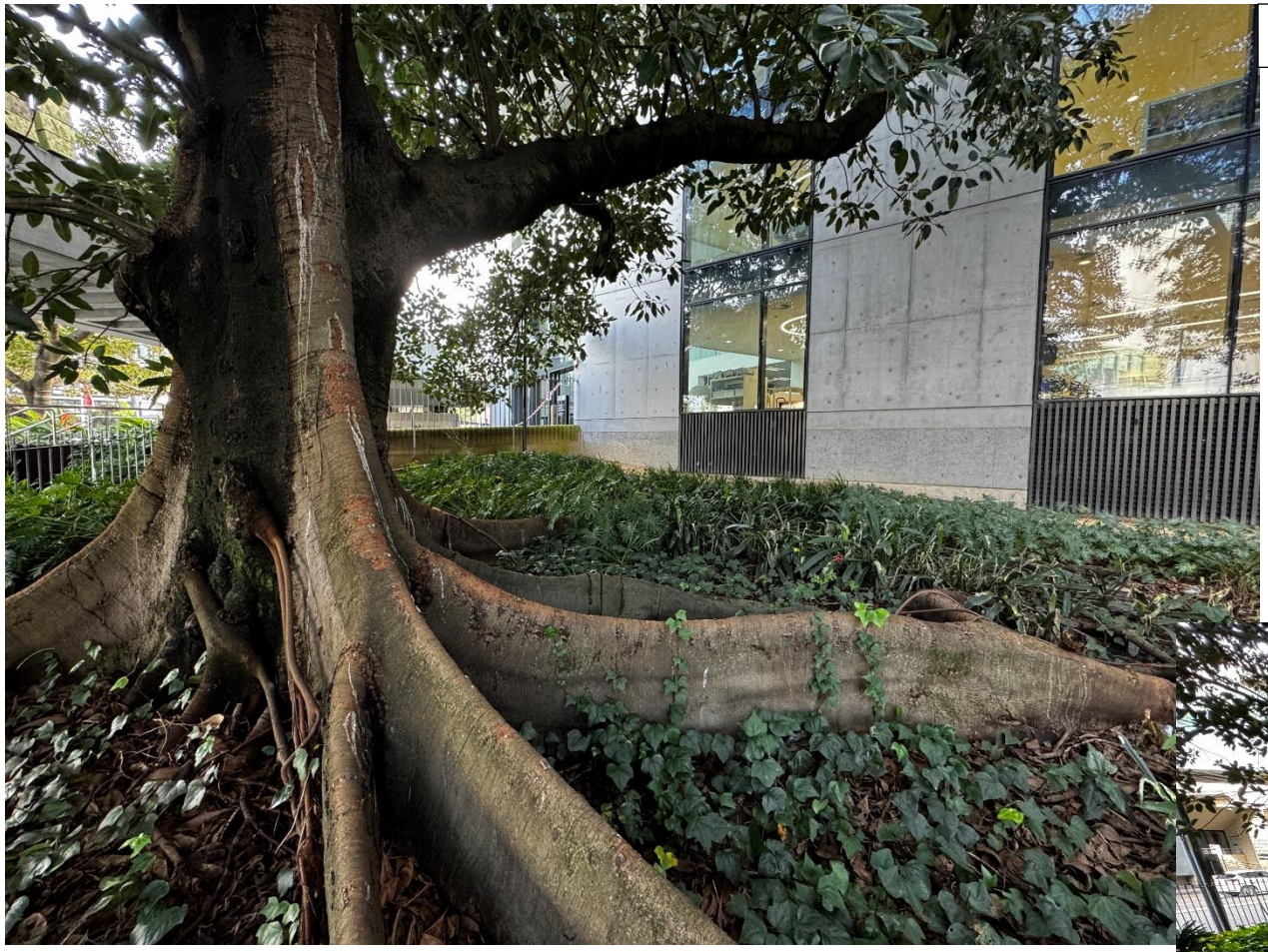
All photos below were taken by David Gowenlock on 05.07.2024 at between 11am till midday

F1, F2, F3 and F4 health appears excellent with lots of new growth over all the canopy, trees in great condition





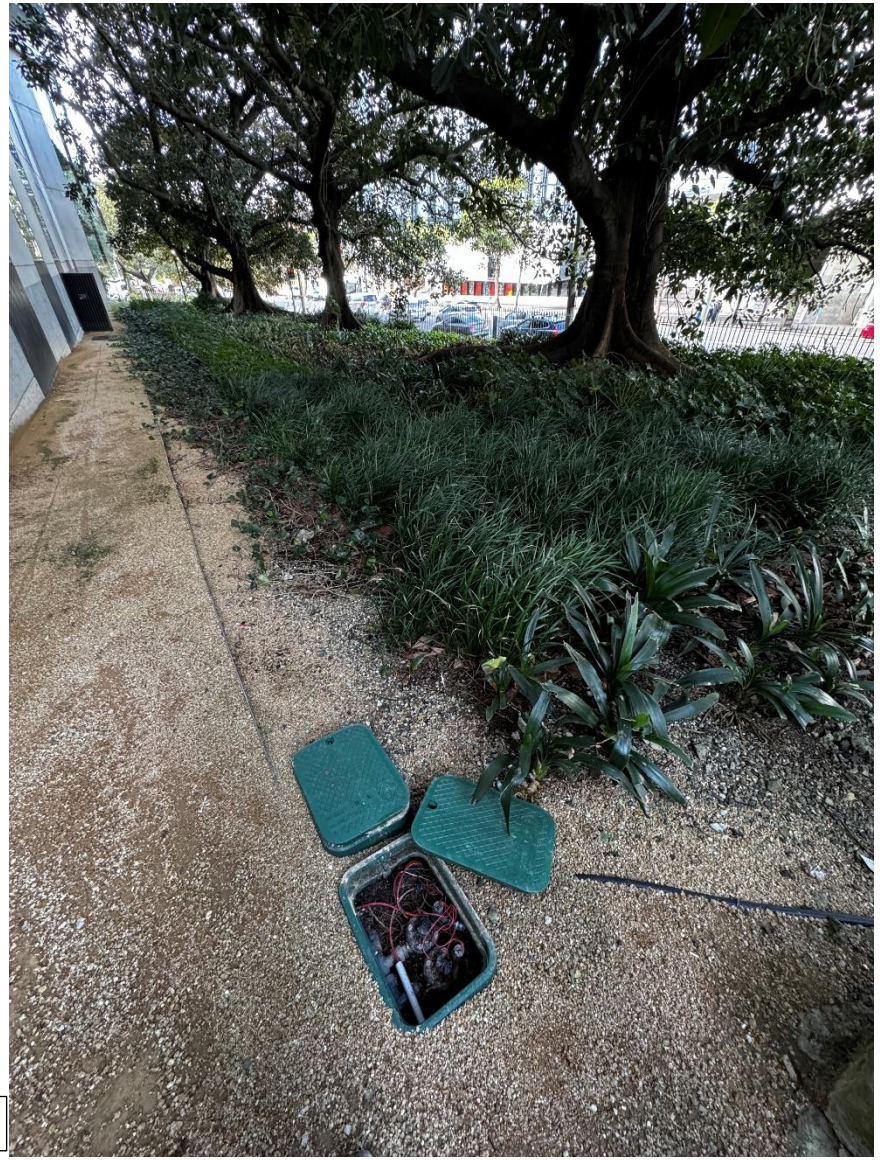
Significant canopy pruning of **F1, F2, F3 and F4 has occurred to accommodate the development**



The most western tree of **F1, F2, F3 and F4**

Decomposed gravel was used as a permeable path solution

Note that extensive drip irrigation has been installed, plus mulched, and then Ivy and other low plantings growing on ground as a natural mulch product



Drip irrigation solenoids for regular watering

The amount of overshadowing is massive here.

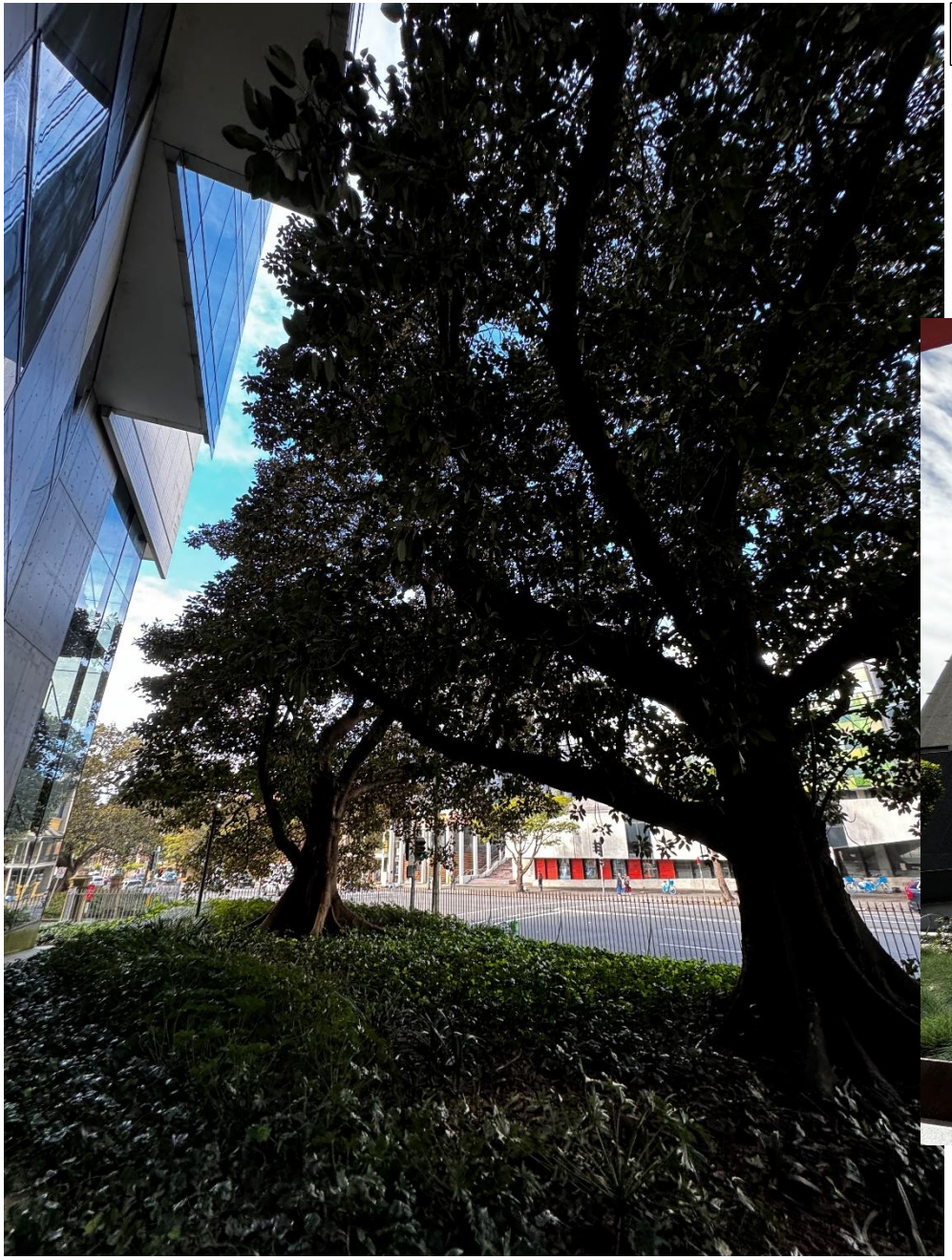
The most western tree of **F1, F2, F3 and F4, this photo taken as standing from the west of the tree**

The amount of overshadowing is massive here.

The most western tree of **F1, F2, F3 and F4, this photo taken as standing from the west of the tree**

The amount of overshadowing is massive from the northern development.

The most western tree of **F1, F2, F3 and F4, this photo taken as standing from due west of the tree**



Health of the trees is excellent.

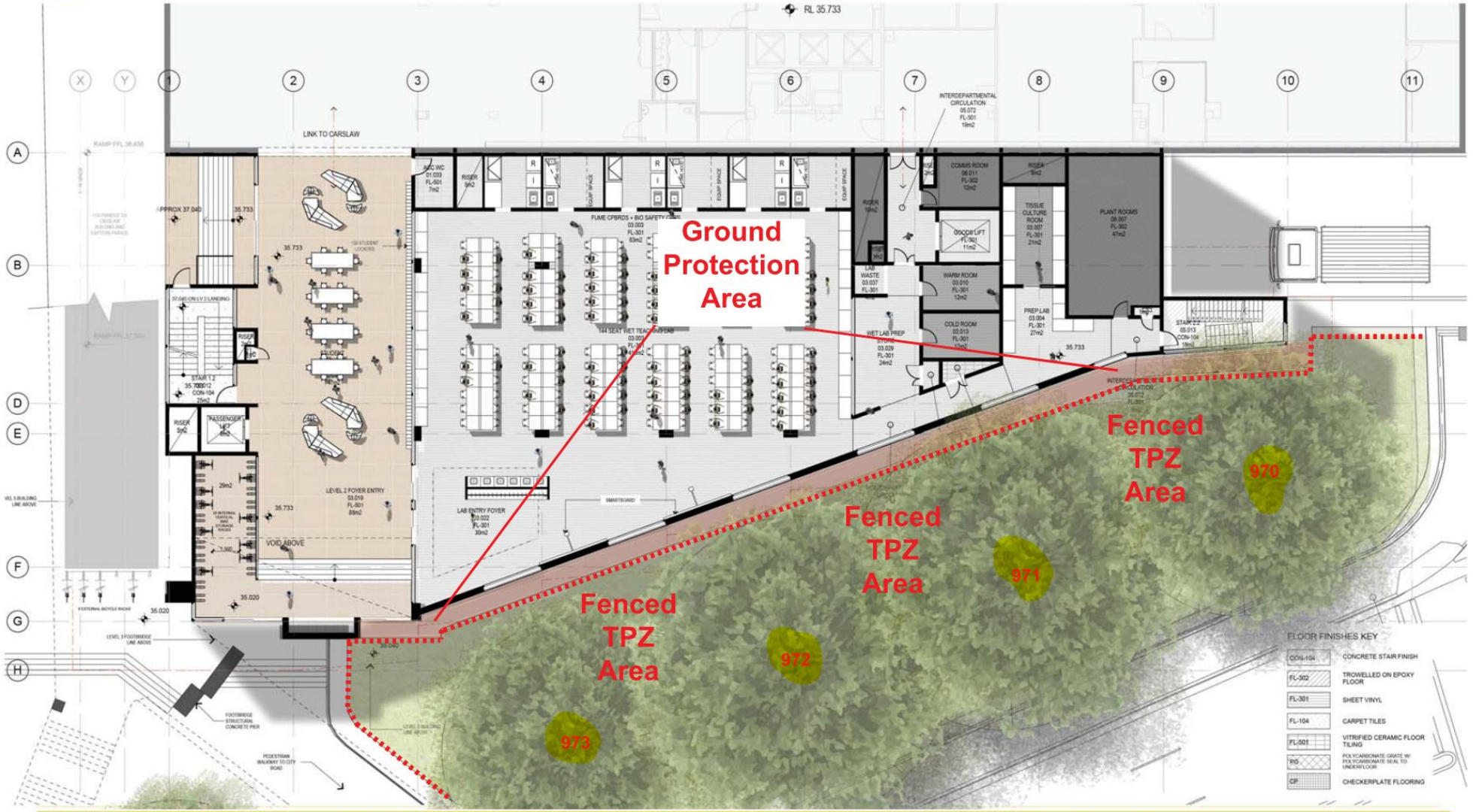
This single Fig here is much more recently planted and considered to be semi mature

The most western tree of **F1, F2, F3 and F4, this photo taken as standing from due west of the tree.**

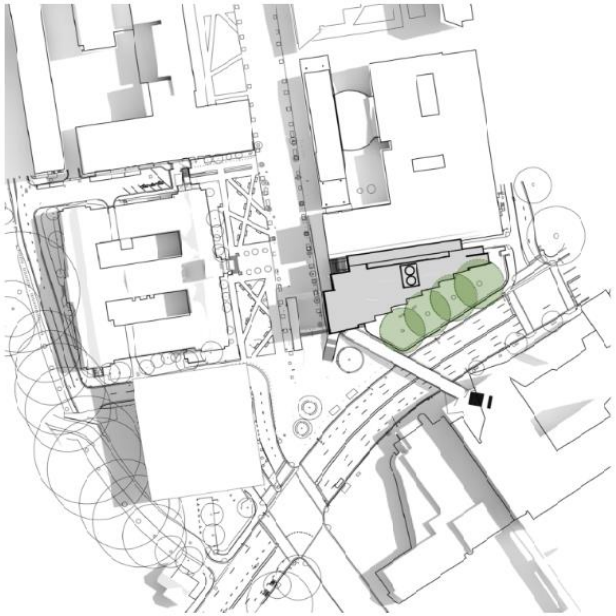
The most western tree of **F1, F2, F3 and F4, this photo taken as standing from due west of the tree underneath the pedestrian overpass**

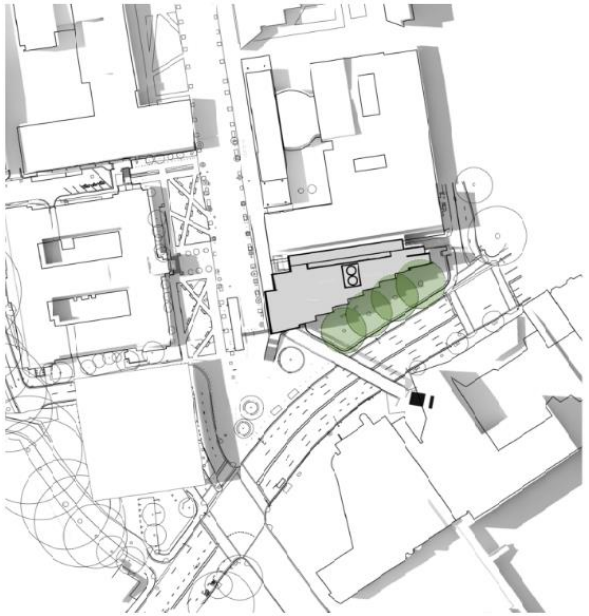
EXISTING CARSLAW BUILDING
EX CARSLAW BASEMENT SUBSTATION (TO BE DECOMISSIONED)
EX CARSLAW BASEMENT SWITCH
REGIONAL SWITCHROOM
LOADING BAY RAMP
LOADING DOCK
GAS MANIFOLD
STORES MANAGER OFFICE
GOODS LIFT
DILUTION TANK
STAIR 1.1
CORRIDOR
PASSENGER LIFT
LIQUID N2 CRYO DECANT + STORE
CHEM MIXED CLASS
CHEM CLASS
COMMS ROOM
SWITCH ROOM
CLEANER
BIOBARS VENDING MACHINES
X-RAY CRYSTALLOGRAPHY LAB
NMR
CENTRAL GLASS WASH-UP + DECONTAMINATION
GLASSWASH/ DECONTAMINATION STORE + PICKUP
STORE - SECURE
WASTE - CHEM MIXED CLASS
RADIOACTIVE STORE
WASTE - RECYCLING
WASTE - GENERAL
WASTE - CLINICAL
GAS BOTTLE STORAGE + WASTE
FIRE PUMP + DOM WATER PUMP ROOM
SPRINKLER VALVE ROOM
BULK FREEZER ROOM (MINUS 80 DEG)
TOILET - PUBLIC, MALE
TOILET - PUBLIC, FEMALE
ACCESSIBLE WC
STAFF WC - M
STAFF WC - F
ELEC CUPBOARD
FHR
GENERATOR
DIESEL TANK UNDER
TPZ 12.0 m
SRZ 3.4 m
970
F1
TPZ 13.2 m
SRZ 3.5 m
971
F2
TPZ 9.6 m
SRZ 3.1 m
972
F3
TPZ 13.8 m
SRZ 3.6 m
973
F4
BOUNDARY
CITY ROAD
COLOUR FILL LEGEND
AMENITIES
CIRCULATION
LABS
OFFICE
PLANT + RISERS
SERVICE SPACES
STORAGE
SUBSTATION + SWITCH
VERTICAL CIRCULATION
F ISSUED FOR DA GG 17.05.2016
RICHARD CROOKES CONSTRUCTIONS
THE UNIVERSITY OF SYDNEY
FDR RICE DAUBNEY
LEES1 BUILDING (F07)
THE UNIVERSITY OF SYDNEY
CITY ROAD, CAMPERDOWN
PLAN LEVEL 01
1 : 100 @ A1
GG
17.05.2016
DA01
F

THE UNIVERSITY OF SYDNEY



TREE PROTECTION PLAN





9:00 AM - 22 DECEMBER | 12:00 PM - 22 DECEMBER | 2:00 PM - 22 DECEMBER

A	ISSUE FOR DA	CC	14/04/16				

CONSULTANT

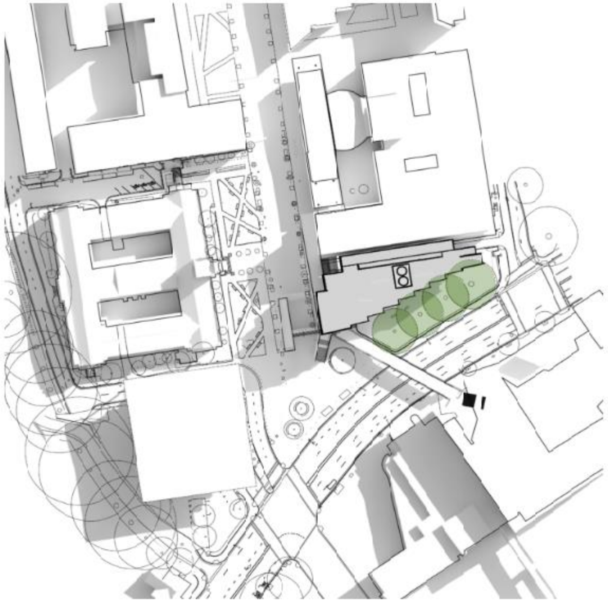
CLIENT
RICHARD CROOKES CONSTRUCTIONS
THE UNIVERSITY OF SYDNEY

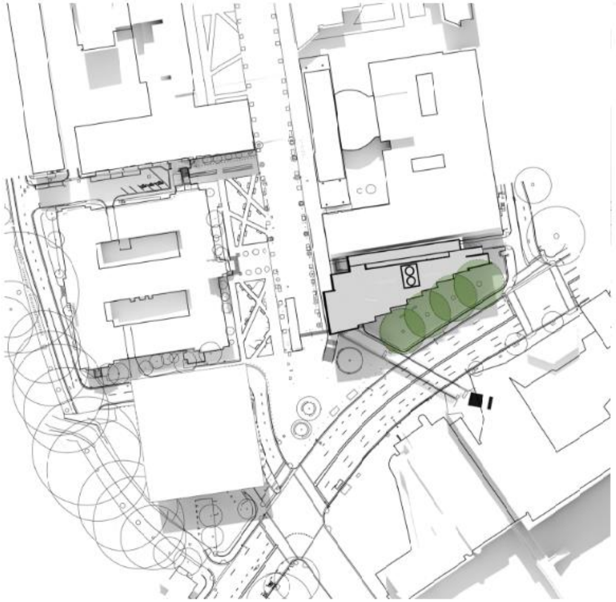
ARCHITECTS
HDR RICE DAUBNEY
Level 1, 153 Walker Street, North Sydney NSW 2060, Australia
+61 2 9956 2666 | hdrricedaubney.com.au | hdrinc.com
The Rice Daubney Group (NSW) P/L as trustee for The Rice Daubney Trading Trust
ABN 56 003 304 993

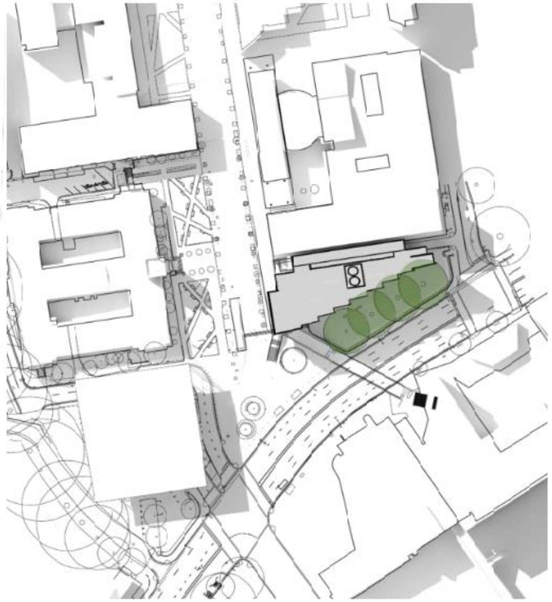
PROJECT
LEES 1 BUILDING (F07)
THE UNIVERSITY OF SYDNEY
CITY ROAD, SYDNEY

DRAWING TITLE
SHADOW DIAGRAMS
SUMMER SOLSTICE

SCALE	CHECKED	DATE
1:1000@ A1	AM	14/04/16
CONTRACT NUMBER	DRAWING NUMBER	ISSUE
	DA 19	A







9:00 AM - 21 MARCH | 12:00 PM - 21 MARCH | 2:00 PM - 21 MARCH

A	ISSUE FOR DA	CZ	14.04.16	

N

0 1m 5m A1

CONSULTANT

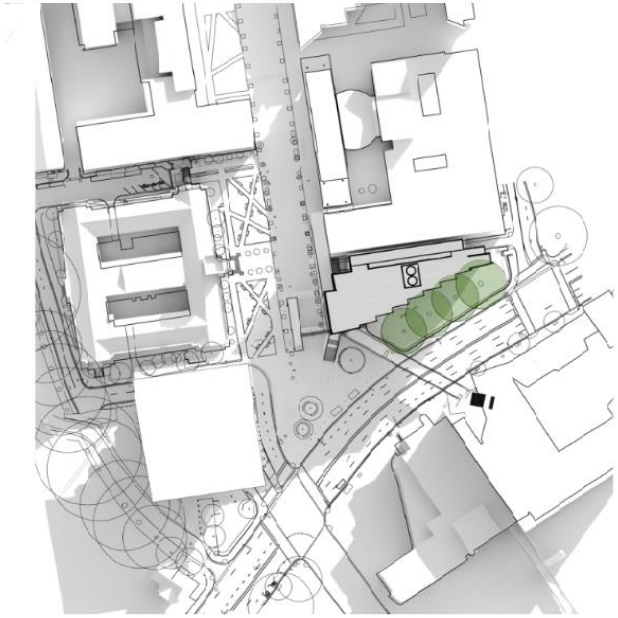
CLIENT
RICHARD CROOKES CONSTRUCTIONS
THE UNIVERSITY OF SYDNEY

ARCHITECTS
HDR RICE DAUBNEY
Level 1, 110 Walker Street, North Sydney NSW 2060, Australia
+61 2 9956 2666 | hdrricedaubney.com | hdrinc.com
The Rice Daubney Group (NSW) P/L as trustee for The Rice Daubney Trading Trust
ABN 56 080 304 993

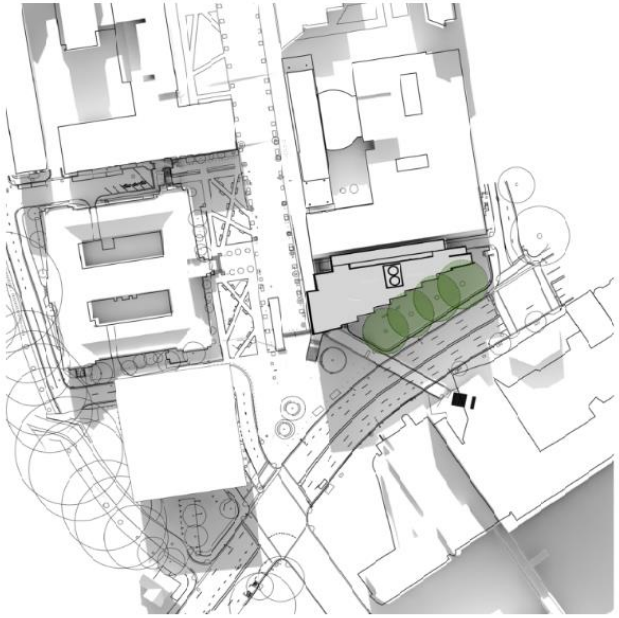
PROJECT
LEES 1 BUILDING (F07)
THE UNIVERSITY OF SYDNEY
CITY ROAD, SYDNEY

DRAWING TITLE
SHADOW DIAGRAMS
AUTUMN EQUINOX

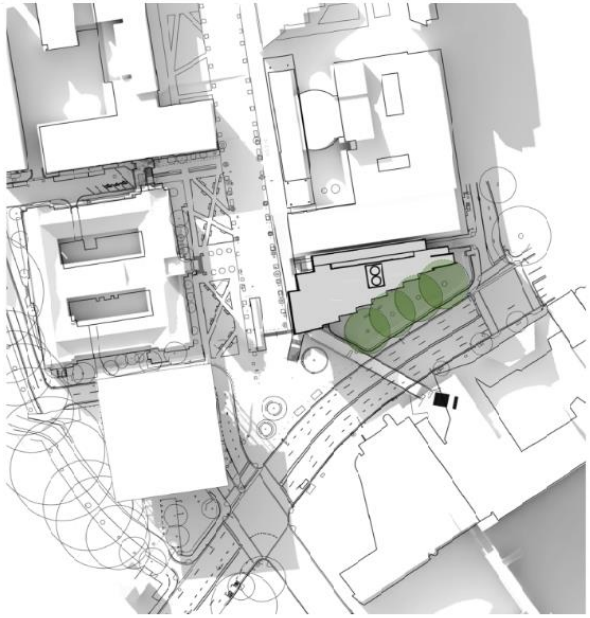
SCALE	CHECKED	DATE
1:1000@ A1	AM	14.04.16
CONTRACT NUMBER	DRAWING NUMBER	ISSUE
	DA 20	A



9:00 AM - 21 JUNE



12:00 PM - 21 JUNE



2:00 PM - 21 JUNE

A	ISSUE FOR DA	CZ	14/04/16					

CONSULTANT

CLIENT
RICHARD CROOKES CONSTRUCTIONS
THE UNIVERSITY OF SYDNEY

ARCHITECTS
HDR RICE DAUBNEY
Level 1, 153 Walker Street, North Sydney NSW 2060, Australia
(+61) 2 9956 2666 | hdrricedaubney.com.au | hdrinc.com
The Rice Daubney Group (NSW) P/L as trustee for The Rice Daubney Trading Trust
ABN 56 880 304 992

PROJECT
LEES 1 BUILDING (F07)
THE UNIVERSITY OF SYDNEY
CITY ROAD, SYDNEY

DRAWING TITLE
SHADOW DIAGRAMS
WINTER SOLSTICE

SCALE	CHECKED	DATE
1:1000@ A1	AM	14.04.16
CONTRACT NUMBER	DRAWING NUMBER	ISSUE
	DA 21	A

Plate 7: Showings Tree 970-971

From page 17 of the Arboricultural Impact Assessment + Tree Protection Specification (Tree IQ, Anna Hopwood + Martin Peacock) 11.04.2016

*** Please note tree ID numbers are the wrong way around here

Plate 8: Showing Tree 972-973

From page 17 of the Arboricultural Impact Assessment + Tree Protection Specification (Tree IQ, Anna Hopwood + Martin Peacock) 11.04.2016

*** Please note tree ID numbers are the wrong way around here