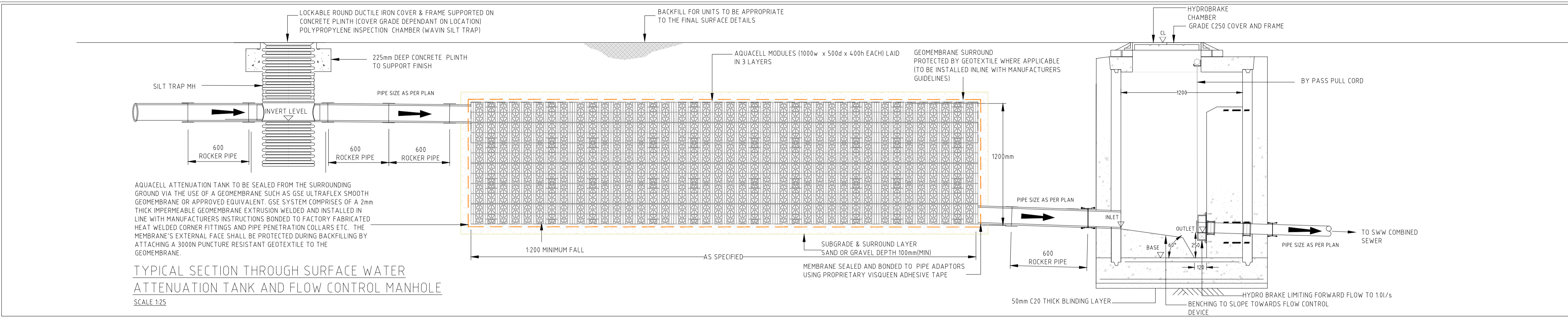


KEY

- PROPOSED PRIVATE SW SEWER (INCLUDING GULLIES)
- PROPOSED ATTENUATION TANK CONSTRUCTED USING MODULAR INFILTRATION UNITS
- PROPOSED HYDROBRAKE
- PROPOSED PRIVATE SURFACE WATER POLYPROPYLENE INSPECTION CHAMBER (4750/4500 P.P.I.C)
- PROPOSED CATCHPIT WITH LEAF AND DEBRIS FILTER
- FLOOD ROUTING POST DEVELOPMENT
- SWW COMBINED SEWER



SURFACE WATER

THE PREFERRED WAY TO DEAL WITH SURFACE WATER IS VIA INFILTRATION. HOWEVER AS THE SITE IS VERY STEEP WITH NUMEROUS RETAINING WALLS AS SUCH SOAKAWAYS ARE DEEMED UNFEASIBLE AS SUCH AN ON SITE ATTENUATION SYSTEM TO DISCHARGE TO A SUITABLE RECEPTION IS PROPOSED.

THIS DRAWING SHOWS THE PROPOSED LAYOUT OF THE SURFACE WATER ATTENUATION SYSTEM AT THE SITE.

MICRO DRAINAGE SOFTWARE HAS BEEN USED TO SIZE THE STORAGE REQUIRED TO DRAIN THE IMPERMEABLE AREAS FROM THE BUILDINGS. THESE CALCULATIONS ARE BASED ON MODULAR INFILTRATION UNITS WITH A 95% VOID RATIO TO ACCOMMODATE THE WORST CASE DESIGN STORM (100-YEAR) WITH RAINFALL INTENSITIES INCREASED BY 50% TO ALLOW FOR THE EFFECTS OF CLIMATE CHANGE AS REQUIRED BY THE LOCAL DRAINAGE GUIDANCE FOR THIS AREA.

FUTURE MANAGEMENT PLAN & MAINTENANCE OF THE SYSTEM

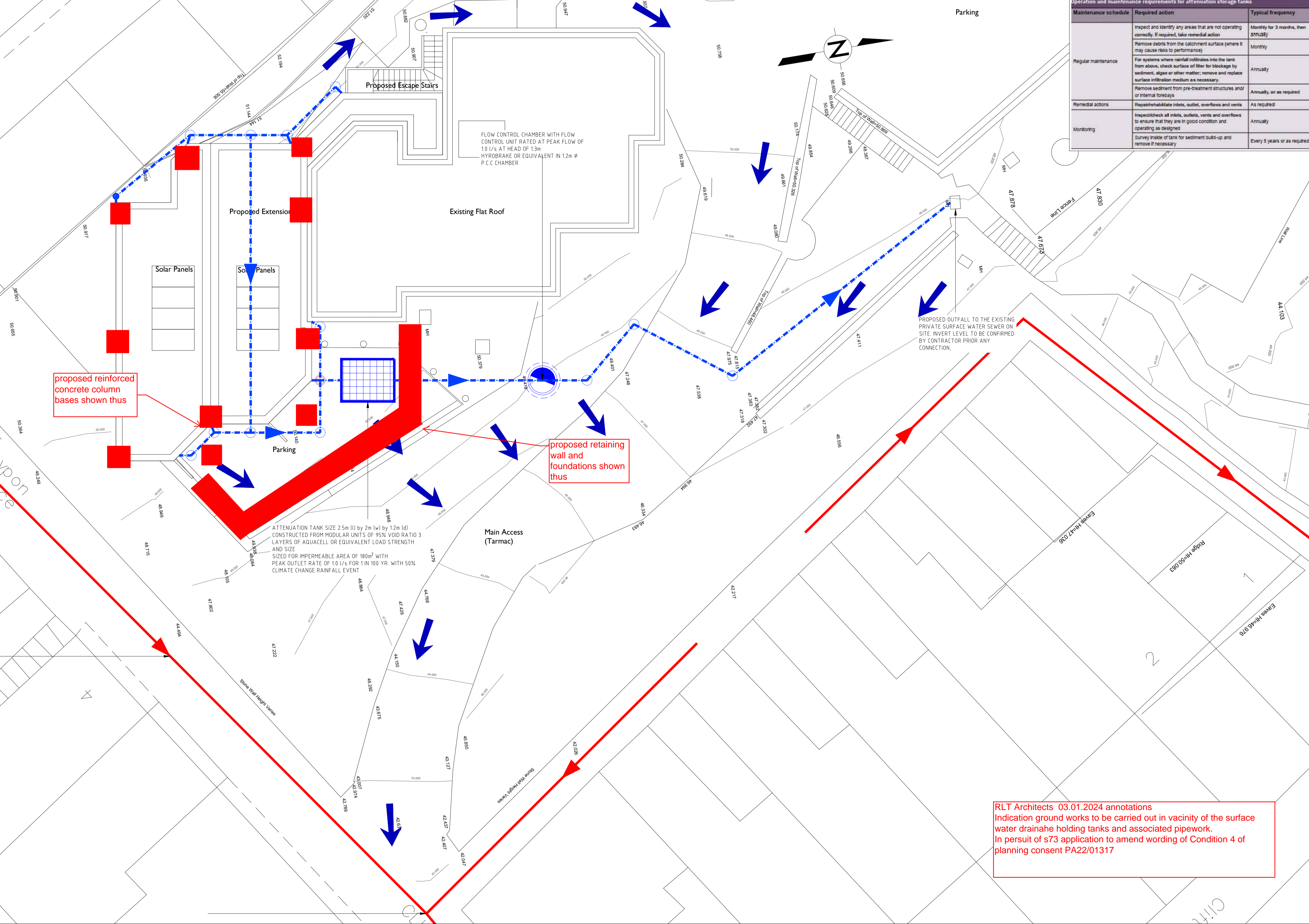
THE PROPOSED DRAINAGE SYSTEMS WILL REMAIN PRIVATE AND WILL BE OPERATED AND MAINTAINED BY THE SITE OWNERS/USERS.

REGULAR INSPECTION AND CLEANING OF THE DRAINAGE INFRASTRUCTURE, INCLUDING GUTTERING, DOWN-PIPE, PIPE / GULLY NETWORKS SHOULD BE CARRIED OUT FREQUENTLY TO PREVENT BUILD-UP OF SILT AND DEBRIS, WHICH WILL REDUCE THE SYSTEM CONVEYANCE CAPACITY. VISUAL INSPECTION SHOULD IDEALLY BE CARRIED OUT AFTER ANY HEAVY RAINFALL EVENT DURING THE FIRST YEAR OF OPERATION, THEN SIX-MONTHLY AFTER THAT. PARTICULAR ATTENTION SHOULD BE PAID DURING THE AUTUMN MONTHS WHEN LEAF LITTER AND OTHER DEAD PLANT MATERIAL MAY CAUSE OBSTRUCTION.

INSPECTION OF UPSTREAM CATCH-PITS, UPSTREAM GULLIES AND PIPEWORK TO INCLUDE REMOVAL OF DEBRIS SHOULD BE UNDERTAKEN AS NECESSARY. OPTIONAL CCTV INSPECTION AND DE-SILT SHOULD BE UNDERTAKEN IF REQUIRED ON A TEN-YEARLY BASIS.

ROUTINE INSPECTION OF THE ATTENUATION TANK SHOULD OCCUR TO ENSURE THEY REMAIN EFFICIENT. SILT REMOVAL MAY BE NEEDED FROM TIME TO TIME.

ANY ISSUES OR FAILURES IDENTIFIED WITH THE SYSTEM SHOULD BE RECTIFIED IMMEDIATELY BY A SUITABLE CONTRACTOR, OBSERVING SUITABLE WORKING PRACTICES AND FOLLOWING THE GUIDANCE AND PROCEDURES AS IDENTIFIED ABOVE.



Operation and maintenance requirements for attenuation storage tanks

Maintenance schedule	Required action	Typical frequency
Maintenance schedule	Inspect and identify any areas that are not operating correctly. If required, take remedial action	Monthly for 3 months, then 30/30/30
	Remove debris from the catchment surface (where it may cause risks to performance)	Monthly
Regular maintenance	For systems where rainfall infiltrates into the tank from above, check surface of filter for blockage by sediment, algae or other matter; remove and replace surface infiltration medium as necessary	Annually
	Remove sediment from pre-treatment structures and/or internal forebays	Annually, or as required
Remedial actions	Rehabilitate inlets, outlets, overflows and vents	As required
Monitoring	Inspect/Check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed	Annually
	Survey inside of tank for sediment build-up and remove if necessary	Every 5 years or as required

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NOTES

- This drawing is copyright. Refer to details above.
- This drawing is only to be used for the purposes described in the status box below. Work to figured dimensions only, do not scale for construction purposes.
- This drawing is to be read in conjunction with all other drawings, details and specifications pertaining to the work described. It should only be used for the purpose marked in the status box below, and shall not be used for construction unless clearly marked CONSTRUCTION.
- Materials and workmanship shall comply to the appropriate British Standards and Codes of Practice unless otherwise stated.
- The activities required to construct the work, shown on drawings clearly marked CONSTRUCTION, may be subject to the provisions of the Construction (Design & Management) Regulations 2015. The Contractor and Client must ensure that they are adequately conversant with these regulations and that the appropriate procedures required under the regulations are observed at all times.
- The contractor is responsible for locating services prior to excavation. Any services shown on the drawing should be considered 'indicative' only. Where no services are shown on the drawing it does not necessarily mean there are no services present, only that a services search has not been undertaken. Where in doubt refer to HSE booklet "avoiding danger from underground services"
- Design Risk Assessment

A risk assessment relating to potential hazards associated with the works described within this drawing, in so far as they have been designed by EDS Ltd, has been undertaken. Risks identified have been eliminated by design wherever practicable. The status with regard to residual risks is as follows:

The work is of low complexity with low level of risk; it is considered that there are no significant residual risks that would not be readily foreseeable by a competent contractor, observing good working practices.

Designer - EDS Drawing revision - A
Date - 09/06/23

CAUTION!
UNDERGROUND UTILITY SERVICES NOT SHOWN ON DRAWING

DATE	DRWN	CHKD	REV	NOTES
04-07-23	JM	BD	B	SURFACE WATER REROUTED TO PRIVATE SURFACE WATER SEWER ON SITE
15-06-23	JM	BD	A	PRELIMINARY ISSUE

PRELIMINARY

EDS
Engineering & Development Solutions

- Flood Risk Assessment
- SuDS and Surface Water
- Foul and Sewage Treatment
- Highway Design
- Civil Engineering
- Statutory Approvals

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CLIENT
CHYPONS RESIDENTIAL HOME

PROJECT
PROPOSED NEW EXTENSION AT CHYPONS RESIDENTIAL HOME, NEWLYN

DRAWING TITLE
SURFACE WATER DRAINAGE LAYOUT

PROJECT No.	DRAWING No.	REV.
J-2959	3001	B

RLT Architects 03.01.2024 annotations
Indication ground works to be carried out in vicinity of the surface water drainage holding tanks and associated pipework.
In pursuit of s73 application to amend wording of Condition 4 of planning consent PA22/01317