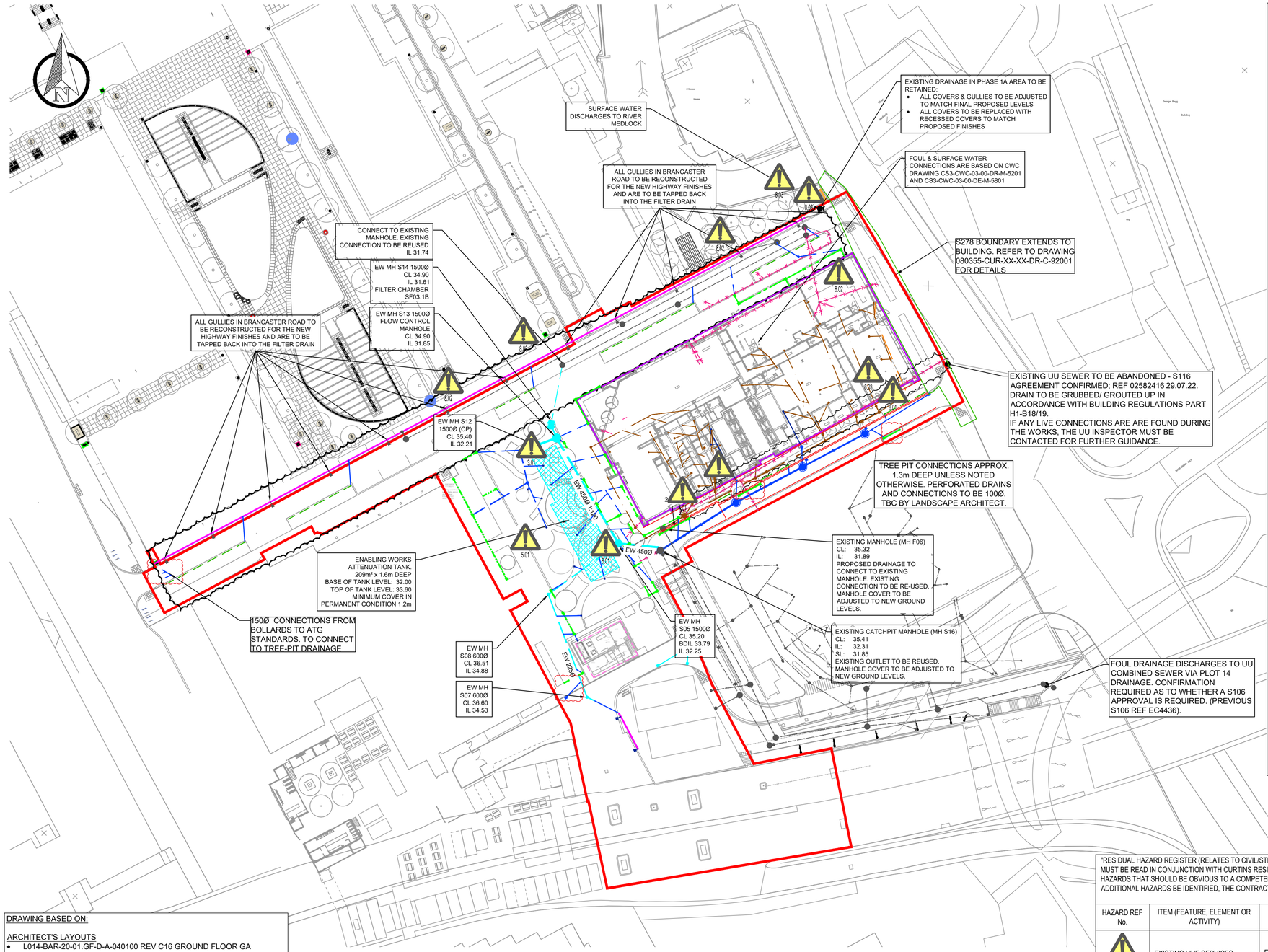


DRAWING BASED ON:

ARCHITECT'S LAYOUTS
- L014-BAR-20-01.GF-D-A-040100 REV C16 GROUND FLOOR GA

LANDSCAPE ARCHITECT'S LAYOUT
- L014-PIE-90-ZZ.00-D-L-000001 REV C02 LANDSCAPE GA
- L014-PIE-90-ZZ.00-D-L-000002 REV C03 HARDWORKS LAYOUT
- L014-PIE-90-ZZ.00-D-L-000005 REV C04 PROPOSED LEVELS
- L014-PIE-94-ZZ.00-D-L-000008 REV C04 KERBS & EDGES LAYOUT

PROPOSED SERVICES
- L014-SES-60-01.EX-D-E-600002 REV P03 SITE PLAN PROPOSED ELECTRICAL UTILITY SERVICES

ABOVE GROUND DRAINAGE (SES)
- L014-SES-52-Z1-GF-D-P-002401 REV C01 DRAINAGE & RAINWATER SERVICES GF ZONE 1
- L014-SES-52-Z2-GF-D-P-002401 REV C01 DRAINAGE & RAINWATER SERVICES GF ZONE 2

PROPOSED STRUCTURAL INFORMATION.
- L014-CUR-18-01.FN-D-S-016000 REV C11 FOUNDATION GA
- L014-CUR-11-01.GF-D-S-020100 REV C07 GROUND FLOOR SLAB SETTING OUT

ENABLING WORKS DRAINAGE
- BEMUS AS BUILT DRAWINGS RECEIVED 23.01.23

PHASE 1A DRAINAGE LAYOUT
- MA1347-70-00-01 C11

PLOT 14 DRAINAGE LAYOUT
- 064428-CUR-FS-XX-DR-C-92500 F01

TOPOGRAPHICAL SURVEY
- 15E146/004 BY SURVEY OPERATIONS RECEIVED AUGUST 2015

THIS DRAWING HAS BEEN PROVIDED TO SHOW THE OVERALL DRAINAGE STRATEGY. REFER TO DRAWINGS L014-CUR-52-01.ZZ-D-C-520001 TO 5200032 FOR DETAILED DRAINAGE LAYOUTS.

SURFACE WATER DRAINAGE

THE SURFACE WATER DRAINAGE CONNECTS INTO THE WIDER MASTERPLAN NETWORK. THE MASTERPLAN NETWORK DISCHARGES TO THE RIVER MEDLOCK.

THE MASTERPLAN NETWORK IS SUBJECT TO A RESTRICTED DISCHARGE TO THE RIVER MEDLOCK.
THE ALLOWABLE MAXIMUM FLOW RATES FOR THE TOTAL SITE ARE APPROXIMATELY:
- 25 l/s FOR THE 1 IN 1 YEAR EVENT
- 58 l/s FOR THE 1 IN 30 YEAR EVENT
- 74 l/s FOR THE 1 IN 100 YEAR EVENT (CURRENT PROPOSAL INCLUDES A 40% ALLOWANCE FOR CLIMATE CHANGE).

NOTE: AS INSTALLED DRAINAGE IS DESIGNED WITH 30% CC CAPACITY, AND ALL NEW DRAINAGE SHOULD ACCOMMODATE 40% CC.

PROPOSED FLOW RATES:
ALLOWABLE DISCHARGE RATES FOR THE HAVE MASTERPLAN DRAINAGE HAVE BEEN CALCULATED BASED ON BROWNFIELD RUNOFF CALCULATIONS. THE ALLOWABLE DISCHARGE RATES HAVE BEEN AGREED AS PART OF PREVIOUS PLANNING APPROVALS.

REFER TO DRAWING 080355-CUR-XX-XX-DR-C-92001 FOR THE PROPOSED CATCHMENT AREAS:

AREA A
AREA IS APPROXIMATELY 0.24Ha. THE FLOW RATES BELOW ARE THE RATES ACHIEVED AND DO NOT EXCEED THE ABOVE ALLOWABLE FLOW RATES:
- 22 L/S FOR THE 1 IN 1 YEAR EVENT
- 23 L/S FOR THE 1 IN 30 YEAR EVENT
- 67 L/S FOR THE 1 IN 100 YEAR EVENT (INCLUDING 30% ALLOWANCE FOR CLIMATE CHANGE)

AREAS B&C
AREA IS APPROXIMATELY 0.99 Ha.THE ALLOWABLE MAXIMUM FLOW RATES FOR THE PLOT SITE ARE APPROXIMATELY:
- 25 l/s FOR THE 1 IN 1 YEAR EVENT
- 58 l/s FOR THE 1 IN 30 YEAR EVENT
- 73 l/s FOR THE 1 IN 100 YEAR EVENT (CURRENT PROPOSAL INCLUDES A 40% ALLOWANCE FOR CLIMATE CHANGE).

ATTENUATION REQUIREMENTS:

AREA A:
THE CELLULAR ATTENUATION WAS INSTALLED AS PART OF THE PHASE 1A WORKS AND NO CHANGES ARE PROPOSED.

AREAS B&C:
THE CELLULAR ATTENUATION THAT HAS BEEN INSTALLED FOR THE PLOT 14 WORKS WILL REQUIRE REMOVAL AS IT NOW FALLS WITHIN THE PROPOSED BUILDING FOOTPRINT.
THE ATTENUATION REQUIREMENT FOR THE ENW SUBSTATION DOES NOT APPEAR TO HAVE BEEN INSTALLED BASED ON A SITE WALKOVER.

THE ATTENUATION FOR THIS AREA WILL BE PROVIDED AS SHOWN ON THE PLAN, SUBJECT TO CO-ORDINATION WITH LANDSCAPING & FUTURE PLOT REQUIREMENTS.

THE TOTAL ATTENUATION REQUIREMENT HAS BEEN ESTIMATED AS 317m³

SUSTAINABLE DRAINAGE

DETAILS OF SUSTAINABLE DRAINAGE SYSTEMS IS TO BE CO-ORDINATED WITH THE LANDSCAPE ARCHITECT AND AGREED WITH THE LLFA.

FOUL WATER DESIGN
FW PEAK FLOW RATES FOR THE PROPOSED SITE HAVE BEEN TAKEN FROM CWC DRAWING L014-CWC-52-01.GF-D-M-520001.

THE FOUL DRAINAGE CONNECTS TO THE AS CONSTRUCTED PLOT 14 FOUL DRAINAGE, WHICH DISCHARGES TO A PUBLIC COMBINED SEWER.

THE CONNECTION HAS BEEN APPROVED (S106 REF EC4436). THIS APPLICATION INCLUDED AN ALLOWANCE OF 552 DUs FOR THE PROPOSED BUILDING.

CONFIRMATION IS REQUIRED FROM UU AS TO WHETHER A NEW S106 APPLICATION IS REQUIRED.

"RESIDUAL HAZARD REGISTER (RELATES TO CIVIL/STRUCTURAL MATTERS ONLY)
MUST BE READ IN CONJUNCTION WITH CURTINS RESIDUAL HAZARD REGISTER 080355-CUR-ZZ-XX-HA-X-00001.
HAZARDS THAT SHOULD BE OBVIOUS TO A COMPETENT CONTRACTOR HAVE NOT BEEN INDICATED ON THIS DRAWING. SHOULD ANY ADDITIONAL HAZARDS BE IDENTIFIED, THE CONTRACTOR SHOULD NOTIFY ALL RELEVANT PROJECT TEAM MEMBERS."

HAZARD REF No.	ITEM (FEATURE, ELEMENT OR ACTIVITY)	RESIDUAL HAZARD
3.01	EXISTING LIVE SERVICES	EXISTING LIVE SERVICES (AS NOTED AND SITEWIDE)
4.01	PROXIMITY TO LIVE BUILDINGS	UNDERMINING OR DAMAGE TO ADJACENT FOUNDATIONS DAMAGE TO EXISITING BUILDINGS
5.01	DEEP EXCAVATION	DEEP EXCAVATION MORE THEN 3M
8.01	PROXIMITY TO PEDESTRIAN ROUTES	CONSTRUCTION ACTIVITIES IN CLOSE PROXIMITY TO THE LIVE EXISTING CAR PARK/ HOTEL.
8.02	WORKING ADJACENT TO PUBLIC HIGHWAY	CONSTRUCTION ACTIVITIES IN CLOSE PROXIMITY TO THE LIVE PUBLIC HIGHWAY
8.03	CONSTRUCTION	HIGHWAYS ACCESS - MANAGEMENT OF ACCESS AND EGRESS FOR CONSTRUCTION WORKS
11.01	FLOOD RISK	THE SITE SITS PARTIALLY WITHIN A FLOOD ZONE 2 AREA

GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. 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.
3. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
4. FOR GENERAL NOTES REFER TO DRAWING SA-CUR-XX-00-DR-C-92502.
5. FURTHER CO-ORDINATION REQUIRED BETWEEN EXTERNAL SERVICES AND THE PROPOSED DRAINAGE.

KEY:

- PLANNING BOUNDARY TAKEN FROM LANDSCAPE ARCHITECTS PLAN L014-PIE-90-ZZ.00-D-L-000001
- PROPOSED BUILDING EXTENTS
- S278 BOUNDARY

EXISTING DRAINAGE
- AS CONSTRUCTED SW DRAINAGE
- AS CONSTRUCTED FOUL DRAINAGE
- PRE-DEVELOPMENT DRAINAGE (ASSUMED ABANDONED - TBC)
- DRAINAGE TO BE ABANDONED/ REMOVED

ENABLING WORKS DRAINAGE (AS CONSTRUCTED)
- ENABLING WORKS SW DRAINAGE
- ENABLING WORKS PROPOSED CELLULAR ATTENUATION STORAGE

PROPOSED DRAINAGE
- PROPOSED SW DRAINAGE
- PROPOSED FOUL DRAINAGE
- PROPOSED LINEAR DRAINAGE CHANNEL GATIC CASTSLOT TREADSAFE
- ROAD GULLY
- YARD GULLY
- TREE PIT DRAIN/ OUTLET
- PROPOSED FILTER DRAIN
- EXTENT OF UNDRGROUND SUBSTATION

Rev:	Description:	Date:	By:	Chkd:
C02	UPDATED TO LATEST LA PLAN	03.02.25	ATL	HS
C01	ISSUED FOR CONSTRUCTION	15.11.24	ATL	ATL
P06	BIN STORE DRAINAGE UPDATED	13.10..23	CG	CG
P05	ISSUED TO SHOW WIDER DRAINAGE PROPOSALS WITH BIN STORE PROPOSALS	17.08.23	CS	CG
P04	UPDATED IN LINE WITH REVISED ARCHITECT'S & LA PLANS	16.06.23	ATL	CG
P03	ISSUE TO INCLUDE BEMUS AS BUILT ENABLING WORKS DRAINAGE	16.02.23	CS	CG
P02	ISSUED FOR PLANNING CONDITION DISCHARGE	16.12.22	ATL	CG
P01	ISSUED FOR STAGE 4	18.11.22	ATL	MW

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Status: STAGE 4

Project: N0 3 CIRCLE SQUARE

Drg Title: PROPOSED DRAINAGE STRATEGY

Drawn By	Designed By	Checked By
ATL	ATL	MW
Project No. 080355	Date 18.11.22	Scales @ A1 1:500

Project No - Originator - Function - Spatial - Form - Discipline - Number: L014 - CUR - 52 - 01.ZZ - D - C - 520000
Revision: C02

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