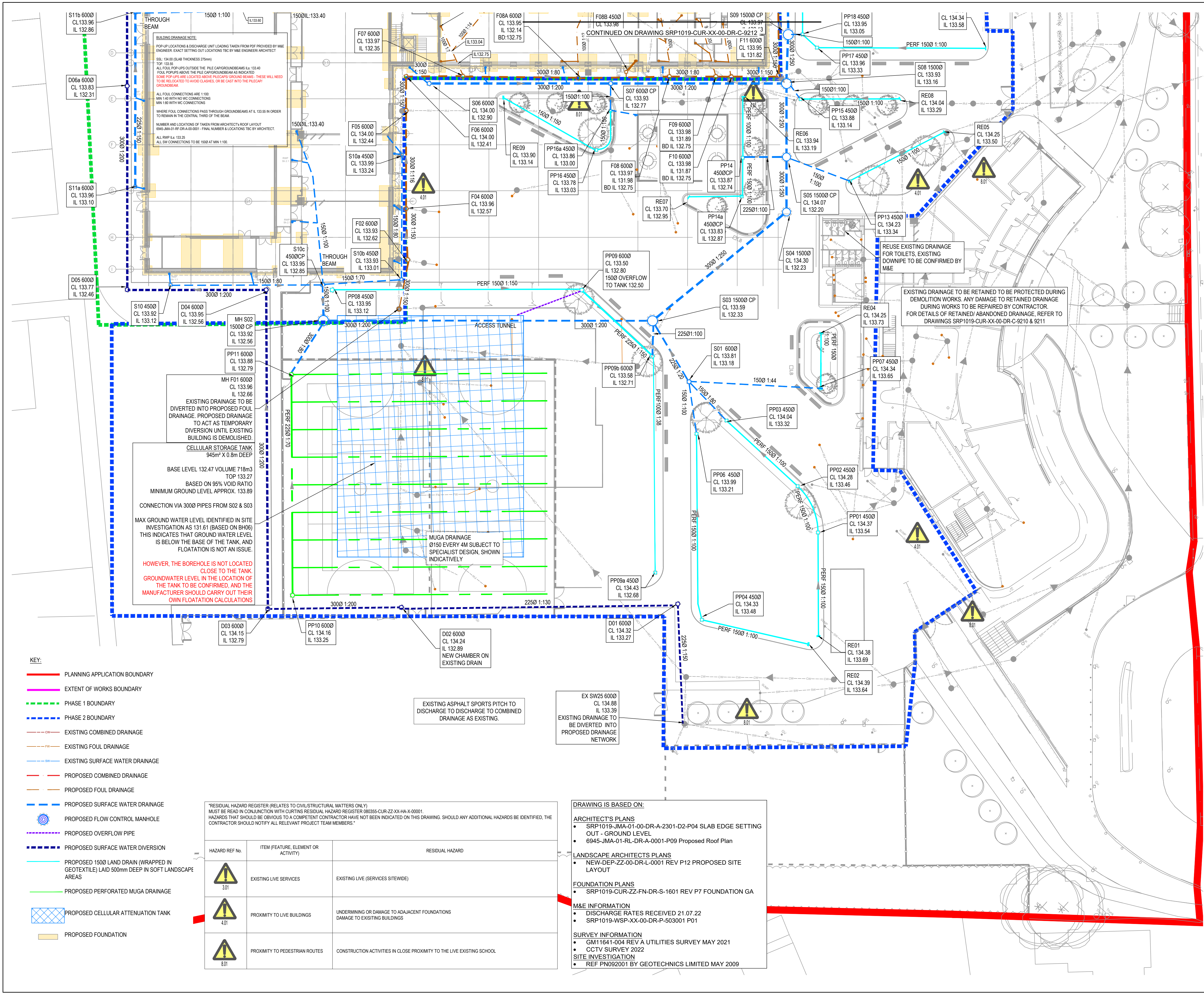




GENERAL NOTES:

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
- 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 UNLESS NOTED OTHERWISE.
- FOR GENERAL NOTES REFER TO DRAWING SRP1019-CUR-XX-XX-DR-C-9224

SURFACE WATER DRAINAGE

LEVELS INDICATE THAT PUMPING WILL NOT BE REQUIRED GRAVITY CONNECTION TO PRIVATE DRAINAGE WITHIN SITE.

PROPOSALS WILL BE SUBJECT TO AGREEMENT WITH THE RELEVANT AUTHORITIES.

IT IS RECOMMENDED THAT SUSTAINABLE METHODS OF ATTENUATION ARE IMPLEMENTED WHERE POSSIBLE.

PROPOSED FLOW RATES:
ALLOWABLE DISCHARGE RATES HAVE BEEN CALCULATED BASED ON BROWNFIELD RUNOFF, WITH FLOWS RESTRICTED TO 50% OF EXISTING FOR CONTRIBUTING IMPERMEABLE AREAS.

- 1-YEAR 22.4 l/s
- 30-YEAR 55.4 l/s
- 100-YEAR 60.4 l/s

UU HAS CONFIRMED IN EMAIL 08.08.22 PROPOSED RATES AREA ACCEPTABLE

SURCHARGE LEVELS USED FOR CALCULATIONS: 131.083 FOR 1:1 YEAR STORM (AS STATED BY UU), 133.020 FOR 1:30 & 1:100 YEAR STORMS. THIS IS BASED OFF THE LOWEST GULLY LEVEL ON SITE, AS UU PROVIDED LEVEL IS ABOVE SITE LEVELS.

FINAL SURCHARGE LEVELS TO BE AGREED WITH UU FOLLOWING PUBLIC SEWER SURVEY IN ROAD

ATTENUATION REQUIREMENTS:
ATTENUATION IS PROVIDED BY CELLULAR ATTENUATION (TOTAL 718m³)
ATTENUATION TANK SUBJECT TO FINAL SURCHARGE LEVEL WITHIN PUBLIC SEWER

SUSTAINABLE DRAINAGE
WHICH PROVIDES SUFFICIENT WATER QUALITY TREATMENT:
SOFT LANDSCAPE WITH LAND DRAINS

AGREEMENT OF SUSTAINABLE DRAINAGE SYSTEMS IS TO BE AGREED WITH THE LLFA.

FOUL WATER DESIGN
FW WILL DISCHARGE BY GRAVITY TO EXISTING PRIVATE MANHOLE WITHIN SITE.

FW PEAK FLOW RATE ESTIMATED AT 8.5 l/s BASED ON 147 DISCHARGE UNITS PROVIDED BY M&E ENGINEER

DISCHARGE FROM SITE HAS BEEN AGREED WITH UU UNDER PREDEVELOPMENT ENQUIRY

THE PROPOSED COMBINED DRAINAGE FORMS THE TEMPORARY DIVERSION FOR PART OF THE EXISTING SITE. THE FINAL COMBINED DRAINAGE INCLUDES FOR AN UNRESTRICTED FLOW FROM THE ASPHALT SPORTS AREA, (OUTSIDE PLANNING BOUNDARY). THE DRAINAGE HAS BEEN DESIGNED TO INCREASE THE CAPACITY COMPARED TO THE EXISTING DRAINAGE.

THIS PROPOSAL IS SUBJECT TO AGREEMENT WITH THE LLFA. IF THIS AREA IS REQUIRED TO BE REDIRECTED INTO THE PROPOSED SURFACE WATER DRAINAGE, ADDITIONAL ATTENUATION WILL BE REQUIRED.

UU HAS AGREED IN PRINCIPLE THAT AREA C DIVERT DRAINAGE WILL DISCHARGE AS EXISTING WITHOUT RESTRICTION EMAIL FROM 08.08.22

P06	ISSUED TO DISCHARGE CONDITION, FOUNDATION UPDATED	15.12.22	MW	MW
P05	STAGE 4 ISSUE	26.08.22	MW	MW
P04	ISSUED FOR PLANNING - UPDATED LANDSCAPE PLAN	26.07.22	ATL	ATL
P03	ISSUED FOR PLANNING - UPDATED BOUNDARIES	25.05.22	TH	MW
P02	ISSUED FOR PLANNING	20/05/22	ATL	MW
Rev:	Description:	Date:	By:	Chkd:

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Civils & Structures • Transport Planning • Environmental • Infrastructure • Geotechnical • Conservation & Heritage • Principal Designer
Birmingham • Bristol • Cambridge • Cardiff • Douglas • Dublin • Edinburgh • Glasgow • Kendal • Leeds • Liverpool • London • Manchester • Nottingham

Status:

STAGE4

Project:

NEWHOUSE ACADEMY

Dwg Title:

**PROPOSED DRAINAGE LAYOUT
SHEET 2 OF 2**

Drawn By	Designed By	Checked By
ATL	ATL	MW
Date	08/04/22	Scales @ A1 1:250
Project No - Originator - Function - Spatial - Form - Discipline - Number		
Revision		

SPR1019 - CUR - XX - 00 - DR - C - 9213

P06

DRAWING IS BASED ON:

ARCHITECT'S PLANS

- SRP1019-JMA-01-00-DR-A-2301-D2-P04 SLAB EDGE SETTING OUT - GROUND LEVEL
- 6945-JMA-01-RL-DR-A-0001-P09 Proposed Roof Plan

LANDSCAPE ARCHITECTS PLANS

- NEW-DEP-ZZ-00-DR-L-0001 REV P12 PROPOSED SITE LAYOUT

FOUNDATION PLANS

- SRP1019-CUR-ZZ-FN-DR-S-1601 REV P7 FOUNDATION GA

M&E INFORMATION

- DISCHARGE RATES RECEIVED 21.07.22
- SRP1019-WSP-XX-00-DR-P-503001 P01

SURVEY INFORMATION

- GM11641-004 REV A UTILITIES SURVEY MAY 2021
- CCTV SURVEY 2022

SITE INVESTIGATION

- REF PN092001 BY GEOTECHNICS LIMITED MAY 2009

KEY:

- PLANNING APPLICATION BOUNDARY
- EXTENT OF WORKS BOUNDARY
- PHASE 1 BOUNDARY
- PHASE 2 BOUNDARY
- EXISTING COMBINED DRAINAGE
- EXISTING FOUL DRAINAGE
- EXISTING SURFACE WATER DRAINAGE
- PROPOSED COMBINED DRAINAGE
- PROPOSED FOUL DRAINAGE
- PROPOSED SURFACE WATER DRAINAGE
- PROPOSED FLOW CONTROL MANHOLE
- PROPOSED OVERFLOW PIPE
- PROPOSED SURFACE WATER DIVERSION
- PROPOSED 1500 LAND DRAIN (WRAPPED IN GEOTEXTILE) LAID 500mm DEEP IN SOFT LANDSCAPE AREAS
- PROPOSED PERFORATED MUGA DRAINAGE
- PROPOSED CELLULAR ATTENUATION TANK
- PROPOSED FOUNDATION

BUILDING DRAINAGE NOTE:

POP-UP LOCATIONS & DISCHARGE UNIT LOCATIONS TAKEN FROM PDF PROVIDED BY M&E ENGINEER. EXACT SETTING OUT LOCATIONS TBC BY M&E ENGINEER ARCHITECT

SSL: 134.00 (SLAB THICKNESS 275mm)

TOP: 133.95

ALL FOUL POP-UPS OUTSIDE THE PILE CAP/GROUND BEAMS IL: 133.40

FOUL POP-UPS ABOVE THE PILE CAP/GROUND BEAMS AS INDICATED

SOME POP-UPS ARE LOCATED ABOVE PILE CAPS/GROUND BEAMS - THESE WILL NEED TO BE RELOCATED TO AVOID CLASHES, OR BE CAST INTO THE PILE CAP/GROUND BEAM

ALL FOUL CONNECTIONS ARE 1:100

MIN 140 WITH NO WC CONNECTIONS

MIN 180 WITH WC CONNECTIONS

WHERE FOUL CONNECTIONS PASS THROUGH GROUND BEAMS AT IL: 133.55 IN ORDER TO REMAIN IN THE CENTRAL THIRD OF THE BEAM

NUMBER AND LOCATIONS OF TAKEN FROM ARCHITECT'S ROOF LAYOUT

6945-JMA-01-RF-DR-A-0001-0001 - FINAL NUMBER & LOCATIONS TBC BY ARCHITECT

ALL RWP IL: 133.25

ALL SW CONNECTIONS TO BE 1:500 AT MIN 1:100

BASE LEVEL 132.47 VOLUME 718m³

TOP 133.27

BASED ON 95% VOID RATIO

MINIMUM GROUND LEVEL APPROX. 133.89

CONNECTION VIA 3000 PIPES FROM S02 & S03

MAX GROUND WATER LEVEL IDENTIFIED IN SITE INVESTIGATION AS 131.61 (BASED ON BH06)

THIS INDICATES THAT GROUND WATER LEVEL IS BELOW THE BASE OF THE TANK, AND FLOATION IS NOT AN ISSUE.

HOWEVER, THE BOREHOLE IS NOT LOCATED CLOSE TO THE TANK. GROUNDWATER LEVEL IN THE LOCATION OF THE TANK TO BE CONFIRMED, AND THE MANUFACTURER SHOULD CARRY OUT THEIR OWN FLOATION CALCULATIONS

HAZARD REF No.

ITEM (FEATURE, ELEMENT OR ACTIVITY)

RESIDUAL HAZARD

3.01	EXISTING LIVE SERVICES	EXISTING LIVE (SERVICES SITESIDE)
4.01	PROXIMITY TO LIVE BUILDINGS	UNDERMINING OR DAMAGE TO ADJACENT FOUNDATIONS DAMAGE TO EXISTING BUILDINGS
8.01	PROXIMITY TO PEDESTRIAN ROUTES	CONSTRUCTION ACTIVITIES IN CLOSE PROXIMITY TO THE LIVE EXISTING SCHOOL

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