A1

DRAINAGE NOTES

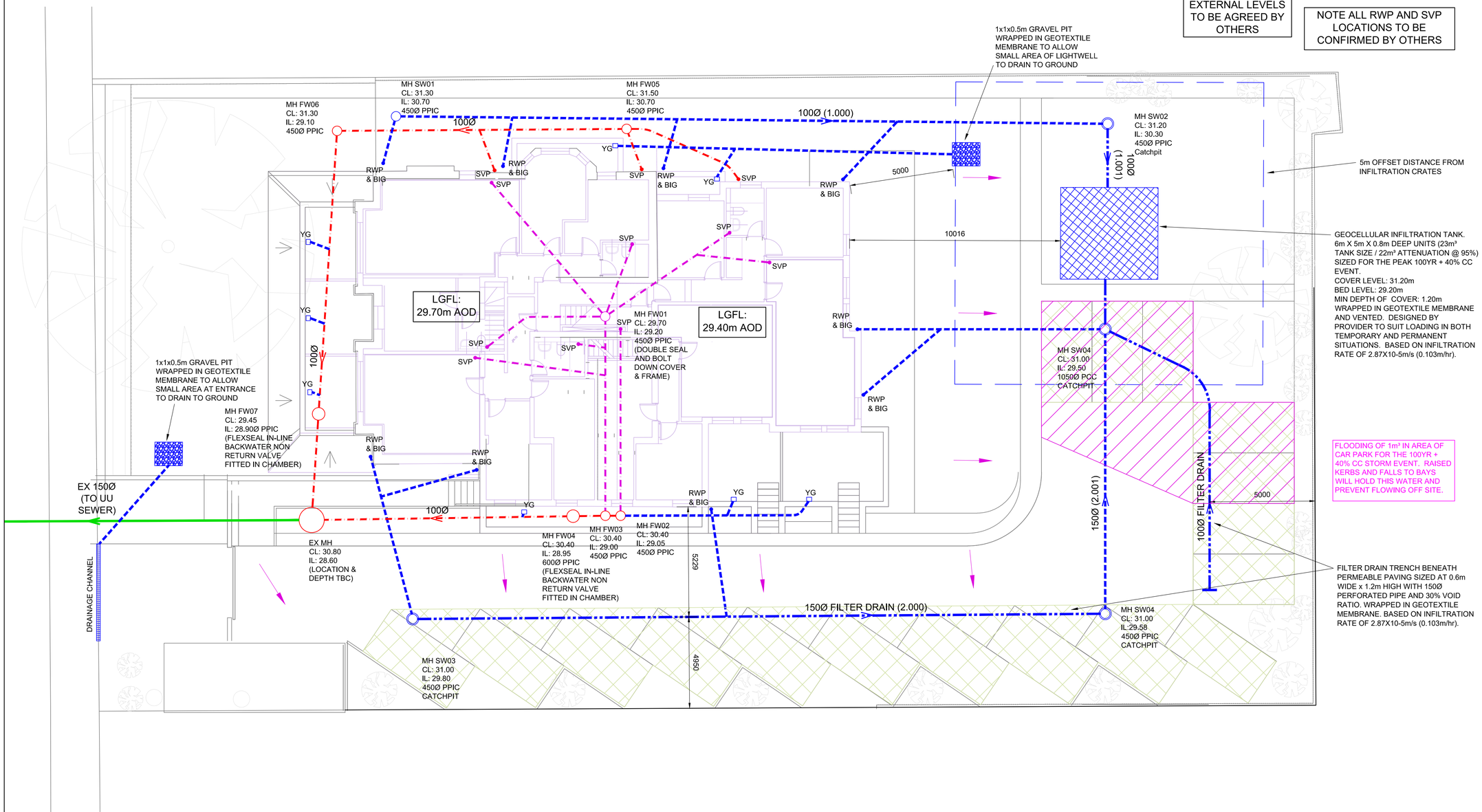
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS, SPECIFICATIONS AND DOCUMENTATION.
2. THE POSITION, SIZE AND LEVELS OF ALL DRAINS ARE TO BE CONFIRMED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORKS AND ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER.
3. DO NOT SCALE FROM THIS DRAWING, WORK TO DIMENSIONS OR CO-ORDINATES PROVIDED. ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS OTHERWISE NOTED.
4. THE CONTRACTOR SHALL ALLOW FOR THE PROTECTION, TEMPORARY AND PERMANENT SUPPORT AND DIVERSION WORKS AS NECESSARY, TO ALL EXISTING SERVICES TO THE SATISFACTION OF THE PUBLIC UTILITIES.
5. THE CONTRACTOR SHALL ALLOW FOR DEALING WITH SURFACE WATER RUN-OFF INTO EXCAVATIONS AND FROM GROUNDWATER BY MEANS OF SUMPS, PUMPING AND DE-WATERING AS APPROPRIATE, IN ORDER TO KEEP THE EXCAVATION AS REASONABLY DRY AS POSSIBLE DURING THE CONSTRUCTION OF THE WORKS.
6. ALL PRIVATE DRAINAGE WITHIN THE SITE IS TO COMPLY WITH THE REQUIREMENTS OF THE RELEVANT BRITISH/EUROPEAN STANDARD AND THE BUILDING REGULATIONS PART H.
7. CONCRETE PROTECTION TO PIPEWORK IS TO BE PROVIDED AS FOLLOWS:
 a) ALL PIPEWORK WITHIN PEDESTRIAN/SOFT AREAS WITH LESS THAN 600MM COVER.
 b) ALL PIPEWORK SUBJECT TO VEHICULAR OVERRUN WITH LESS THAN 1.2M COVER.
8. ALL PIPEWORK WITHIN MANHOLES ARE TO BE LAID SOFFIT TO SOFFIT (U.N.O). ALL CHAMBER INVERT LEVELS ARE FOR THE OUTGOING PIPE LEVELS. BACKDROP PIPEWORK SHALL BE CONNECTED AT SOFFIT TO SOFFIT WITH THE RODDING ACCESS LEVEL SPECIFIED.
9. ANY GRADIENTS OF DRAINS INDICATED ARE INDICATIVE ONLY AND THE CONTRACTOR SHALL INSTALL THE DRAINS TO THE SPECIFIED LEVELS SHOWN FOR EACH MANHOLE (U.N.O). CATCHPIT INVERT LEVELS ARE FOR THE OUTGOING PIPE WITH THE SUMP LEVEL SPECIFIED SEPARATELY.
10. CO-ORDINATE SETTING OUT INFORMATION FOR MANHOLES IS TO THE INTERSECTION THE DRAINS AND NOT THE CENTRE OF THE MANHOLE.
11. COVER LEVELS OF THE MANHOLES ARE PROVISIONAL AND SUBJECT TO ADJUSTMENT ON SITE TO SUIT THE FINISHED GROUND LEVELS. ALL EXTERNAL WORKS CONSTRUCTION AREAS TO BE AS LOCATED BY THE ARCHITECT.
12. MANHOLE COVERS AND FRAMES ARE TO BE IN ACCORDANCE WITH THE RELEVANT BRITISH/EUROPEAN STANDARD AND THE FOLLOWING:
 a) VEHICULAR AREAS: CLASS E600 & D400, DOUBLE TRIANGULAR, 150MM DEEP DUCTILE IRON COVER AND FRAME WITH THREE POINT COVER SEATING, BADGED FW OR SW FOR FOUL OR SURFACE WATER DRAINAGE.
 b) PEDESTRIAN AREAS: CLASS B125/C250, 100MM DEEP, BADGED FW OR SW FOR FOUL OR SURFACE WATER DRAINAGE.
13. DOUBLE SEAL MANHOLE COVERS AND FRAMES ARE TO BE USED ON INTERNAL FOUL WATER DRAINAGE CHAMBERS. FINISH TO BE CONFIRMED BY THE ARCHITECT.
14. HEAVY DUTY COVER SLABS ARE TO BE USED WITHIN VEHICULAR TRAFFICKED AREAS.
15. GULLY GRATINGS AND STEEL CHANNEL COVERS ARE TO BE IN ACCORDANCE WITH THE RELEVANT BRITISH/EUROPEAN STANDARD AS FOLLOWS:
 a) AREAS SUBJECT TO VEHICULAR OVERRUN: CLASS D400 MINIMUM.
 b) AREAS NOT SUBJECT TO REGULAR VEHICLE OVERRUN (ADJACENT TO KERBS ETC): CLASS C250.
 c) GULLY GRATES ADJACENT TO KERBS SHALL BE HINGED ON THE SIDE OF THE TRAFFIC DIRECTION (LEFT HAND SIDE).
16. POSITIONS AND SIZES OF ABOVE GROUND FOUL AND SURFACE WATER DRAINAGE CONNECTIONS ARE TO BE CONFIRMED PRIOR TO CONSTRUCTION WITH THE ARCHITECT AND M&E ENGINEER.
17. DIAMETER OF PCC MANHOLES VARIES WITH PIPE SIZE, AND IS TO BE IN ACCORDANCE WITH THE TABLES SHOWN ON THE ACCOMPANYING MARSTON & GRUNDY STANDARD DETAILS DRAWINGS.
18. ALL BRICKWORK IN CONNECTION WITH DRAINAGE IS TO BE SOLID CLASS B ENGINEERING BRICK TO THE RELEVANT BRITISH/EUROPEAN STANDARD.
19. ALL PRECAST CONCRETE PIPES, CHAMBER PRODUCTS AND ROAD GULLIES SHALL BE TO THE RELEVANT BRITISH/EUROPEAN STANDARD AND SHOULD BE KITE-MARKED/CE-MARKED ACCORDINGLY.
20. INSITU CONCRETE GRADES TO BE AS STATED ON THE DRAWINGS. DESIGN CHEMICAL CLASS FOR ALL PRECAST CONCRETE PRODUCTS SHALL BE DC4 UNLESS AGREED OTHERWISE.
21. ALL BELOW GROUND PLASTIC/GRP TANKS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS. THEY SHALL BE PROVIDED WITH SUFFICIENT CONCRETE SURROUND TO COUNTER FLOATATION AND SHALL HAVE A WALL THICKNESS ADEQUATE TO RESIST THE HIGHEST GROUND WATER LEVEL WHICH COULD BE ENCOUNTERED AT THEIR LOCATION.
22. ALL EXISTING DRAINAGE/STRUCTURES TO BE ABANDONED SHALL BE BROKEN OUT AND REMOVED FROM SITE, THE EXCAVATION SHALL BE BACKFILLED WITH A SUITABLE GRANULAR MATERIAL TO THE REQUIRED LEVEL. ALTERNATIVELY, DEEP DRAINS MAY BE CLEANED AND GROUTED WITH A 1:10 CEMENTITIOUS GROUT, WITH STRUCTURES BROKEN DOWN 1M BELOW FINISHED GROUND LEVEL AND BACKFILLED WITH A SUITABLE GRANULAR MATERIAL.
23. WHERE UTILITY/LAND DRAINAGE TRENCHES ETC CROSS OVER DRAINAGE TRENCHES, THE CONTRACTOR SHALL CONSTRUCT AN IMPERMEABLE BARRIER TO PREVENT GROUNDWATER INFILTRATING INTO THE DRAINAGE TRENCH.
24. UPON COMPLETION OF THE WORKS THE CONTRACTOR SHALL CLEAN ALL DRAINAGE BY JETTING, REMOVING ALL DEBRIS FROM SITE. NO DEBRIS SHALL BE PERMITTED TO ENTER THE EXISTING DRAINAGE SYSTEM.
25. ALL WORKS ARE ASSUMED TO BE WITHIN PUBLIC HIGHWAY OR WITHIN LAND OWNERS LANDS & NO WORKS ARE REQUIRED ON THIRD PARTY LAND OWNERS PROPERTY.
26. ALL RWP, GULLY AND CHANNEL CONNECTIONS SHALL BE 150MM DIA U.N.O. WASTE/SOIL STACK CONNECTIONS SHALL BE 100MM DIA. UNO AND SHALL HAVE INTERNAL ABOVE GROUND RODDING EYES OR LARGE ACCESS FITTINGS IN ACCORDANCE WITH BUILDING REGULATIONS.
27. DESIGN ASSUMES THAT NO WATER AUTHORITY SEWERS OR OTHER DRAINAGE SYSTEMS REQUIRE MODIFICATION, DIVERSION OR ABANDONING.
28. BACKFILL TO ALL DRAINAGE TRENCHES TO BE CLASS 6F1 MATERIAL.
29. ALL WORKS WITHIN THE PUBLIC HIGHWAY TO BE REINSTATED TO HIGHWAY AUTHORITY REQUIREMENTS.
30. NO DEEP ROOTING TREES/VEGETATION SHOULD BE PLANTED WITHIN 5.0M OF ANY DRAINAGE WORKS.
31. ALL WPC'S, SRWP'S AND RWP'S ARE SHOWN INDICATIVELY. LOCATIONS SHALL BE CONFIRMED BY OTHERS.
32. ALL MANHOLES LESS THAN 1.5M DEEP ARE CONSIDERED AS NONE MAN ENTRY AND SHALL BE MAINTAINED FROM GROUND LEVEL.

ALL PIPEWORK TO BE 100Ø UNLESS NOTED OTHERWISE

LOCATIONS, DEPTH AND SIZE OF ALL EXISTING DRAINAGE TBC PRIOR TO WORKS COMMENCING

EXTERNAL LEVELS TO BE AGREED BY OTHERS

NOTE ALL RWP AND SVP LOCATIONS TO BE CONFIRMED BY OTHERS



NOTES

This drawing is copyright and owned by Marston and Grundy LLP, and is for use on this site only unless contractually stated otherwise.

DO NOT SCALE this drawing (printed or electronic versions). Contractors must check all dimensions from site.

All other design team elements, where indicated, have been imported from the consultant's drawings and reference should be made to the individual consultant's drawings for exact setting out, size and type of component.

Discrepancies and / or ambiguities within this drawing, between it and information given elsewhere, must be reported immediately to the architect for clarification before proceeding.

All works are to be carried out in accordance with the latest British Standards and Codes of Practice unless specifically directed otherwise in the specification.

Responsibility for the reproduction of this drawing in paper form, or if issued in electronic format, lies with the recipient to check that all information has been replicated in full and is correct when compared to the original paper or electronic Graphical representations of equipment on this drawing have been co-ordinated, but are approximations Please refer to the Specifications and / or Details for actual sizes and / or specific contractor construction information.

This original document is issued for the purpose indicated below and contains information of confidential nature. Further copies and circulation will be strictly in accordance with the confidentiality agreement under the contract. This original must be destroyed or returned to the contractor.

KEY

- EXISTING COMBINED WATER DRAINAGE
- PROPOSED FOUL WATER DRAINAGE
- PROPOSED BASEMENT FOUL WATER DRAINAGE
- PROPOSED SURFACE WATER DRAINAGE
- PROPOSED LAND DRAIN
- PROPOSED PERMEABLE SURFACING
- RWP RAINWATER PIPE
- SVP SOIL VENT PIPE
- BIG BACK INLET GULLY
- RG ROAD GULLY
- YG YARD GULLY
- RE RODDING EYE
- SG SUMP GULLY FOR DRAINAGE CHANNEL
- EXCEEDANCE FLOOD ARROW

Rev	Description	By	Date	Chk'd
P3	DRAINAGE LAYOUT UPDATED TO SUIT MCC COMMENTS	PG	09.03.22	MD
P2	DRAINAGE LAYOUT UPDATED TO SUIT MCC COMMENTS	PG	23.02.22	MD
P1	PRELIMINARY ISSUE	PG	30.11.21	MD

Marston & Grundy LLP
Consulting Engineers
Priory House, Ellesmere Ave
Marple, Stockport, Cheshire, SK6 7AN
Telephone: *0161 427 7231*
Email: *mail@marstonandgrundy.com*

Client
ARMISTEAD PROPERTY LIMITED

Project
59 UPPER CHORLTON ROAD
WHALLEY RANGE, MANCHESTER

Drawing
DRAINAGE GA

Purpose of Issue
PRELIMINARY

Project No.	Scale @ A1	Date	Drawn	Checked
12830	1:100	30.11.21	PG	MD

Drawing Identifier
project origin zone level file type role number revision
UCR-MaG-ZZ-00-DR-C-00100 P3