

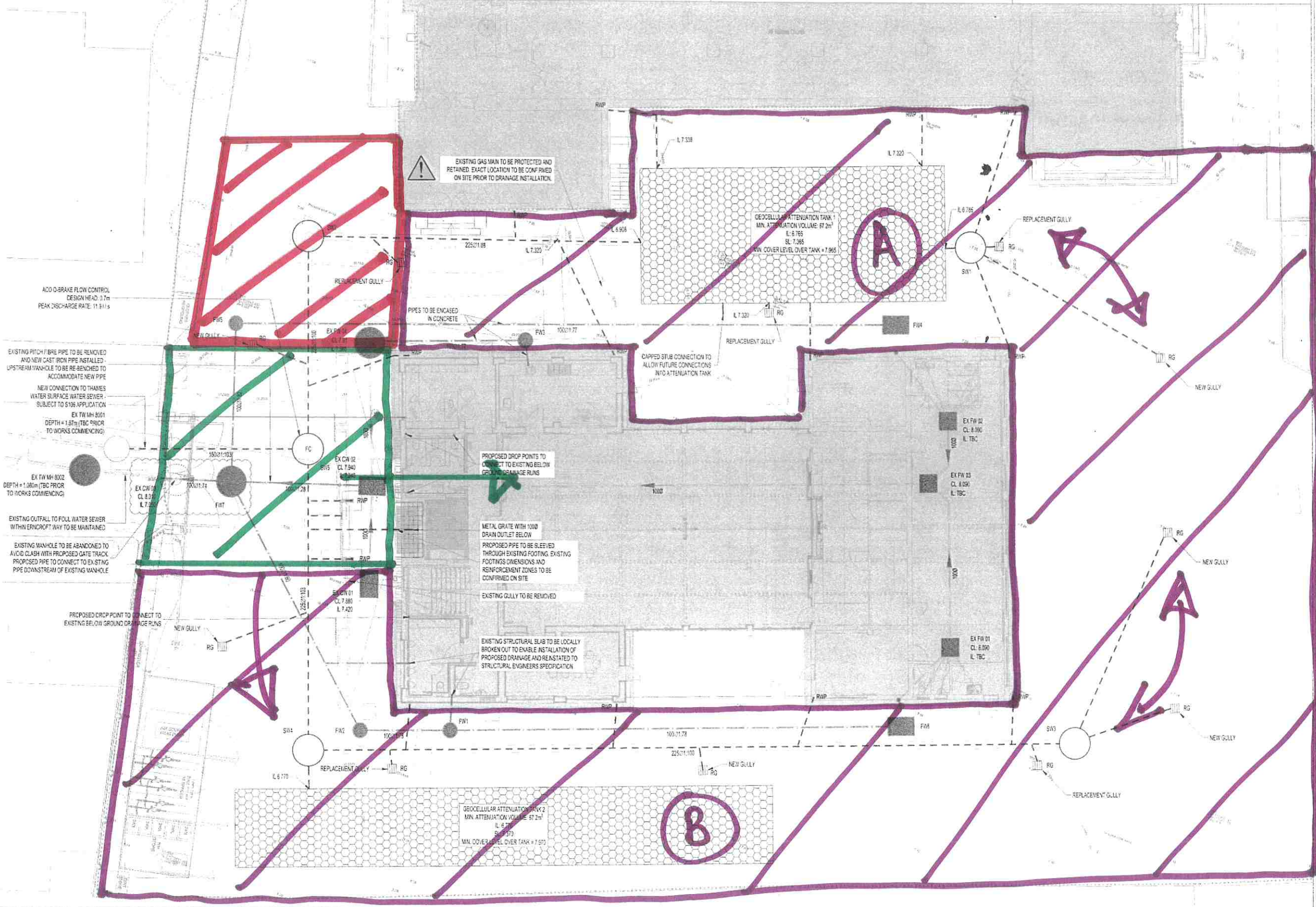
**BELOW GROUND DRAINAGE NOTES**

1. THE LOCATION AND LEVEL OF EXISTING DRAINAGE CONNECTIONS AND EXISTING SERVICES IS TO BE CHECKED PRIOR TO COMMENCEMENT OF DRAINAGE WORKS. ANY VARIANCE TO THE DETAILS ON THIS DRAWING AND THE SPECIFICATIONS IS TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
2. THE DESIGN IS BASED ON THE INFORMATION AVAILABLE ON THE DATE OF ISSUE FROM OTHER PARTIES (E.G. ARCHITECT AND M&E ENGINEER). IT IS SUBJECT TO CHANGE RESULTING FROM UPDATES TO THE AVAILABLE INFORMATION FROM OTHERS.
3. THE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE M&E SPECIFICATIONS, ASSOCIATED MANHOLE SCHEDULE AND STANDARD DRAINAGE DETAIL DRAWINGS WHERE APPLICABLE.
4. THE POSITIONS OF FOUL AND SURFACE WATER DRAINAGE POINTS ARE INDICATIVE ONLY. REFER TO THE ARCHITECT'S DRAWINGS FOR SETTING OUT DETAILS.
5. PRIVATE FOUL AND SURFACE WATER DRAINAGE IS TO BE CONSTRUCTED IN ACCORDANCE WITH BUILDING REGULATIONS PART N, BS ENTS AND BS EN 12056.
6. OPENING AT GROUND LEVEL ARE TO BE CONSTRUCTED USING MURPHY'S CLAY PIPES TO BS EN 12054 IN PUR SUITABILITY SPECIFICATION (HEP WORTH SUPERLEVEL) OR SIMILAR APPROVED.
7. ALL SOIL CONNECTIONS UNDER BUILDINGS TO BE MAINTAINED AT A MINIMUM GRADE OF 150mm UNLESS OTHERWISE SPECIFIED.
8. ALL SURFACE WATER CONNECTIONS TO BE FROM WATER AND TO BE LAIN AT A MINIMUM GRADE OF 150mm UNLESS OTHERWISE SPECIFIED.
9. ALL SOIL CONNECTIONS AND RUN WATER PIPES SHOULD BE LOCATED FROM GROUND LEVEL.
10. RUN WATER DOWN PIPES ARE TO BE CONNECTED TO A DRAIN IN A RIGHT BEND. WHERE DRAINAGE IS COMBINED A TRIP MUST ALSO BE PROVIDED.
11. IN CASES OF IN SITU CONCRETE FLOOR SLABS, DRAINING ARE TO BE CAST INTEGRAL WITH THE SLAB WITH THE PIPE CENTER TO THE DRAIN IS LESS THAN 200mm. NOTE SPECIAL PROVISIONS APPLY TO BASEMENT FLOOR SLABS - SEE DETAILED DRAINAGE AND STRUCTURAL DRAWINGS. CONCRETE ENCASEMENT TO BE REINFORCED AS PER DRAINAGE DETAIL.
12. IN CASES OF SUSPENDED FLOORS WHERE A VOID OF 300mm OR MORE EXISTS BELOW FLOOR DRAINS ARE TO BE SUSPENDED USING A PROPRIETARY HANGER SYSTEM OR CAST INTEGRAL WITH THE FLOOR.
13. WHERE DRAIN PIPES PASS THROUGH FOUNDATIONS OR OTHER RIGID STRUCTURES A LEVEL OR SLEEVE IS TO BE USED AND PROVISION FOR FLEXIBILITY IS TO BE MADE USING ROCKER PIPES.
14. BACKFILLING OF DRAIN TRENCHES ADJACENT TO BUILDINGS OR OTHER STRUCTURES IS TO BE IN ACCORDANCE WITH CD/MRAM 8 OF THE BUILDING REGULATIONS.
15. ANY PIPE OR GULLY OR OTHER FITTING OR DUCT PENETRATING THE BASEMENT SLAB OR WALLS IS TO BE WATERPROOFED USING MORTAR/PLASTER OR PROCE FLANGED TO ENSURE A WATER TIGHT JOINT. CONCRETE'S CURROUND TO DRAINAGE PIPES AND FITTINGS MAY BE REQUIRED IN CERTAIN CASES - REFER TO DETAILED DRAINAGE DRAINAGE AND RELEVANT STRUCTURAL DETAILS.
16. EXISTING FOUNDATIONS AND RETAINING WALLS MUST NOT BE UNDERMINED BY NEW DRAINAGE UNLESS APPROVED BY WRITING WITH THE STRUCTURAL ENGINEER. CONTRACTOR TO SUBMIT METHOD STATEMENTS AND TEMPORARY WORKS PROPOSALS TO THE STRUCTURAL ENGINEER FOR COMMENT PRIOR TO COMMENCEMENT OF WORKS.
17. ALL DRAINAGE EXCAVATIONS SHOULD BE RISK ASSESSED BY THE CONTRACTOR TO ENSURE TRENCH SAFETY IS MAINTAINED. MEASURES ARE CONSIDERED DURING THE CONSTRUCTION PERIOD. ANY EXCAVATIONS LEFT PROPOSED SHOULD BE PROTECTED BY A COMPETENT PERSON ON A DAILY BASIS. GROUND CONDITIONS SHOULD BE MONITORED AND TCOL BOX TALKS SHOULD INCLUDE SITE INVESTIGATION INFORMATION TO AID THE CONTRACTOR'S RISK ASSESSMENT AND METHOD OF EXCAVATION. ALL EXCAVATIONS SHOULD BE ASSESSED BY A COMPETENT PERSON FOR CONFINE SPACES REQUIREMENTS.
18. THE CONTRACTOR IS TO CONSIDER PASSING OF THE DRAINAGE INSTALLATION AND ARE TO PROVIDE TEMPORARY DRAINAGE MEASURES THEY DETERMINE ARE REQUIRED.
19. SWS ARE TO BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS MADE WITHIN THE CERA SUDS MANUAL (CERA) WITH PARTICULAR ATTENTION DRAWN TO CHAPTER 11 AND CERA GUIDANCE ON THE CONSTRUCTION OF SUDS CIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONSIDER CONSTRUCTION PROGRAMME OF SUDS.
20. DETAILED DESIGN OF GEOCELLULAR ATTENUATION CHAMBERS IS A COP ITEM AND SHOULD BE BASED ON LEVEL LAND IT AND VOLUME DETAILS SHOWN. DETAILED DESIGN INFORMATION SHOULD BE PROVIDED TO THE CIVIL ENGINEER TO PASS COMMENT.
21. ALL MANHOLE COVER LEVELS SHOULD BE APPROXIMATE AND VARY TO SUIT THE FLOOR GRADING OR BUILDING LEVELS.
22. MANHOLE COVERS IN BLOCK PAVED AREAS ARE TO BE PROCESSED UNLESS NOTED OTHERWISE.
23. ALL INTERNAL MANHOLE COVERS ARE TO BE NON-VENTILATING AND DULCET SEALED.
24. ALL EXTERNAL FOUL AND COMBINED WATER MANHOLE COVERS IN FOOTPATHS AND PAVED AREAS OTHER THAN FOOTPATHS ARE TO BE NON-VENTILATING AND DULCET SEALED UNLESS NOTED OTHERWISE.
25. ALL EXTERNAL SURFACE WATER MANHOLE COVERS ARE TO BE NON-VENTILATING UNLESS NOTED OTHERWISE.
26. ALL MANHOLE COVERS ARE TO BE INSTALLED SQUARE TO PARALLEL WITH LINES OF BUILDINGS.
27. FOR ADOPTED DRAINAGE, MANHOLE COVERS ARE TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SUDS OR SPECIFIC WATER AUTHORITY REQUIREMENT.
28. INSPECTION CHAMBERS ARE TO HAVE A REDUCED ACCESS PRICE WHEN THE DEPTH IS GREATER THAN 1.5m TO THE BASE OF THE CHAMBER.

**NOTES:**

**LEGEND:**

- FOUL WATER MANHOLE
- SURFACE WATER MANHOLE
- EXISTING FOUL WATER
- EXISTING SURFACE WATER
- PROPOSED FOUL WATER
- PROPOSED SURFACE WATER
- FOUL WATER PIPE TO BE ABANDONED
- SURFACE WATER PIPE TO BE ABANDONED
- PIPE TO BE CAST INTO FOUNDATION
- PROPOSED LINEAR CHANNEL WITH WHEELSLIP GRATING - ACD M1000 OR SIMILAR APPROVED
- TRAPPED ROAD GULLY (LOAD CLASS D400) - HEPWORTH ROPS GULLY OR SIMILAR APPROVED
- FOUL DROP POINT
- RAN WATER PIPE
- GEOCELLULAR SURFACE WATER ATTENUATION (TO CONTRACTOR DESIGN)
- FLOW CONTROL CHAMBER
- EXISTING BUILDING
- PROPOSED BUILDING
- REVISION CLOUD INDICATING CHANGES FROM PREVIOUS REVISION



**CAUTION VISITOR PARKING**

**CLEAR ENTRANCE TO SITE**

**CONTRACTORS SITE**

Rev	Date	By	Check	Description
C2	01.02.24	EW	TP	Issued for Construction
C1	23.01.24	EW	TP	Issued for Construction
T1	12.10.23	EW	TP	Tender
P3	09.01.23	EW	TP	Preliminary

**ALL HALLOWS**  
**Proposed Below Ground**  
**Drainage Layout**  
**JH1727 / D10000 / C2**

Scale: 1:100@A1  
 Date: Feb 2024  
 Drawing status: CONSTRUCTION  
 Revision: C2

Drawn by: EW