DESIGN PHILOSOPHY

SURFACE WATER DESIGN
THE DESIGN PROVIDES CAPACITY UP TO THE 100 YEAR 40% CLIMATE CHANGE EVENT.

SW FLOW RATE: 11L/S (BASED ON EXISTING GREENFIELD RUNOFF RATE)
APPROXIMATE STORAGE REQUIREMENT: 1000m³

OUTFALL: 225Ø COMBINED CONNECTION TO EXISTING MANHOLE S106 AGREEMENT REQUIRED WITH UNITED UTILITIES (DIRECT)
PART 1 BY CURTINS
PART 2 BY CONTRACTOR

BASED ON THE CURRENT DESIGN, PUMPING WILL NOT BE REQUIRED

DRAINAGE DESIGN FOR THE 30-YR & 100-YR (+40% CLIMATE CHANGE) INCLUDES AN ALLOWANCE FOR A SURCHARGED OUTFALL LEVEL OF 54.54 (1M ABOVE SOFFIT LEVEL OF PUBLIC SEWER)

POLLUTION TREATMENT: OIL SEPARATOR

SUSTAINABLE DRAINAGE: RAIN GARDENS

INFILTRATION IS NOT CONSIDERED APPROPRIATE FOR THIS SCHEME.

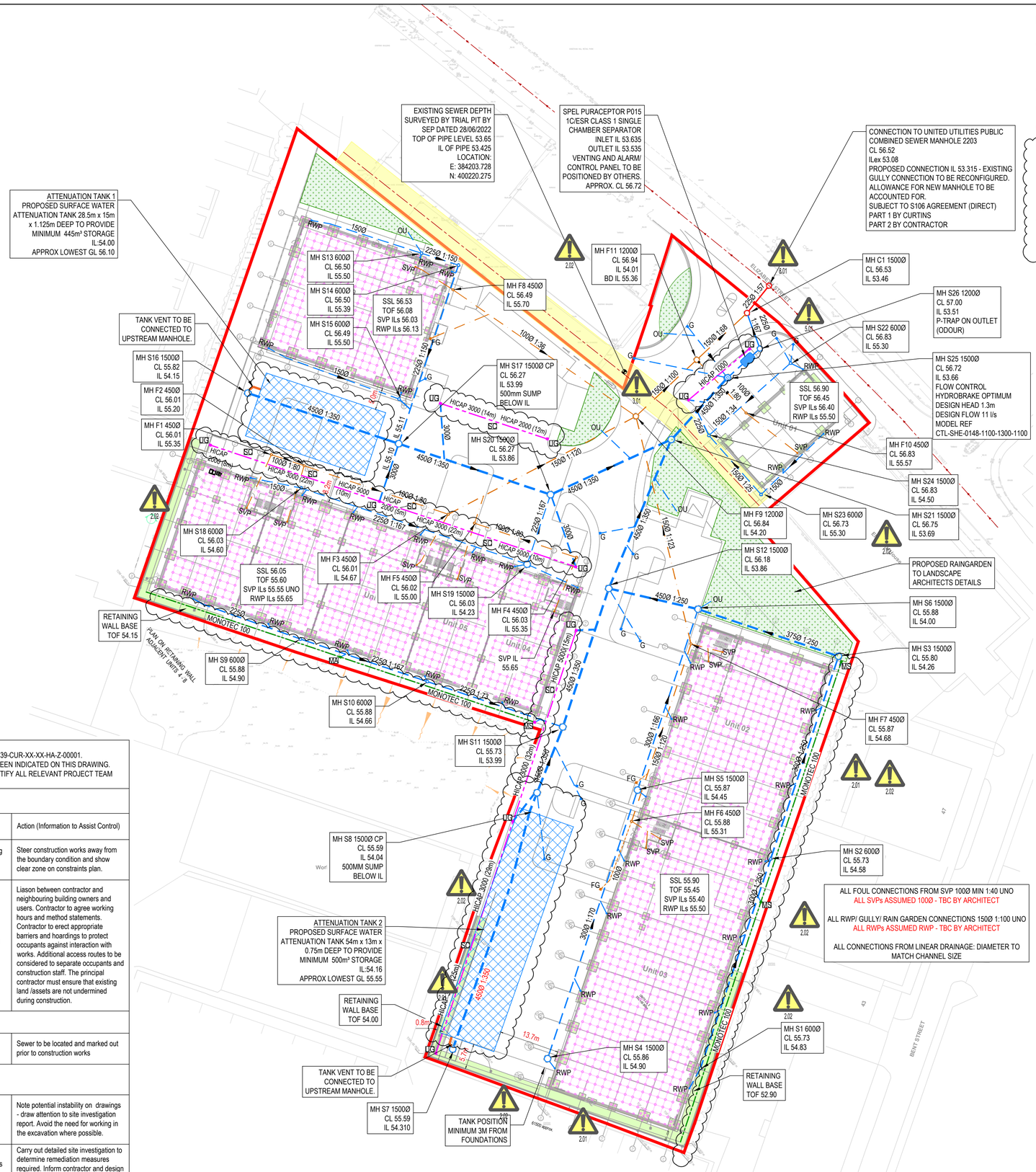
FOUL DRAINAGE DESIGN.

FOUL WATER DESIGN

FW PEAK FLOW RATE: 4.7 l/s (BASED ON ESTIMATE OF 5 DUs PER UNIT).

OUTFALL: 225Ø COMBINED CONNECTION TO EXISTING MANHOLE S106 AGREEMENT REQUIRED WITH UNITED UTILITIES (DIRECT)
PART 1 BY CURTINS
PART 2 BY CONTRACTOR

BASED ON THE CURRENT DESIGN, PUMPING WILL NOT BE REQUIRED.



"RESIDUAL HAZARD REGISTER (RELATES TO CIVIL/STRUCTURAL MATTERS ONLY)
MUST BE READ IN CONJUNCTION WITH CURTINS RESIDUAL HAZARD REGISTER 080139-CUR-XX-XX-HA-Z-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 REGISTER

Hazard Ref.	Item (Feature, Element or Activity)	Potential Hazard Identified	Action (Information to Assist Control)
2.01	Construction activity next to an existing retaining feature around perimeter.	Collapse / failure of existing retaining feature due to condition / capacity under load.	Steer construction works away from the boundary condition and show clear zone on constraints plan.
2.02	Existing Buildings	Damage to existing buildings during construction	Liason between contractor and neighbouring building owners and users. Contractor to agree working hours and method statements. Contractor to erect appropriate barriers and hoardings to protect occupants against interaction with works. Additional access routes to be considered to separate occupants and construction staff. The principal contractor must ensure that existing land /assets are not undermined during construction.
3.00 Existing Buried & Overhead Services			
3.01	Public combined sewer known to cross site. Location and depth known at one point only	Existing sewer could be damaged during construction activity.	Sewer to be located and marked out prior to construction works
5.00 EXcavations & Foundations			
5.01	Excavation stability.	At 2.5 - 3.0m - excavation may be unstable in the temporary condition.	Note potential instability on drawings - draw attention to site investigation report. Avoid the need for working in the excavation where possible.
5.02	Contamination within Made Ground	Risk to end users and site operatives	Carry out detailed site investigation to determine remediation measures required. Inform contractor and design team as required.
8.00 Access & Maintnenance			
8.01	Works in Public Highway	"Risk to operatives & Public off site from construction traffic. "	"Traffic Management plan to be developed "

KEY

- SITE BOUNDARY TAKEN FROM DRAWING 21039-FRA-XX-XX-DR-A-10-0003
- EXISTING PUBLIC COMBINED SEWER
- PROPOSED SURFACE WATER DRAINAGE
- PROPOSED FOUL WATER DRAINAGE
- PROPOSED COMBINED DRAINAGE
- PROPOSED LINEAR DRAIN HAURATON HICAP OR SIMILAR APPROVED
- UG HAUARTON HICAP UNIVERSAL GULLY
- SO HAURATON HICAP STEP CONNECTOR OUTLET BOX
- PROPOSED LINEAR DRAIN: HAURATON MONOTEC 100 TYPE 230
- MS HAURATON MONOTEC 100 TYPE 230 SUMP UNIT
- G PROPOSED ROAD GULLY
- FG PROPOSED FOUL GULLY
- RWP PROPOSED RAINWATER PIPE
- SVP PROPOSED SVP
- PROPOSED FLOW CONTROL CHAMBER
- PROPOSED PETROL INTERCEPTOR
- PROPOSED CELLULAR ATTENUATION TANK
- ATTENUATION TANK VENT PIPE
- BACKDROP
- PROPOSED RAINGARDEN (TO LANDSCAPE ARCHITECTS DETAILS)
- OU PROPOSED RAIN GARDEN OUTLET (FURTHER CONFIRMATION OF RAIN GARDEN DETAILS TBC BY LANDSCAPE ARCHITECT)
- EASEMENT TO UU SEWER
- PROPOSED PAD FOUNDATION
- VIBRO-COLUMN PILE INSTALLED FOR GROUND IMPROVEMENT (AS SUPPLIED BY SUB-CONTRACTOR - EXACT LOCATION TBC ON SITE

GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. DESIGN BASED ON TOPOGRAPHICAL SURVEY AND CCTV SURVEY INFORMATION AVAILABLE AT THE TIME OF DESIGN.
3. 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.
4. ALL DIMENSIONS ARE IN METRES AND LEVELS IN METRES ABOVE ORDNANCE DATUM UNLESS OTHERWISE NOTED.

FOR FULL DRAINAGE NOTES REFER TO DRAWING CUR-XX-XX-DR-C-92530

DRAWING REFERENCES

THE DESIGN OF THIS SCHEME HAS BEEN DESIGNED IN ACCORDANCE WITH THE BELOW DRAWINGS AND INFORMATION.

SURVEYS
- 'TOPOGRAPHICAL SURVEY REF: TOPOGRAPHICAL SURVEY 'S22909-T_Rev –'. DATED APRIL 2021.
- CCTV SURVEY REF 000847 BY LAYER SURVEYS DATED MARCH 2022
- TRIAL PIT ON PUBLIC SEWER BY SEP 28/06/2022

ARCHITECT'S PLANS
- 21039-FRA-XX-XX-DR-A-90-0011 REV C3 ALL UNITS - SITE SETTING OUT PLAN
- 21039-FRA-XX-XX-DR-A-90-0013- REV C1 ALL UNITS - SITE DRAINAGE SETTING OUT

LANDSCAPE ARCHITECT'S PLANS
- 4018 101 REV B LANDSCAPE LAYOUT (FOR REFERENCE ONLY)

FOUNDATION PLANS
- 080139-CUR-01-FN-DR-S-16001 REV C01 UNIT 01 FOUNDATION GA
- 080139-CUR-02-FN-DR-S-16001 REV C02 UNIT 02 FOUNDATION GA
- 080139-CUR-04-FN-DR-S-16001 REV C02 UNIT 04 FOUNDATION GA
- 080139-CUR-09-FN-DR-S-16001 REV C02 UNIT 09 FOUNDATION GA
- 080139-CUR-ZZ-ZZ-DR-S-17001 REV C03 GA TO EXTERNAL RETAINING WALLS

VIBRO-COLUMN GROUND IMPROVEMENT
- TCV-22310-2-3 REV A STONE COLUMN LAYOUT PLOT 2-3
- TCV-22310-4-8 REV - STONE COLUMN LAYOUT PLOT 4-8
- TCV-22310-9 REV - STONE COLUMN LAYOUT PLOT 9

ATTENUATION TANK INFO
- AS-BUILT SETTING OUT RECEIVED 06.09.23

RAIN GARDENS ALLOW FOR BACKFALL ON FOOTWAYS - FINAL DETAILS TO BE REVIEWED AND CONFIRMED WITH TRITON.

Rev:	Description:	Date:	By:	Chkd:
C02	ATTENUATION TANKS AMENDED, LINEAR DRAINAGE AMENDED	08.09.23	ATL	CG
C01	CONSTRUCTION ISSUE	04/08/22	ATL	CG
P04	TENDER ISSUE	14/10/22	ATL	CG
P03	STAGE 3 UPDATE	23/06/22	LK	CG
P02	STAGE 3 ISSUE	15/06/22	LK	CG
P01	DRAFT ISSUE FOR COMMENT	13/05/22	CS	CG

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Status: SUITABLE FOR STAGE APPROVAL — S4

Project: ELIZABETH STREET, CHEETHAM HILL

Drg Title: PROPOSED DRAINAGE LAYOUT

Drawn By	Designed By	Checked By
LK	LK	CG
	Date: 12/05/22	Scales @ A1: 1:500

Project No - Originator - Function - Spatial - Form - Discipline - Number: 080139 - CUR - XX - XX - D - C - 92500

Revision: C02

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