

**SYDNEY SOUTH-WEST
PRIVATE HOSPITAL
PROPOSED EXPANSION SCHEME
BIGGE STREET, LIVERPOOL**

***Traffic, Transport and Parking
Assessment Report***

September 2010

Reference 10096

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES
Transportation, Traffic and Design Consultants
Suite 502, Level 5
282 Victoria Avenue
CHATSWOOD 2067
Telephone (02) 9411 5660
Facsimile (02) 9904 6622
Email: tpa@tpa.com.au

TABLE OF CONTENTS

1. INTRODUCTION	1
2. PROPOSED DEVELOPMENT SCHEME	4
2.1 Site, Context and Existing Development	4
2.2 Approved Development	5
2.3 Proposed Development	5
3. ROAD NETWORK AND TRAFFIC CONDITIONS	7
3.1 Road Network	7
3.2 Traffic Controls	8
3.3 Traffic Conditions	9
3.4 Future Circumstances	11
4. TRANSPORT FACILITIES	13
4.1 Rail	13
4.2 Buses	14
4.3 Pedestrian and Cyclists	16
5. TRAFFIC	17
6. PARKING	19
7. ACCESS, INTERNAL CIRCULATION AND SERVICING	20
8. CONSTRUCTION TRAFFIC MANAGEMENT	22
9. RESPONSE TO DIRECTOR GENERAL'S REQUIREMENTS	23
10. CONCLUSION	25

APPENDIX A	APPROVED SCHEME
APPENDIX B	TRAFFIC ASSESSMENT FOR PUBLIC HOSPITAL
APPENDIX C	TRAFFIC SURVEY RESULTS

LIST OF ILLUSTRATIONS

FIGURE 1	LOCATION
FIGURE 2	SITE
FIGURE 3	ROAD NETWORK
FIGURE 4	TRAFFIC CONTROLS
FIGURE 5	PUBLIC PARKING PROVISIONS
FIGURE 6	PEAK TRAFFIC FLOWS
FIGURE 7	EXISTING BUS SERVICES

1. INTRODUCTION

This report has been prepared to accompany a Part 3A Concept Plan Application to the Department of Planning for the proposed expansion of the existing Sydney South-West Private Hospital (SSWP) at Liverpool (Figure 1).

The existing SSWP Hospital is located in the north-eastern sector of Liverpool CBD adjacent to the public hospital complex within the Liverpool Medical Precinct. The existing hospital contains 84 beds, 24 recovery beds and 5 theatres with consulting suites and 70 parking spaces. The proposal is to construct a new connected building on the adjoining vacant land which will contain:

- * 55 beds (25 mental health)
- * 3 theatres
- * 793m² consulting rooms
- * 34 parking spaces.

A PEA was submitted to the Department and the Director General's Requirements in relation to Transport and Traffic are reproduced in the following:

4. Transport and Accessibility Impacts (Construction and Operational)

- *Provide a Transport and Accessibility Study prepared with reference to the Metropolitan Transport Plan – Connecting the City of Cities, the NSW State Plan, the NSW Planning Guidelines for Walking and Cycling, the Integrated Landuse and Transport policy package, the NSW Bike Plan and the RTA's Guide to Traffic Generating Development, considering the following:*
 - *Demonstrate how users of the development will be able to make travel choices that support the achievement of relevant State Plan targets;*
 - *Detail the existing pedestrian and cycle movements within the vicinity of the site and determine the adequacy of the proposal to meet the likely*

future demand for increased public transport and pedestrian and cycle access;

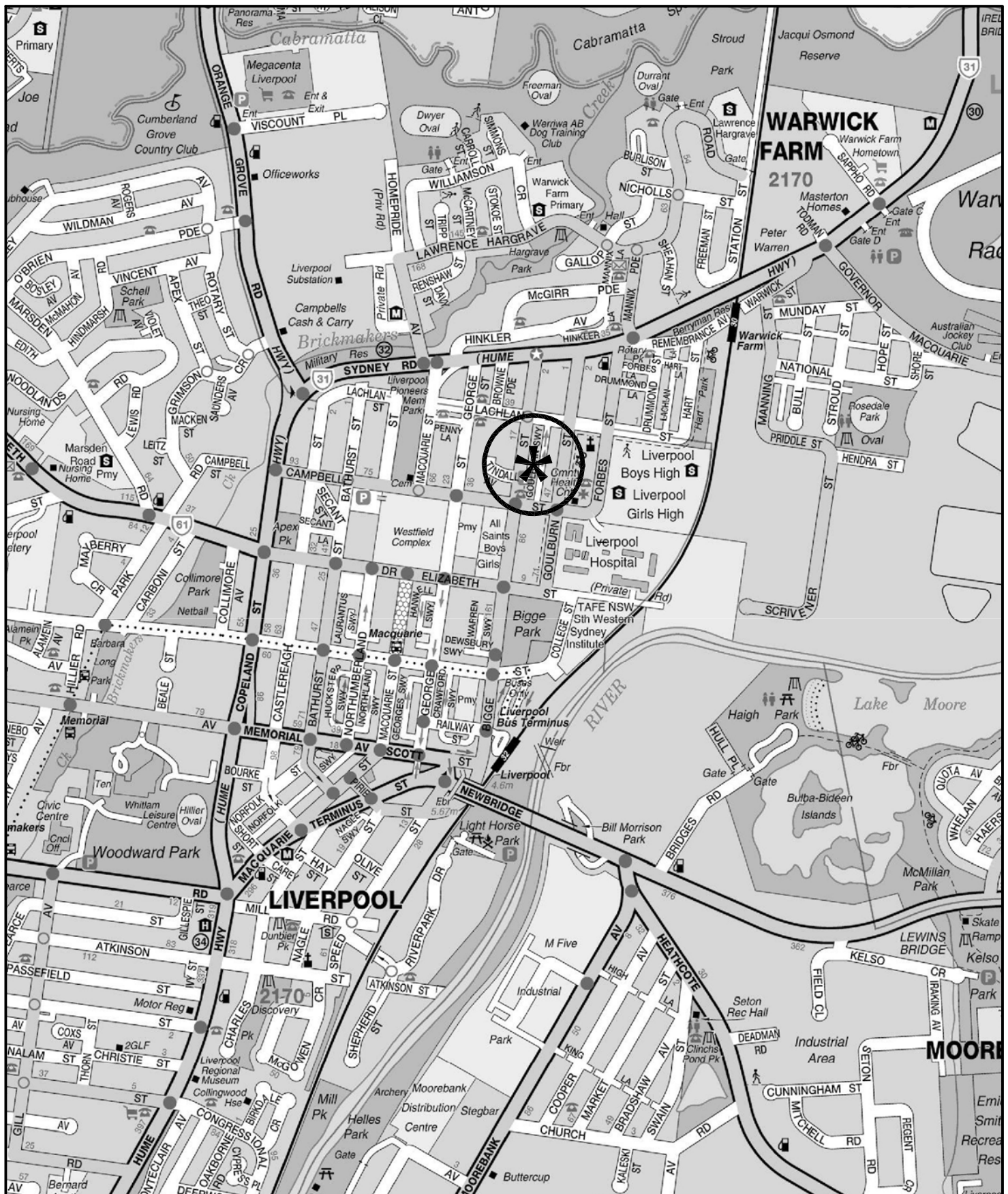
- *Identify potential traffic impacts during the construction stage of the project, and measures to mitigate these impacts'*
- *The implications of the proposed development on non-car travel modes (including public transport use, walking and cycling) and the provision of facilities to increase the non-car mode share for travel to and from the subject site. This will entail an assessment of the accessibility of the development site by public transport;*
- *Describe the measures to be implemented to promote sustainable means of transport including public transport usage and pedestrian and bicycle linkages in addition to addressing the potential for implementing a location specific sustainable travel plan;*
- *Daily and peak traffic movements likely to be generated by the proposed development, including the impact on nearby intersections and the need/ associated funding for upgrading or road improvement works (if required). The traffic impact assessment should consider base models with future traffic generated by the Sydney Southwest Private Hospital;*
- *Details of the proposed access, parking provisions and service vehicle movements (vehicle types, likely arrival and departure times) associated with the proposed development, demonstrating compliance with the requirement of the relevant Australian Standards and other local plans and policies;*
- *Demonstrate a minimalist approach to carparking for the proposed development having regard to the high public transport accessibility of the site, opportunities for car sharing, local planning controls and RTA guidelines (note: the Department supports reduced parking provisions, if adequate public transport is available to access the site).*

The purpose of this report is to:

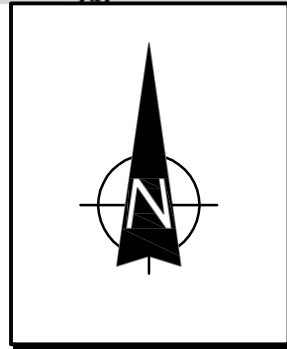
- * describe the site, the existing hospital development and the proposed development scheme

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

- * describe the road network serving the site, the prevailing traffic conditions and the public transport services available
- * assess the adequacy of the proposed parking provision
- * assess the potential traffic implications
- * assess the suitability of the proposed access, internal circulation and servicing arrangements
- * address the transport and traffic related matters contained in the Director General's Requirement.



LEGEND



LOCATION

FIG 1

2. PROPOSED DEVELOPMENT SCHEME

2.1 SITE, CONTEXT AND EXISTING DEVELOPMENT

The site (Figure 2) is a large rectangular shaped allotment occupying a total area of approximately 8,600m² with frontages of some 145 metres to Bigge Street and Goulburn Serviceway between Campbell Street and Lachlan Street. The site is a consolidation of the existing hospital (Lot 100 DP 87361) and the adjacent vacant lot (Lot 112 DP 105982).

The existing hospital (6,150m²) comprises:

Ground Level (1,484m²)

- Admission and administration/records
- Kitchen, linen, amenities
- 10 bed ward
- IN/OUT patient treatment 7 cubicles

Level 1 (3,092m²)

- 5 theatres
- 24 recovery beds
- 20 beds
- 3 procedure rooms
- CSSD, ICU and HDC

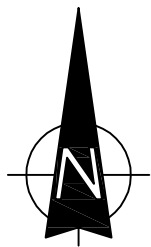
Level 2 (1,940m²)

- 50 beds
- 2 birthing rooms and nursery

Staff	Full-time	101
	Part-time	74
	Casual	62
	Eq full-time	233



LEGEND



SITE

FIG 2

There are a total of 70 spaces provided with 55 spaces in the existing basement carpark and 15 spaces in the open area on the southern part of the site. The carparking areas have vehicle accesses as located to both Bigge Street and Goulburn Serviceway. There is a large dedicated loading dock facility and an ambulance bay with access on Goulburn Serviceway.

2.2 APPROVED DEVELOPMENT

Development Consent (DA № 998/04) has been granted for the construction of a new commercial building on the vacant site for use as 'medical offices'. The approved scheme involves an 8 level building with 10,000m² GFA over basement carparking (103 spaces). The development scheme had a porte-cochere access on the Bigge Street frontage and a carpark access on Goulburn Serviceway. Details of the proposed development are provided in Appendix A.

2.3 PROPOSED DEVELOPMENT

The proposed development scheme involves excavation of the northern part of the site to provide for basement carparking. A new four-level building will be constructed on this northern part connecting into the existing building and 2 existing beds will be lost as a result of this connection.

The new building will comprise:

Level 1 (1,334m ²)	3 theatres 90m ² consulting suites
Level 2 (1,200m ²)	30 bed ward
Level 3 (1,186m ²)	25 bed ward (mental health)
Level 4 (1,156m ²)	703m ² consulting suites

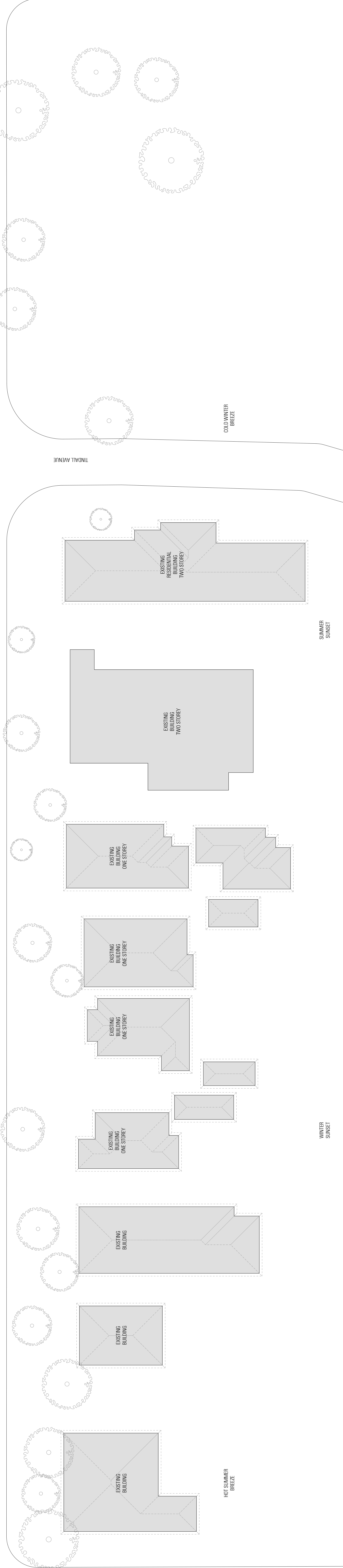
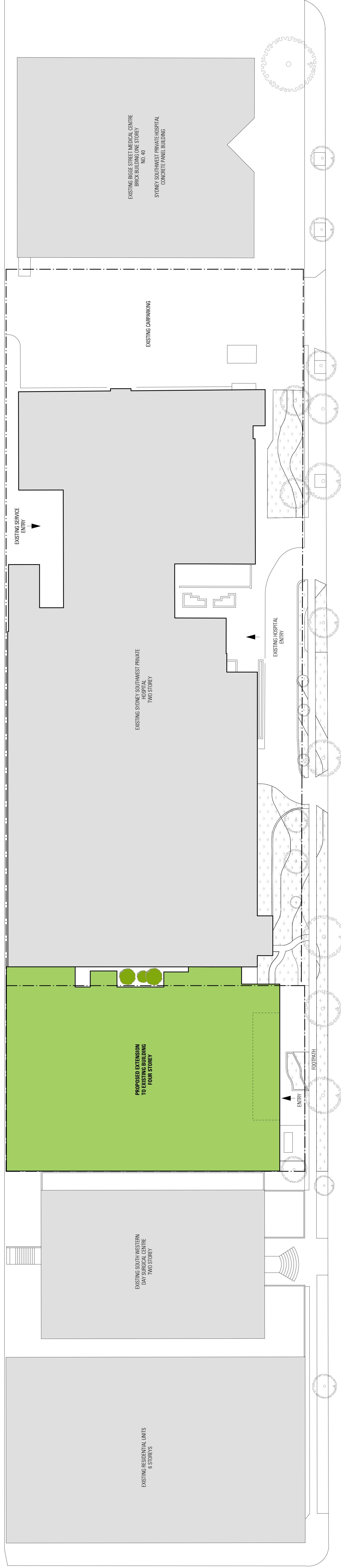
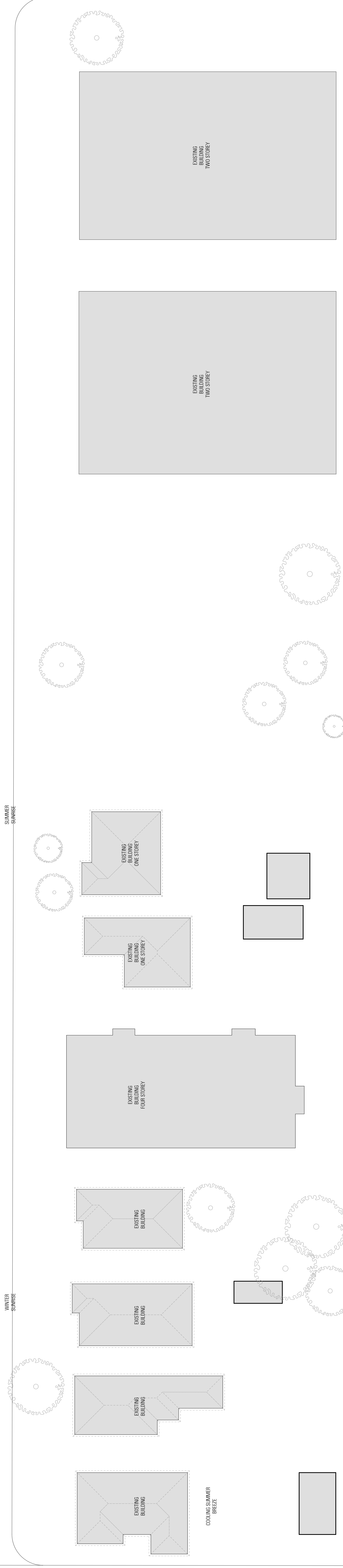
There will be a total of 137 beds and 24 recovery beds in the extended hospital while the staff will comprise:

Full-time	157
Part-time	100
Casual	83
Eq full-time	261

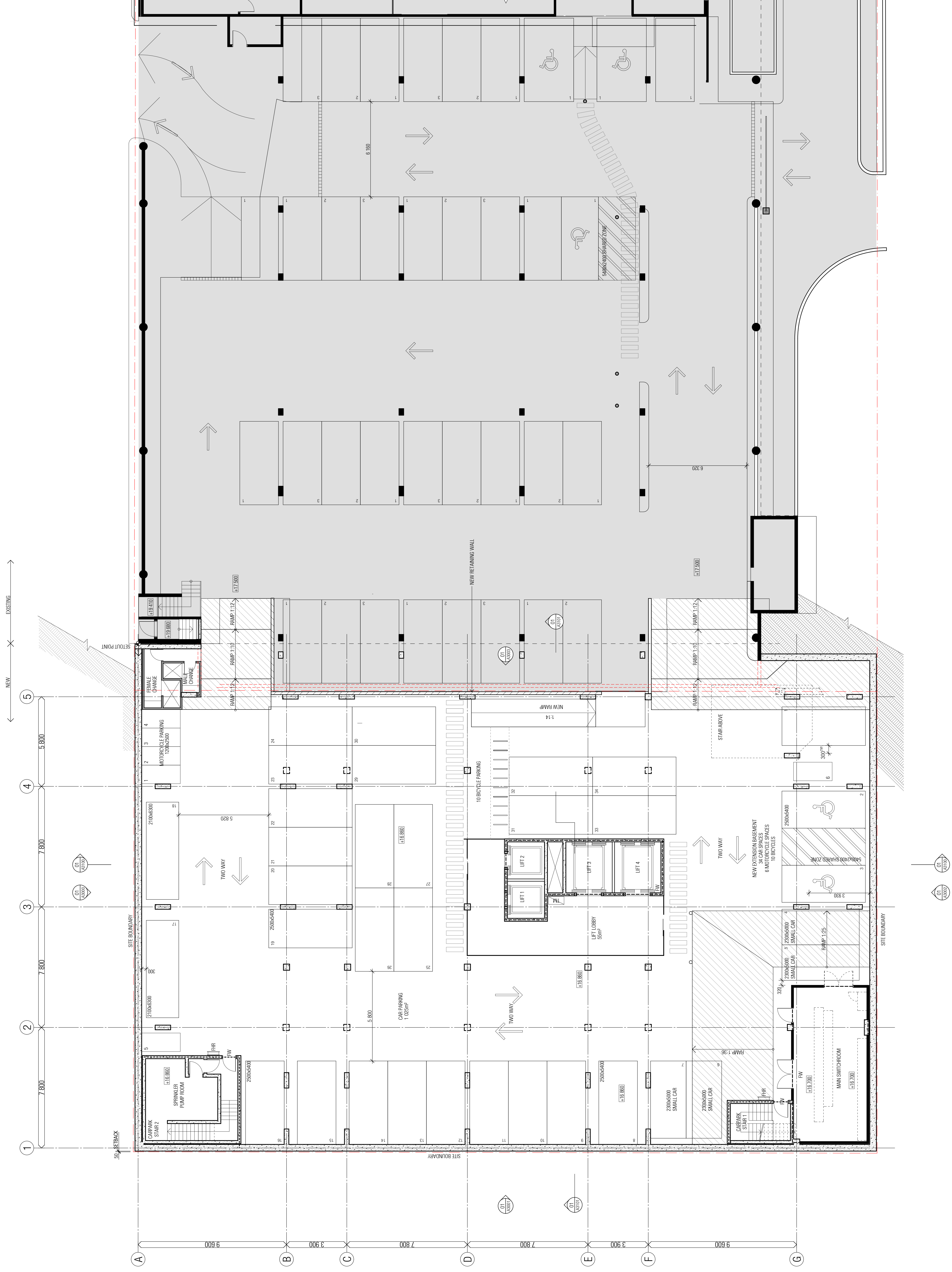
Proposed Carparking 109 spaces (46 existing undercover, 34 new basement and 29 in existing south carpark)

The new basement carparking will connect into the existing basement carpark and utilise the existing access connections on Bigge Street and Goulburn Serviceway.

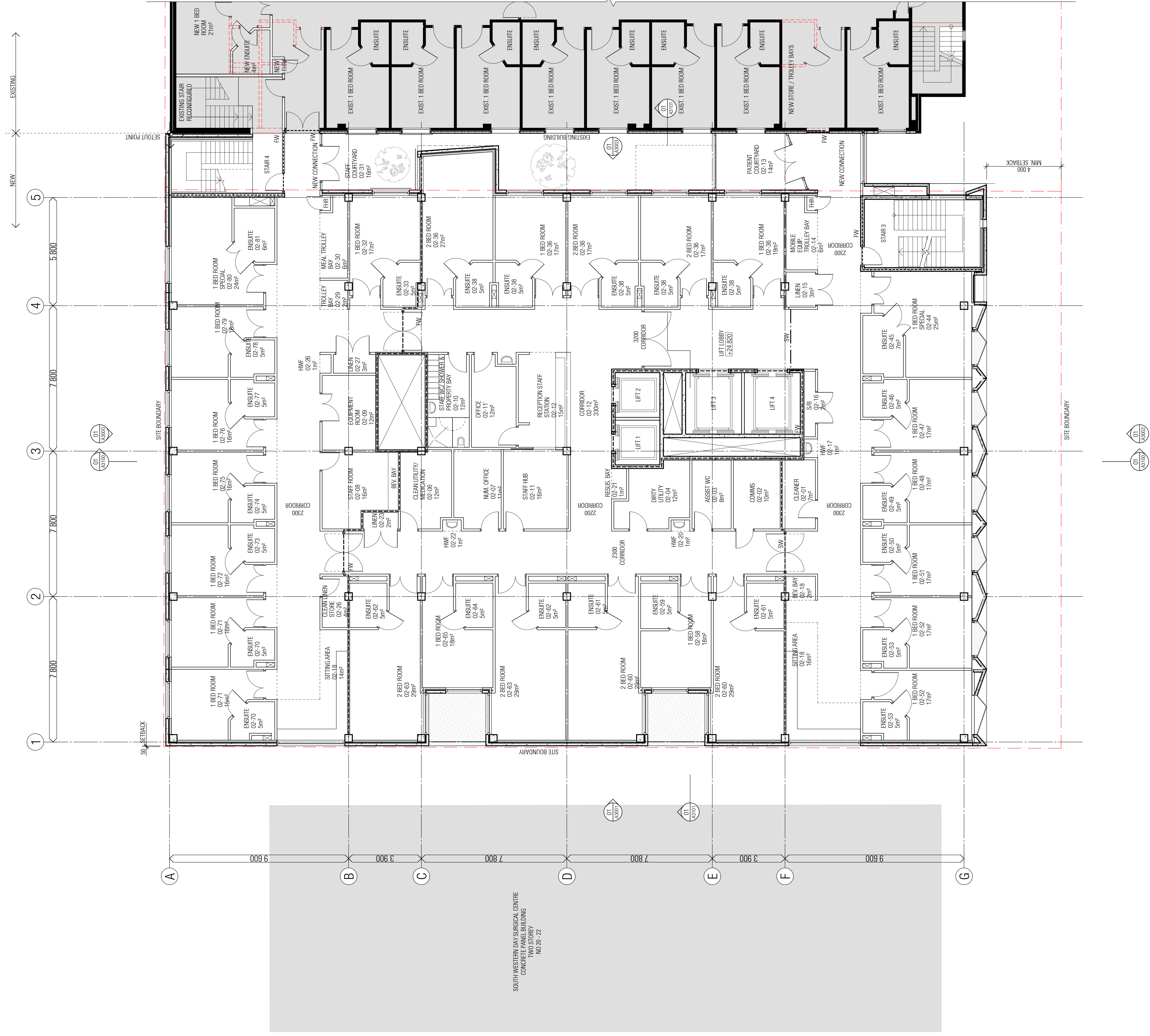
Details of the proposed development scheme are provided on the architectural plans prepared by Woods Bagot which accompany the application and are reproduced in part overleaf.



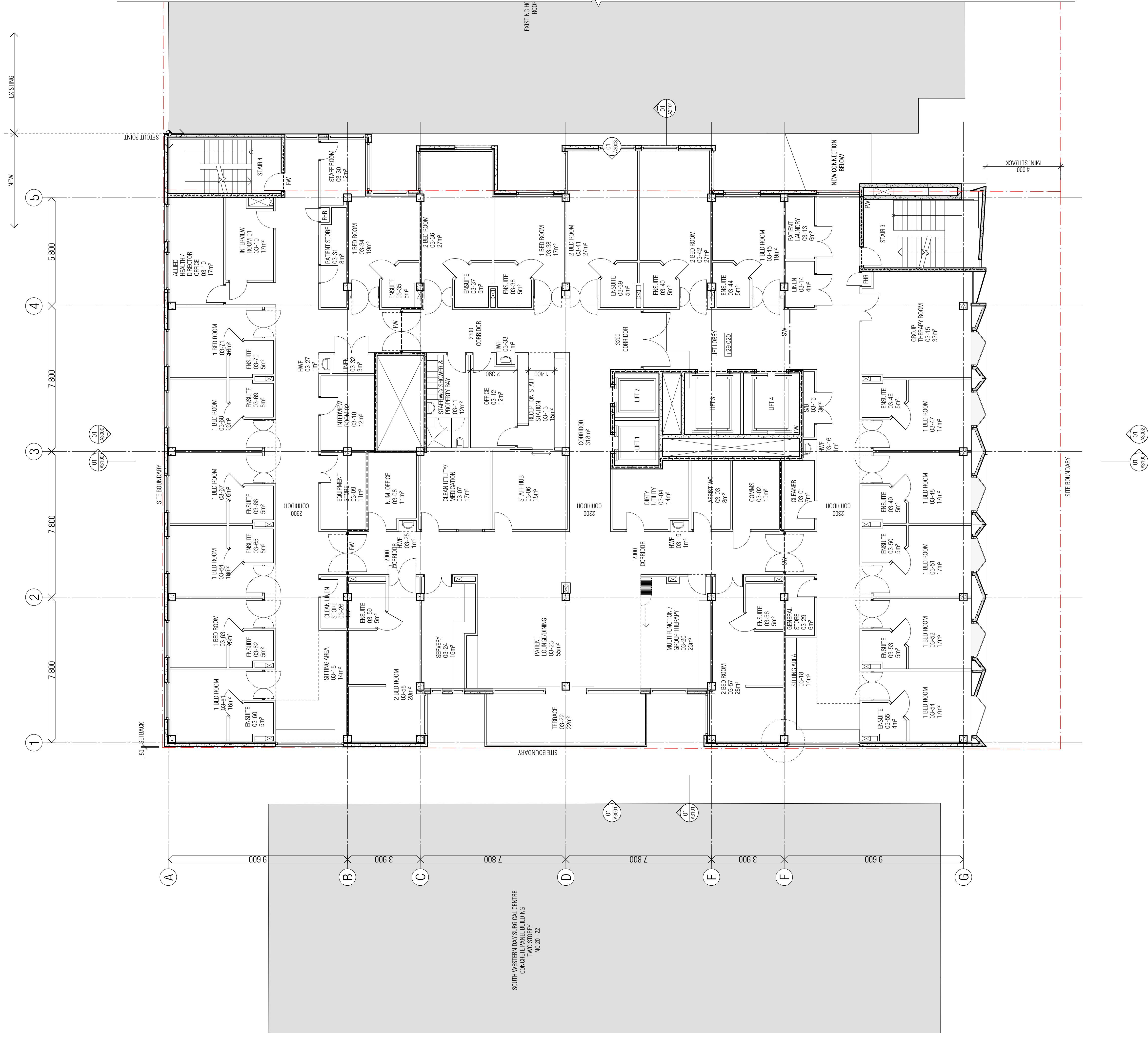
- LEGEND**
- NEW PARTITIONS
 - EXISTING PARTITIONS
 - EXTENT OF DEMOLITION
 - EXISTING AREA
 - RAMP (CARPARK)
 - FIRE WALL
 - SMOKE WALL



- LEGEND**
- NEW PARTITIONS
 - EXISTING PARTITIONS
 - EXTENT OF DEMOLITION
 - EXISTING AREA
 - RAMP CARPARK
 - FIRE WALL
 - SMOKE WALL

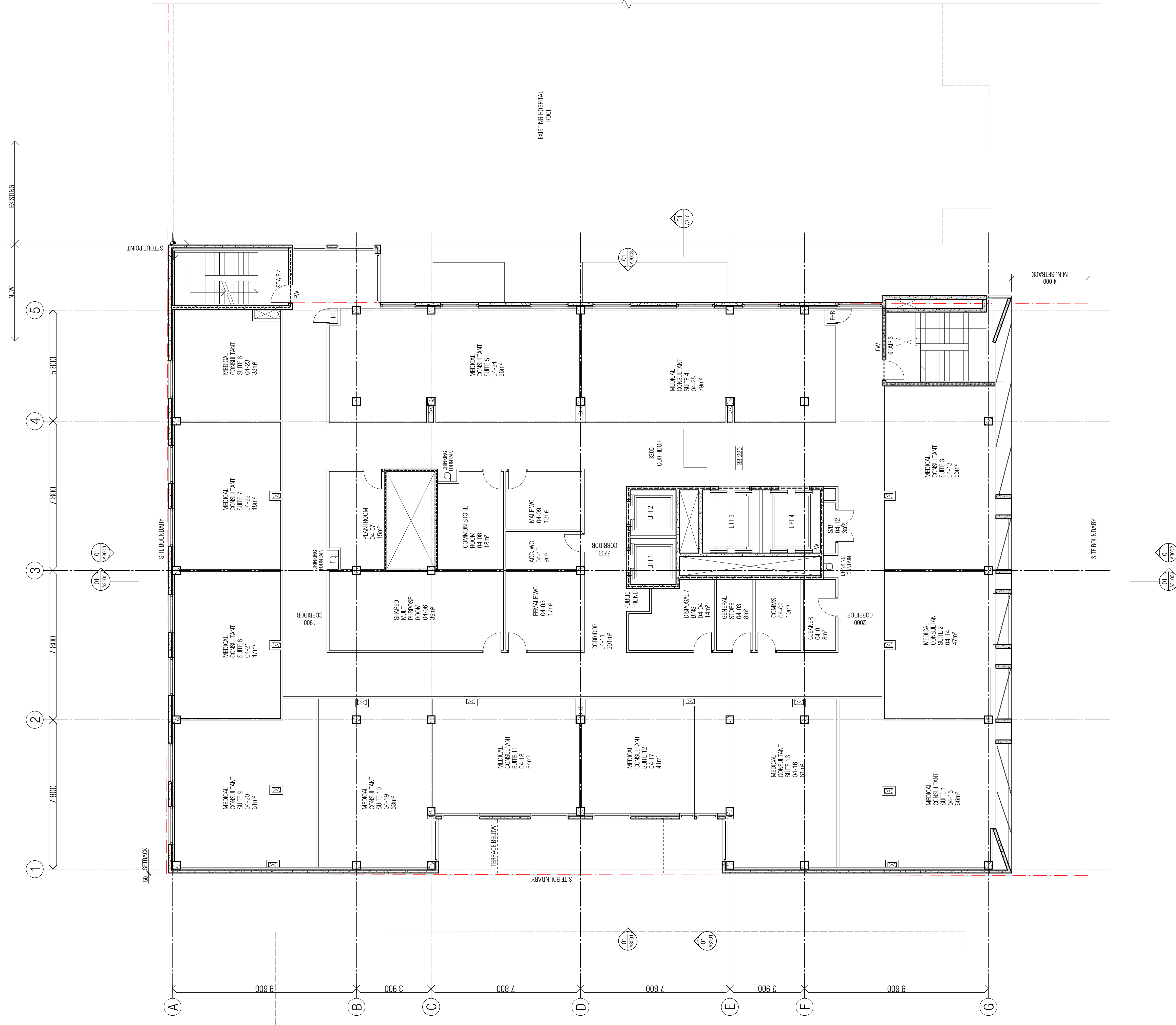


- LEGEND**
- NEW PARTITIONS
 - EXISTING PARTITIONS
 - EXTENT OF CONSTRUCTION
 - EXISTING AREA
 - RAMP / CARPARK
 - FIRE WALL
 - SMOKE WALL






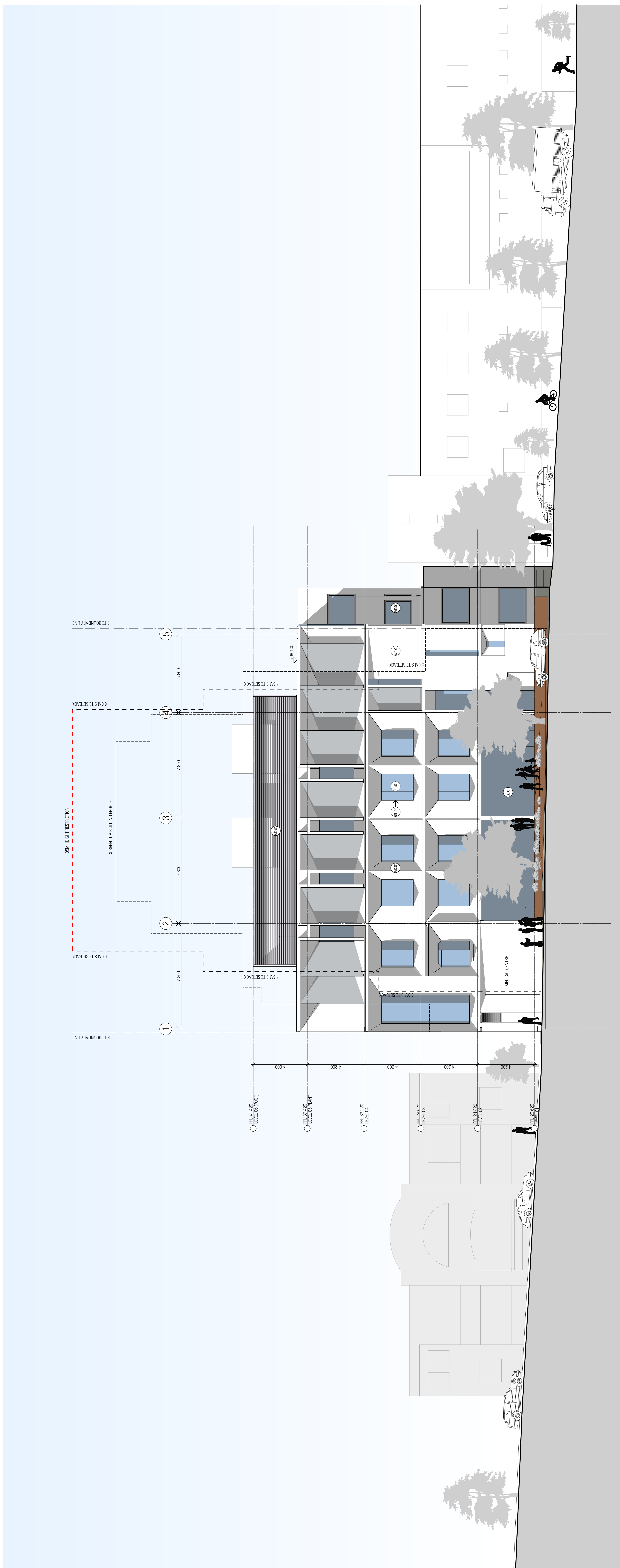
SOUTH WESTERN SURGICAL CENTRE
 CORNER WINDYBANK AND
 TWO DORRY
 NO. 29 - 72

- LEGEND**
- NEW PARTITIONS
 - EXISTING PARTITIONS
 - EXTENT OF CONSTRUCTION
 - EXISTING AREA
 - RAMP (CARPARK)
 - FIRE WALL
 - SMOKE WALL



SOUTH WESTERN DAY SURGICAL CENTRE
CONSTRUCTION INCLUDING
TWO STOREY
NO 20-22

- LEGEND
-  PRECAST CONCRETE FACADE
 -  FACE BRICK
 -  LOUVERS
 -  CLEAR GLASS WINDOW
 -  OPALINE GLASS PANEL



3. ROAD NETWORK AND TRAFFIC CONDITIONS

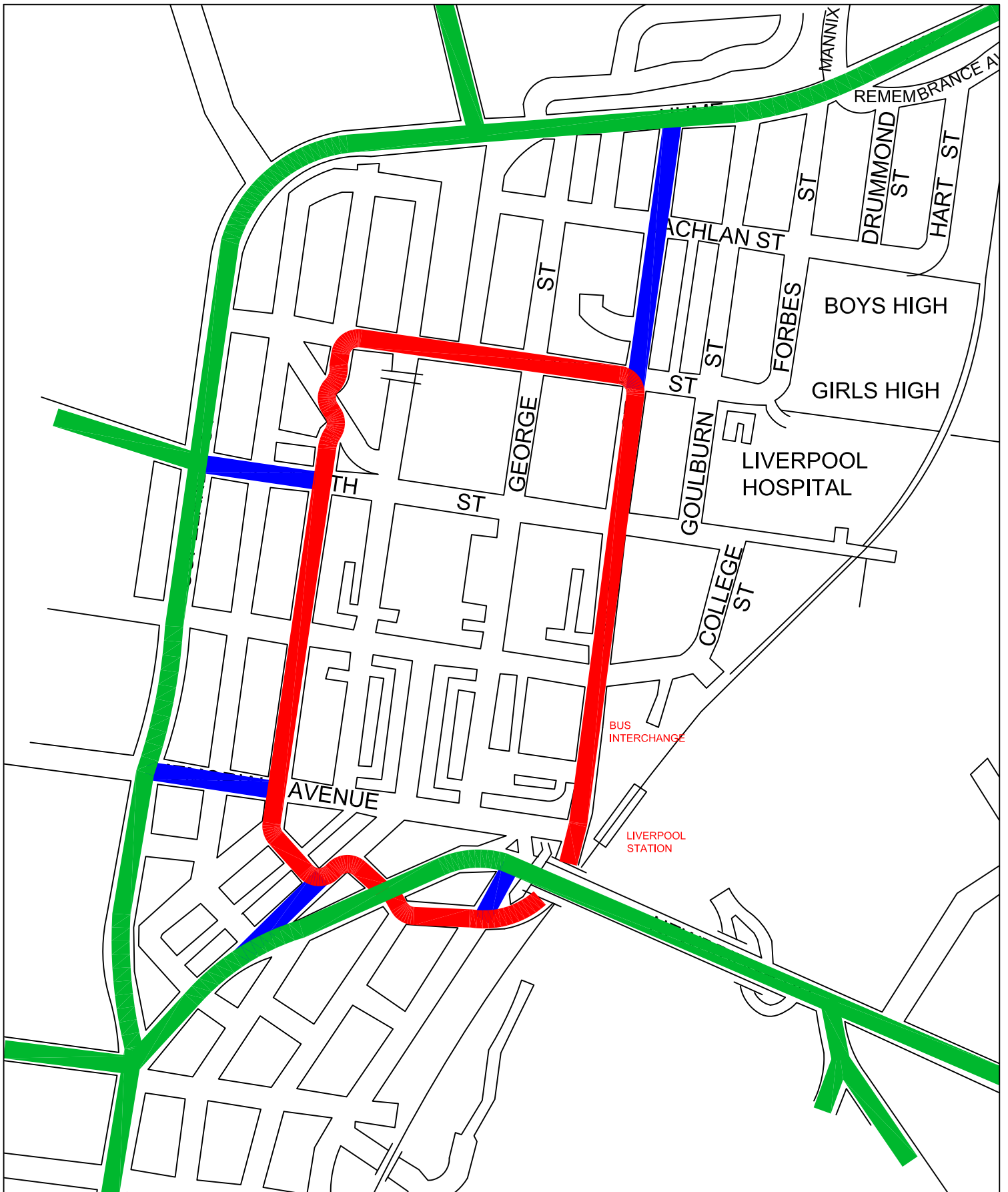
3.1 ROAD NETWORK

The road network serving the site (Figure 3) comprises:

- * *Hume Highway* – a State Highway and arterial route which runs along the western and northern sides of Liverpool CBD
- * *Cumberland Highway* – a State Highway and arterial route which connects northwards from the Hume Highway linking to the M4 and the F3
- * *Elizabeth Drive* – a State Road and arterial route which connects westwards from Liverpool CBD to The Northern Road
- * *Newbridge Road* – a State Road and arterial route connecting easterly from the Hume Highway
- * *Hoxton Park Road* – a State Road and arterial route connecting westerly from Hume Highway to Cowpasture Road
- * *Liverpool CBD Ring Road* along Bigge Street, Campbell Street and Bathurst Street with connections to the surrounding arterial routes
- * *Goulburn Serviceway* – a narrow service lane connecting between Campbell Street and Lachlan Street.

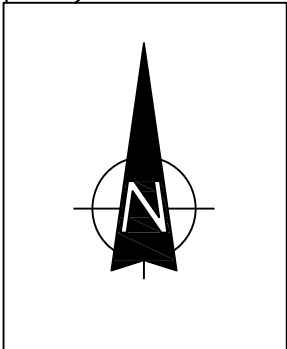
Further afield, the principal routes providing access for Liverpool CBD include:

- * *M5 Motorway* which connects to Hume Highway
- * *Heathcote Road* which connects to Princes Highway
- * *Moorebank Avenue* which connects to M5
- * *Governor Macquarie Drive* which connects between Hume Highway and Newbridge Road



LEGEND

- ARTERIAL
- RING ROAD
- CONNECTIONS



ROAD NETWORK

FIG 3

- * *M7 Westlink* which provides a cross regional route connecting with Hume Highway and Elizabeth Drive.

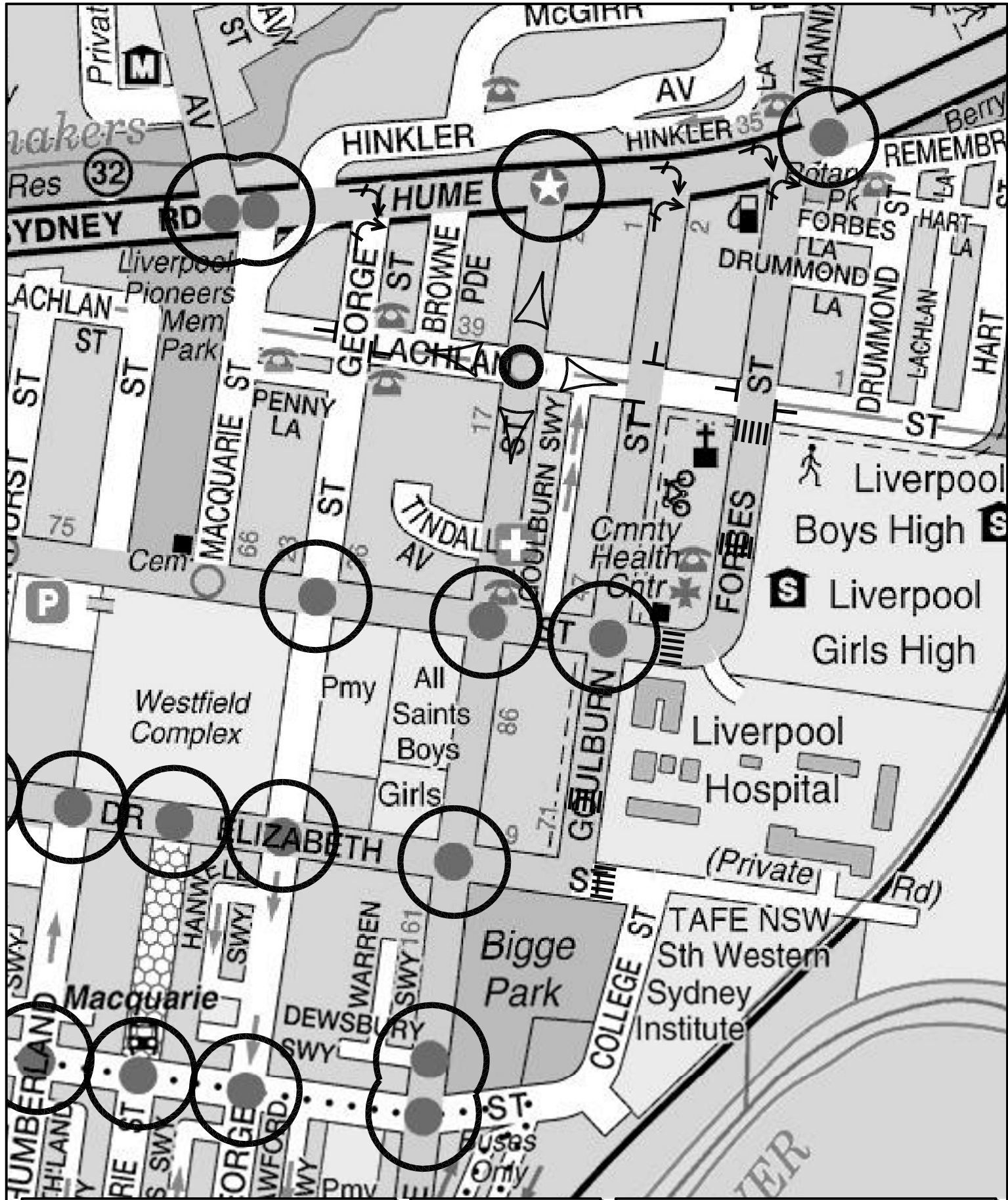
The Railway Line and Georges River present significant barriers to the road system along the eastern side of Liverpool CBD.

3.2 TRAFFIC CONTROLS

The existing traffic controls which have been applied to the roads in the vicinity of the Liverpool Hospital site (Figure 4) include:

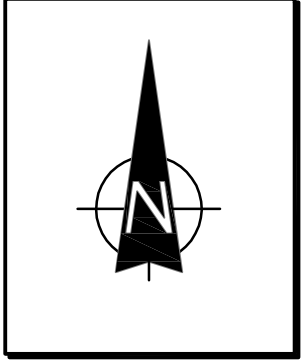
- * the traffic signals along the Hume Highway at the Bigge Street, Remembrance Avenue/Mannix Parade and Governor Macquarie Drive intersections
- * the traffic signals along Bigge Street at the Campbell Street, Elizabeth Street and Moore Street intersections
- * the traffic signals at the Campbell Street and Goulburn Street intersection
- * the STOP sign controls at intersections along Lachlan Street
- * the roundabout at the Bigge Street and Lachlan Street intersection
- * the one-way north traffic flow on Goulburn Serviceway
- * the marked footcrossings across Campbell Street, Forbes Street, Goulburn Street and Elizabeth Street
- * the prohibited right-turn movements on the Hume Highway at the Forbes Street and Goulburn Street intersections.

The existing public parking provisions on and off-street in the vicinity of the Liverpool Hospital site are shown in Figures 5a and 5b.



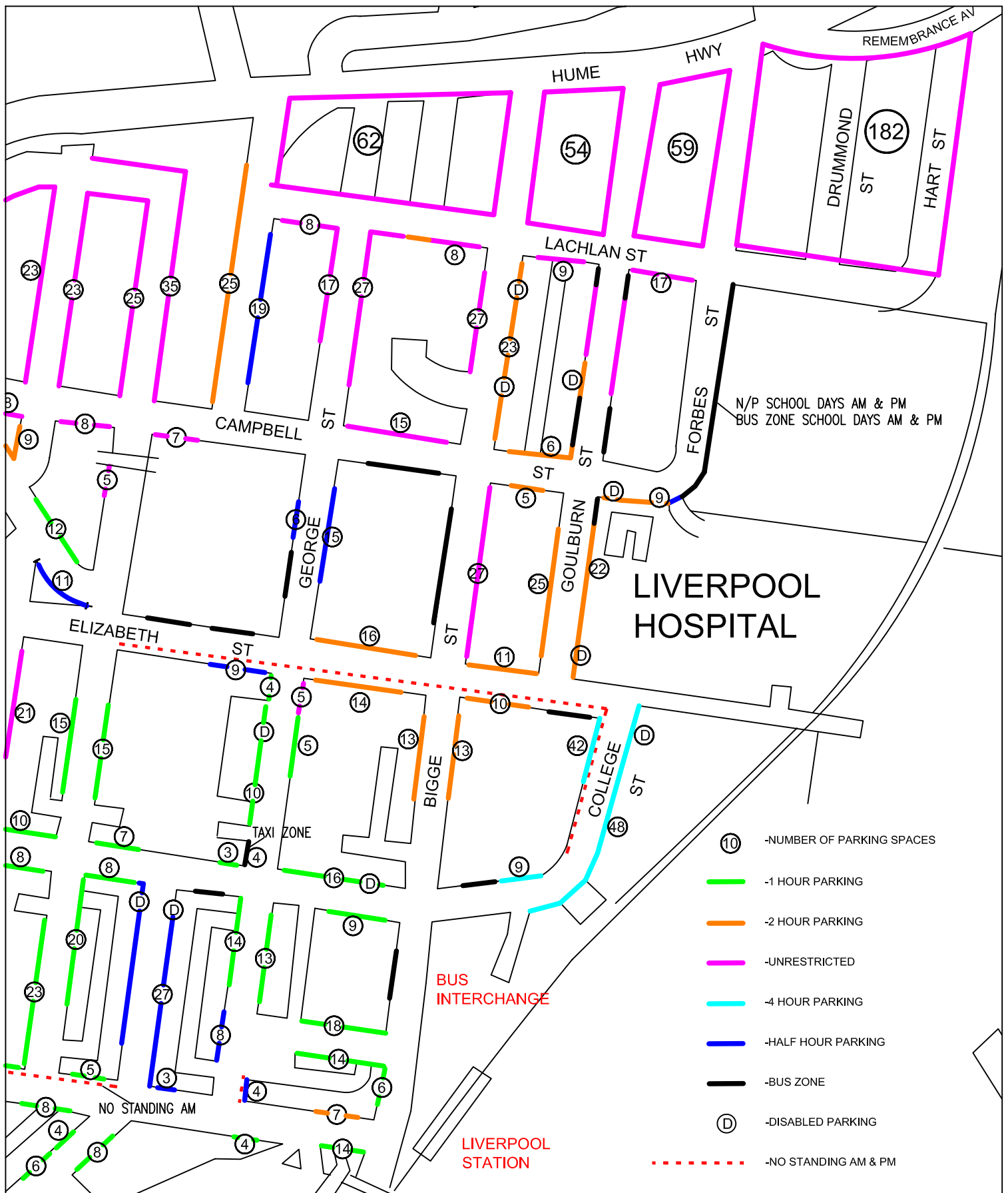
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	TRAFFIC SIGNAL CONTROL
	ROUNDBOUT
	RESTRICTED TURNING MOVEMENT
	MARKED FOOTCROSSING
	STOP SIGN

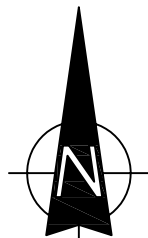


TRAFFIC CONTROLS

FIG 4



LEGEND



ON-STREET PARKING RESTRICTIONS

FIG 5A