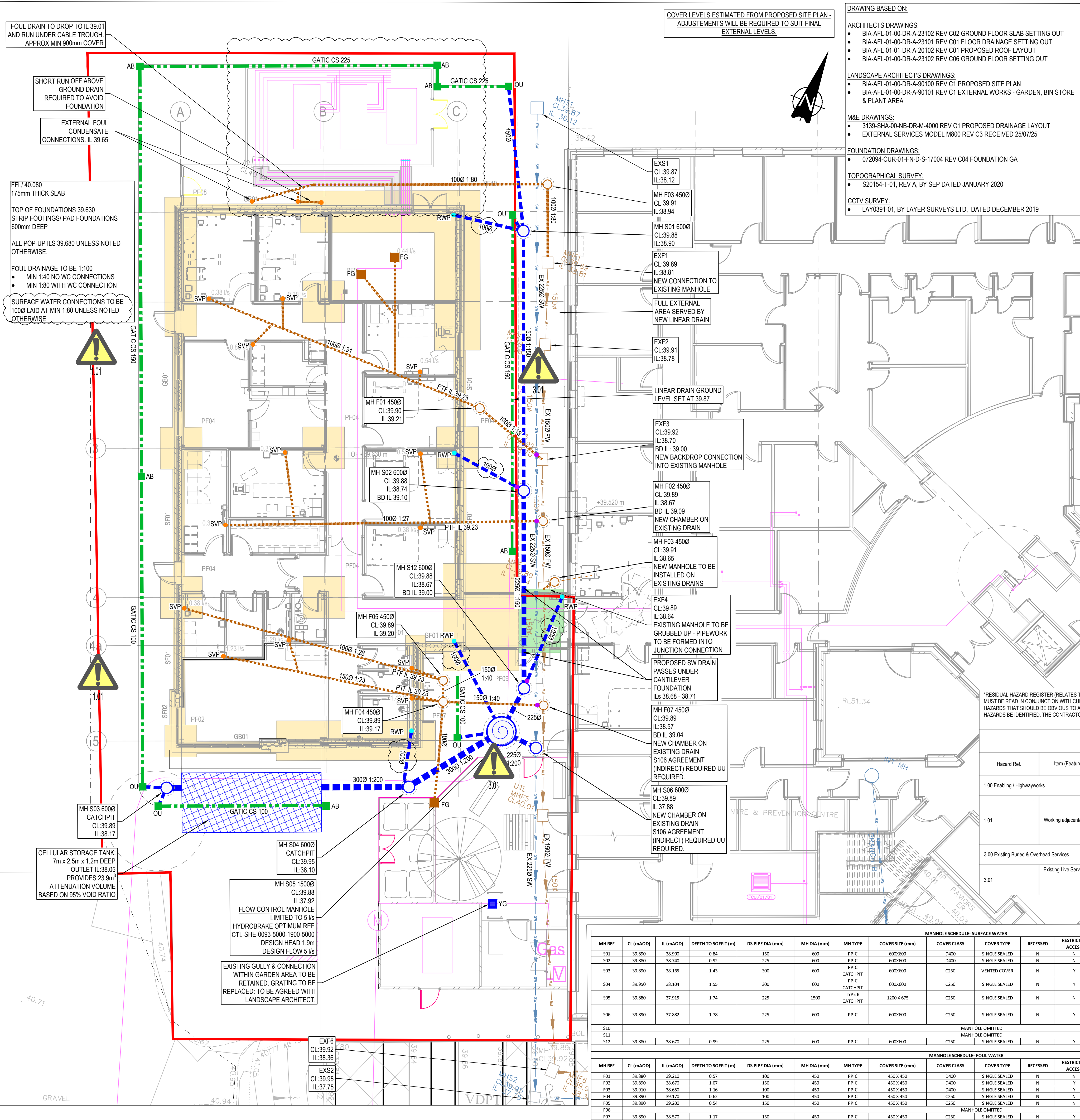




SURFACE WATER DRAINAGE
PROPOSALS WILL BE SUBJECT TO AGREEMENT WITH THE RELEVANT AUTHORITIES

PROPOSED FLOW RATES:
SW OUTFALL
ALLOWABLE DISCHARGE RATES HAVE BEEN CALCULATED BASED ON A GREENFIELD RUNOFF CALCULATIONS FOR THE SITE ARE 0.11ha.
THE EXISTING DISCHARGE RATES FROM THE SITE HAVE BEEN ESTIMATED AS:
1-YEAR 0.21 l/s
30-YEAR 0.41 l/s
100-YEAR 0.50 l/s

THEREFORE, THE DISCHARGE RATE HAS BEEN SET AT 5 l/s, FOR THE 1, 30 & 100-YEAR (+45%CC) STORM EVENTS, IN ORDER TO REDUCE THE RISK OF BLOCKAGES

AGREEMENT OF THIS DISCHARGE RATE IS TO BE AGREED WITH THE LLFA & UNITED UTILITIES.

LEVELS INDICATE THAT PUMPING WILL NOT BE REQUIRED.

SURCHARGED OUTFALL:
THE DRAINAGE MODEL HAS BEEN CARRIED OUT WITH A ASSUMED SURCHARGED OUTFALL LEVEL AET 1m ABOVE THE SOFFIT OF THE EXISTING DRAIN.

ATTENUATION REQUIREMENTS:
ATTENUATION OF APPROX. 24m³ IS PROVIDED BY CELLULAR ATTENUATION

SUSTAINABLE FEATURES:
DUE TO SITE CONSTRAINTS, SUDS FEATURES NOT CONSIDERED VIABLE FOR THE SITE.

INFILTRATION IS NOT CONSIDERED APPROPRIATE FOR THIS SCHEME.

FOUL WATER DESIGN

FW OUTFALL
FW PEAK FLOW RATE ESTIMATED AT 2.9 l/s BASED ON 17.3 DU, FROM M&E DESIGNER'S DRAWING 3139-SHA-00-NB-DR-M-4000.

LEVELS INDICATE THAT PUMPING WILL NOT BE REQUIRED.

A S106 (INDIRECT) AGREEMENT WITH UNITED UTILITIES IS REQUIRED FOR BOTH SW & FOUL DRAINAGE OUTFALLS.

ASPECTS OF THIS DRAWING MAY BE SUBJECT TO CHANGE FOLLOWING THE DEVELOPMENT OF THE CONTRACTOR DESIGN PORTIONS. WHILST THIS DRAWING IS NOTED AS A 'PRELIMINARY CONSTRUCTION' STATUS, PROCUREMENT AND CONSTRUCTION WORKS SHOULD NOT PROGRESS UNTIL THESE ITEMS HAVE BEEN CONCLUDED

COVER LEVELS ESTIMATED FROM PROPOSED SITE PLAN - ADJUSTMENTS WILL BE REQUIRED TO SUIT FINAL DETAILED DESIGN LEVELS.

CONSTRUCTION RECORD - FINAL CONSTRUCTION
THE INFORMATION IS BASED ON CONFIRMATION FROM THE CONTRACTOR OF THE INSTALLED WORKS. THERE MAY BE VARIATIONS ON SITE WHICH ARE NOT REFLECTED ON THIS DRAWING AND HAS NOT BEEN VERIFIED BY CURTINS.

'RESIDUAL HAZARD REGISTER (RELATES TO CIVIL/STRUCTURAL MATTERS ONLY)
MUST BE READ IN CONJUNCTION WITH CURTINS RESIDUAL HAZARD REGISTER XXXXX-CUR-ZZ-XX-HA-X-00001.
HAZARDS THAT SHOULD BE OBVIOUS TO A COMPETENT CONTRACTOR HAVE NOT BEEN IDENTIFIED IN THIS DRAWING. SHOULD ANY ADDITIONAL HAZARDS BE IDENTIFIED, THE CONTRACTOR SHOULD NOTIFY ALL RELEVANT PROJECT TEAM MEMBERS.'

Hazard Ref.	Item (Feature, Element or Activity)	Potential Hazard Identified	Action (Information to Assist Control)
1.00	Enabling / Highwayworks		
1.01	Working adjacent/within Live Car Park	Risk to construction workers and equipment.	Construction Management Plan to assess edge protection, access routes and appropriate activities within proximity to live highway interface.
3.00	Existing Buried & Overhead Services		
3.01	Existing Live Services	Reduce	Carry out additional surveys and investigations to locate and protect the services in co-ordination with Services Engineer/Statutory Undertakers.

- GENERAL NOTES:
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
 - DESIGN BASED ON TOPOGRAPHICAL SURVEY AND CCTV SURVEY INFORMATION AVAILABLE AT THE TIME OF DESIGN.
 - ALL EXISTING SEWERS, CONNECTIONS, PIPE SIZES AND INVERT LEVELS TO BE CONFIRMED BY CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS TO ENSURE CONNECTIVITY. ANY VARIANCE FROM THE INFORMATION SHOWN SHOULD BE REPORTED TO THE ENGINEER FOR REVIEW.
 - DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
 - ALL DIMENSIONS ARE IN METRES AND LEVELS IN METRES ABOVE ORNANCE DATUM UNLESS OTHERWISE NOTED.
 - WHERE EXISTING DRAINAGE IS BEING USED, ALLOWANCES SHOULD BE MADE TO REMEDIATE THIS DRAINAGE IN LINE WITH AVAILABLE CCTV SURVEY INFORMATION.
 - ALL EXISTING SERVICES TO BE LOCATED PRIOR TO COMMENCEMENT OF ANY DRAINAGE WORKS, AND WHERE NECESSARY PROTECTION OR DIVERSIONS TO BE UNDERTAKEN TO AVOID CONFLICT WITH THE PROPOSED WORK.
 - BUILDING LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED BY ARCHITECT/ LANDSCAPE ARCHITECT.
 - OUTFALL CONNECTION(S) SUBJECT TO AGREEMENT WITH THE APPROVING AUTHORITY.
 - THIS DRAWING IS PRELIMINARY AND IS SUBJECT TO CHANGE AT LATER STAGES.

KEY:

ESTIMATED SITE BOUNDARY BASED ON ARCHITECTS DRAWING BIA-AFL-01-00-DR-A-90101-P3
EXISTING FOUL WATER DRAIN
EXISTING SURFACE WATER DRAIN
DRAINAGE TO BE REMOVED
PROPOSED FOUL WATER DRAIN PROPOSED
PROPOSED SURFACE WATER DRAIN
PROPOSED DRAINAGE CHANNEL - CASTSLOT TREADSAFE D400 OR SIMILAR APPROVED. SIZES AS SHOWN
PROPOSED ACCESS/OUTLET BOX
PROPOSED FOUL GULLY
SVP - SOIL VENT PIPE
RWP - RAINWATER PIPE
PROPOSED CELLULAR ATTENUATION TANK
PROPOSED FOUNDATIONS
PROPOSED CANTILEVER SLAB FOUNDATION
PROPOSED SERVICES (BY OTHERS)
PROPOSED SERVICE TRENCH EXTENTS (BY OTHERS)

C05	FINAL CONSTRUCTION ISSUE	15/01/26	JC	ATL
C04	SCHEDULE UPDATED TO MATCH LAYOUT	12/06/25	JC	ATL
C03	UPDATED IN LINE WITH REVISED M&E LAYOUT. SW CONNECTIONS AMENDED	23/02/25	ATL	MW
C02	CONSTRUCTION ISSUE	28/11/24	ATL	ATL
C01	PRELIMINARY CONSTRUCTION	19/09/24	HW	MW
P05	STAGE 4 ISSUE	28/07/23	KS	ATL
P04	STAGE 3 ISSUE	19/05/23	ATL	MW
P03	PROPOSED DRAINAGE UPDATE	15/02/23	TH	MW
P02	CCTV UPDATE	22/01/20	OJT	MW
P01	FOR PLANNING	10/01/20	OJT	MW
Rev:	Description:	Date:	By:	Chkd:

Curtins

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Project: **NATIONAL BREAST IMAGING ACADEMY WYTHENSHAW HOSPITAL**

Drawn By: **OJT** Designed By: **OJT** Checked By: **MW**

Scale: 1:200

Project No: 072094 - CUR - 01 - XX - DR - C - 92500 - C05