

OPERATION AND MAINTENANCE REQUIREMENTS FOR ATTENUATION STORAGE TANKS

MAINTENANCE SCHEDULE	REQUIRED ACTION	TYPICAL FREQUENCY
REGULAR MAINTENANCE	INSPECT & IDENTIFY ANY AREAS THAT ARE NOT OPERATING CORRECTLY. IF REQUIRED, TAKE REMEDIAL ACTION	MONTHLY FOR 3 MONTHS THEN ANNUALLY
	REMOVE DEBRIS FROM THE CATCHMENT SURFACE (WHERE IT MAY CAUSE RISK TO PERFORMANCE)	MONTHLY
	REMOVE SEDIMENT FROM PRE-TREATMENT ROAD GULLIES & SILT TRAP MANHOLE	MONTHLY FOR 3 MONTHS THEN ANNUALLY OR AS REQUIRED
REMEDIAL ACTIONS	REPAIR/REHABILITATE INLETS, OUTLETS, OVERFLOWS & VENTS	AS REQUIRED
MONITORING	INSPECT/CHECK ALL INLETS, OUTLETS, VENTS & OVERFLOWS TO ENSURE THAT THEY ARE IN GOOD CONDITION & OPERATING AS DESIGNED	ANNUALLY
	CCTV SURVEY INSIDE OF TANK FOR SEDIMENT BUILD-UP & REMOVE IF NECESSARY	AFTER CONSTRUCTION, 1 YEAR, & THEN EVERY 5 YEARS OR AS REQUIRED

KEY:

- SW000 CL: IL: — 150Ø, Xm @ 1:X — SURFACE WATER MH & DRAINAGE RUN
- FW000 CL: IL: — 150Ø, Xm @ 1:X — FOUL WATER MH & DRAINAGE RUN
- SW RISE CL: IL: — XXØ, Xm @ 1:X — SURFACE WATER RISING MAIN & MH
- EX CW CL: IL: — 150Ø, Xm @ 1:X — EXISTING COMBINED WATER MH & DRAINAGE RUN
- SW ACO CHANNEL — SURFACE ACO CHANNEL
- FW ACO CHANNEL — FOUL ACO CHANNEL
- SURFACE GULLY
- FS — PROPOSED FUEL SEPARATOR
- RE — SURFACE RODDING EYE
- RWP — RAINWATER PIPE
- SVP — SOIL VENT PIPE
- FLOOD ROUTE — FLOOD ROUTE FOR STORM EVENTS IN EXCESS OF 1 IN 100 YEARS + 40% CLIMATE CHANGE
- 1:3 — PROPOSED BANKING
- +3.20 — PROPOSED LEVELS
- 1.60 — PROPOSED GRADIENTS
- (2.59) — EXISTING BOUNDARY LEVELS
- EXISTING RETAINING WALL
- (XXm) — EXISTING RETAINING WALL

DO NOT SCALE, IF IN DOUBT ASK. DO NOT INTERROGATE CAD BASE

DRAINAGE NOTES:

1. THIS DRAWING HAS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS & ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. FOR DRAINAGE DETAILS REFER TO DRAWING PXXXXX.
3. FOR LOCATION OF ALL R.W.P's & INTERNAL POP-UP's REFER TO ARCHITECTS DRAWING. ALL DOWN PIPES TO BE FITTED WITH ACCESS HANDHOLES ABOVE F.F.L. OR GROUND LEVEL.
4. ALL GULLY CONNECTIONS TO BE 150Ø U.N.O. ALL S.V.P. CONNECTIONS TO BE MINIMUM 100Ø OR TO MATCH S.V.P. DOWNPIPE IF GREATER. ALL R.W.P. CONNECTIONS TO BE 150Ø OR TO MATCH R.W.P. DOWNPIPE.
5. ALL PIPES UP TO 450Ø TO BE UPVC PIPES. PIPES GREATER THAN 450Ø TO BE CONCRETE.
6. PIPES UNDER ROADS HAVING 1200mm OR LESS COVER ARE TO BE ENCASED IN CONCRETE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
7. MANHOLE COVER LEVELS ARE INDICATIVE AND SHOULD BE SET TO SUIT FINISHED ROAD LEVEL AND CAMBER.
8. ALL EXTERNAL MANHOLES WITHIN ROADS TO BE FITTED WITH LOADCLASS D400 COVERS U.N.O. ALL EXTERNAL MANHOLES WITHIN SOFT LANDSCAPING TO BE FITTED WITH LOADCLASS B125 COVERS U.N.O. ALL IN ACCORDANCE WITH BS EN 124:2015 (ALL PARTS).
9. INVERT LEVELS OF EXISTING DRAINS AND MANHOLES TO BE CONFIRMED ON SITE PRIOR TO COMMENCING OPERATIONS. NO EXISTING SEWER MANHOLE TO BE OPENED OR ENTERED WITHOUT THE PERMISSION OF THE LOCAL AUTHORITY DRAINAGE DEPARTMENT AND THE ATTENDANCE OF SEWER PERSON AS REQUIRED.
10. DRAINAGE DESIGN AND INSTALLATION TO BE TO THE SATISFACTION OF THE LOCAL BUILDING CONTROL DEPARTMENT AND TO COMPLY WITH BS EN 752:2017, BS EN 1610:2015, BS EN 12056-1:2000, BS EN 12056-3:2000.
11. ADOPTABLE DRAINAGE WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE LATEST EDITION OF 'SEWERS FOR ADOPTION'.
12. ALL SUDS COMPONENTS TO BE MAINTAINED IN ACCORDANCE WITH CIRIA C 768.
13. SURFACE WATER ATTENUATION CRATES TO BE WAVIN AQUACELL PLUS OR SIMILAR APPROVED. TO BE INSTALLED IN LINE WITH MANUFACTURES SPECIFICATION.

SURFACE WATER ATTENUATION

PROPOSED IMPERMEABLE AREA: 2260m² (0.226 Ha)

EXISTING IMPERMEABLE AREA: 1140m² (0.114 Ha)

SITE AREA: 2960m² (0.296 Ha)

EXISTING SW RUN-OFF: 2.78 x 0.114 x 50 = 15.8 L/S

DISCHARGE RATE: 15.8 L/S - 53% = 7.5 L/S*
(*AS AGREED WITH UNITED UTILITIES)

CELLULAR TANK DIMENSIONS: 17m x 6m x 0.8m x 0.95 = 77.5m³

STORM EVENT: 1 IN 100YR + 40% CLIMATE CHANGE

CDM NOTES

1. ACCESS AND EGRESS TO THE SITE FROM BUSY ROAD.
2. POTENTIAL GROUND INSTABILITY IN DEEP EXCAVATIONS
3. NO HEAVY PLANT OR STOCK PILES PERMITTED OVER OR WITHIN 3m OF THE CONSTRUCTED TANK
4. TANK TO BE FULLY PROTECTED FROM SILT AND DEBRIS INGRESS DURING CONSTRUCTION, AND TO BE INSPECTED AND MAINTAINED DURING OPERATION AS DETAILED ABOVE
5. TANKS NOT DESIGNED TO RESIST UPLIFT UNTIL FULLY BACKFILLED
6. EXISTING SERVICES IDENTIFIED ON SITE.
7. ADEQUATE SEGREGATION HOARDING REQUIRED TO SEPARATE PUBLIC FROM THE CONSTRUCTION SITE.
8. ADEQUATE MEASURES REQUIRED TO CONTROL NOISE, DUST, FUMES & VIBRATION.
9. POTENTIAL HOT SPOT CONTAMINATION DUE TO PREVIOUS SITE USE.
10. EXISTING BOUNDARY RETAINING WALLS PRESENT.

REV.	DATE.	REVISION.	BY.	CHK.
–		FIRST ISSUE.	PH	NB
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Euro Garages Ltd

Proposed PFS & Drive 'Thru' Restaurant
Cheetham Hill Road, Manchester

Drainage Layout Plan

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PLANNING

DATE CREATED:	SCALE:	
July 2022	1:200	@ A1

CONTRACT No:	DRAWING No:	REV:
P15633	500	-