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ISO A1 594mm x 841mm
Project Management Initials: Drawn:AA Checked:JL Approved:VB
Last saved by: ALIA7(2023-04-11) Last Plotted: 2023-04-12
Filename: \\NA.AECOMNET.COM\LFSIEMEA\MANCHESTER-UKMCR5\LEGACY\UKMCR2PFPSW0001\DATA\PROJECTS\60663052 - MAG PLOT 401\08-BIM_CAD\08.1 WIP\08.1 CAD\08.1.1.4 CIVSTRUC\08.1.1.1.1 CURRENT DRAWINGS\RIBA 3\60663052-ACM-401-XX-DR-C-52015 DRAINAGE LAYOUT.DWG

C4 CHANGES

1. FOUL NETWORK SERVING REFUSE AREAS REMOVED AS NO LONGER REQUIRED.
2. SEE NOTE 24.

NOTES

1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE RELEVANT DRAWINGS AND SPECIFICATIONS.
2. IF RECEIVED ELECTRONICALLY, IT IS THE RECIPIENT'S RESPONSIBILITY TO PRINT TO THE CORRECT SCALE. ONLY WRITTEN DIMENSIONS SHALL BE USED.
3. ALL DIMENSIONS IN MILLIMETRES, ALL LEVELS ARE TO METRES ABOVE ORDNANCE DATUM, UNLESS STATED OTHERWISE.
4. SWMH07, SWMH16 AND SMH18 ARE CONNECTED TO THE ATTENUATION TANK VIA MANIFOLD CONNECTIONS REFER TO DRAWING: 60663052-ACM-401-XX-DR-C-10024 FOR THE MANIFOLD CONNECTION STANDARD DETAIL.
5. COVER LEVELS SHOWN ARE TO THE CENTRE OF THE MANHOLE. CONTRACTOR TO ADJUST ACCORDINGLY.
6. LOADING CLASS D400 COVER TO HAVE A MINIMUM SQUARE OPENING OF 600mmx600mm UNLESS SIA SPECIFIES ALTERNATIVE (675mmx675mm).
7. DRAINAGE IS COORDINATED WITH AECOM STRUCTURAL FOUNDATIONS AND FULLFLOW RAINWATER DOWNPIPE LOCATIONS.
8. PRECISE LOCATION OF MANHOLE COVER AND FRAME TO BE DETERMINED ON SITE.
9. DRAINAGE IS COORDINATED WITH STRUCTURAL FOUNDATIONS AND RAINWATER DOWNPIPE LOCATIONS.
10. AS BUILT HV AND COMMS SHOWN. INFORMATION PROVIDED ELECTRONICALLY FROM R&M DEVELOPMENT 23/09/22.
11. AECOM FOUNDATION DESIGN HAS BEEN SHOWN INDICATIVELY FOR CLASH CHECKING PURPOSES. DO NOT SCALE FOUNDATIONS FROM THIS DRAWING.
12. RAINWATER DOWNPIPE LOCATIONS (DP0X) PROVIDED ELECTRONICALLY BY FULL FLOW 18/08/2022 ON DRAWING E9307-FUL-ZZ-RF-DR-Y-0001-P2.
13. RAINWATER DOWNPIPE AND ADJACENT LATERAL PIPE DIAMETER TO BE CLARIFIED BY CONTRACTOR WITH SIPHONIC SPECIALIST PRIOR TO CONSTRUCTION.
14. SIPHONIC PIPEWORK UPSTREAM OF VENTED BREAK CHAMBER IS THE RESPONSIBILITY OF SIPHONIC DRAINAGE DESIGNER, ASSOCIATED PIPE GRADIENTS SHOWN ON THIS PLAN MUST BE VERIFIED BY THE SPECIALIST PRIOR TO CONSTRUCTION.
15. FOR MANHOLE OPENING SIZES AND FRAMES REFER TO SEWERS FOR ADOPTION E2.32 FOR MANHOLES LESS THAN 3M DEEP OPENINGS SHALL BE MINIMUM 600X600, GREATER THAN 3M DEEP MINIMUM 675X675.
16. CHAMBERS UPSTREAM OF THE ATTENUATION TANK SHALL BE REGULARLY INSPECTED AND CLEANED AS NECESSARY.
17. ATTENUATION TANK TO HAVE ACCESS FOR MAINTENANCE.
18. 150mm DIA VENTILATION PIPES REQUIRED FROM TOP OF ATTENUATION TANK INTO UPSTREAM AND DOWNSTREAM CHAMBERS.
19. LOW FLOW CHANNELS REQUIRED FOR INCOMING CONNECTIONS TO ATTENUATION TANK.
20. CONTRACTOR TO COORDINATE ENGINEERING FILL REQUIREMENTS TO PERIMETER OF ATTENUATION TANK DIRECTLY WITH MANUFACTURER.
21. FOUL ROUTE UNDER BUILDING SUBJECT TO CHANGE DUE TO AS-BUILT VIBRO-STONE COLUMN LOCATIONS - CONTRACTOR DESIGN ITEM, DETAILS TO BE CONFIRMED WITH ENGINEER.
22. RWP CONNECTIVITY TO VENTED MANHOLE SHOWN SIMPLY. ONSITE CONSTRUCTION AMENDMENTS MAY BE REQUIRED. CONSULT ENGINEER PRIOR TO ANY AMENDMENTS TO THE LAYOUT.
23. ALL PRIVATE DRAINAGE PIPES TO BE LAID IN TRENCHES BEDDED CLASS 'B' ON SINGLE SIZED AGGREGATE AND BACKFILLED WITH APPROVED SELECTED FILL (400mm DOWN) REUSED FROM EXCAVATED MATERIAL. UNDER BUILDINGS AND WHERE COVER TO INVERT IS LESS THAN 1200mm UNDER TRAFFICKED AREAS PIPES TO BE CAST IN CONCRETE (CLASS Z BEDDING).
24. OPERATOR TO ADOPT PROCEDURES IN THE EVENT OF WASTE SPILLAGE.

KEY CONTINUED

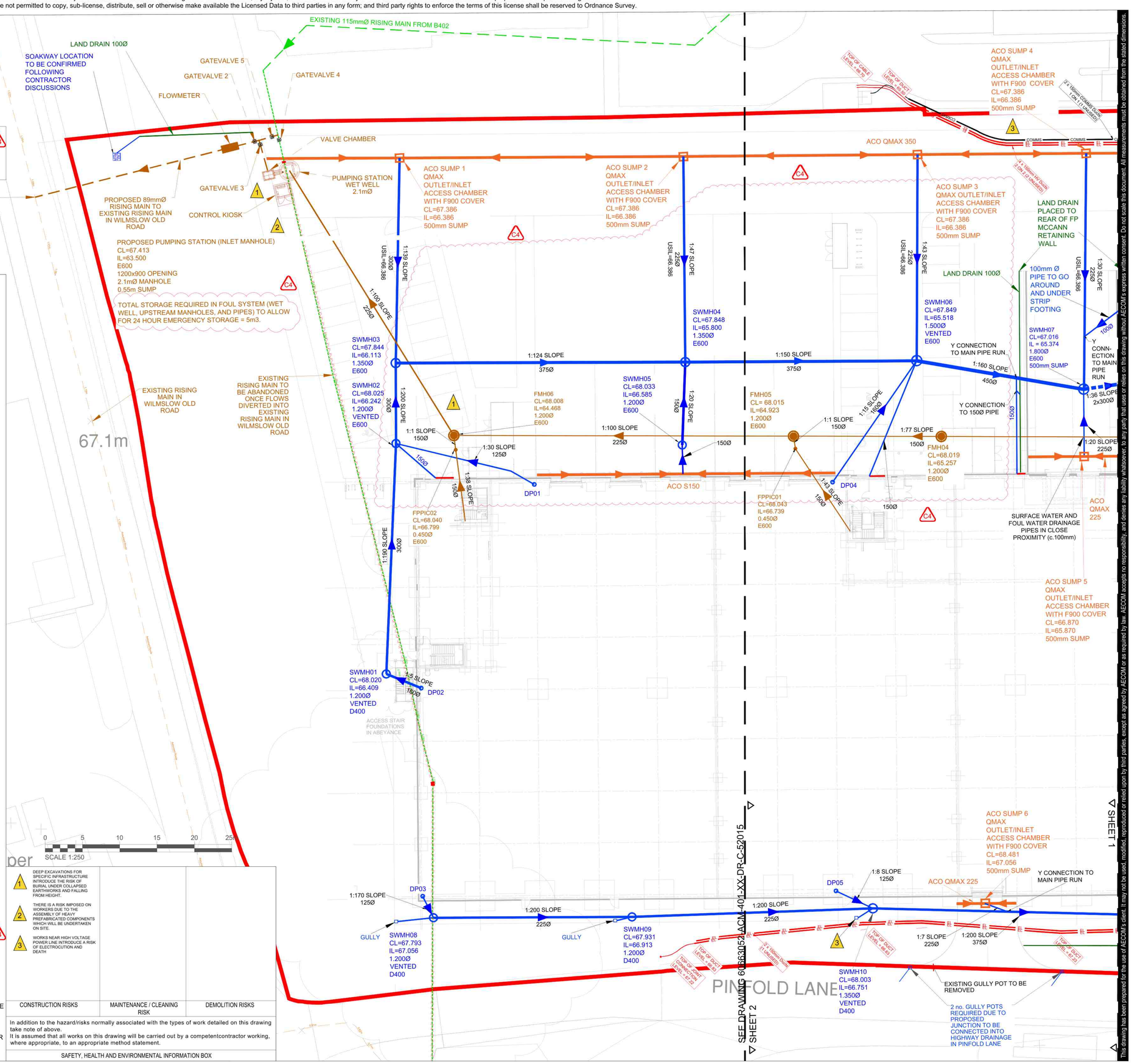
- EXISTING MAG SURFACE WATER NETWORK
- AS BUILT HV DUCTS ROUTE
- AS BUILT COMMS DUCT ROUTE
- AS BUILT LV DUCTS ROUTE
- RISING MAIN REMOVAL AS PER PUMPING STATION PHASING PLAN

	CONSTRUCTION RISKS	MAINTENANCE / CLEANING RISK	DEMOLITION RISKS
1	DEEP EXCAVATIONS FOR SPECIFIC INFRASTRUCTURE INTRODUCE THE RISK OF BURIAL UNDER COLLAPSED EARTHWORKS AND FALLING FROM HEIGHT.		
2	THERE IS A RISK IMPOSED ON WORKERS DUE TO THE ASSEMBLY OF HEAVY PREFABRICATED COMPONENTS WHICH WILL BE UNDERTAKEN ON SITE.		
3	WORKS NEAR HIGH VOLTAGE POWER LINE INTRODUCE A RISK OF ELECTROCUTION AND DEATH		

In addition to the hazard/risks normally associated with the types of work detailed on this drawing take note of above.
It is assumed that all works on this drawing will be carried out by a competentcontractor working, where appropriate, to an appropriate method statement.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION BOX

SCALE 1:250



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AECOM

PROJECT

BUILDING 401
MANCHESTER AIRPORT

CLIENT

McLAREN

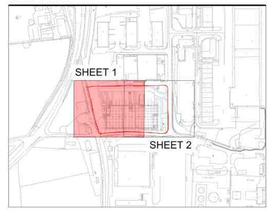
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KEY

- BUILDING 401 BOUNDARY
- PROPOSED SURFACE WATER DRAIN AND MANHOLE
- PROPOSED SURFACE WATER ATTENUATION TANK
- PROPOSED BY-PASS SEPARATOR
- PROPOSED GULLY
- MANIFOLD CONNECTION SEE NOTE 4
- PROPOSED SOAKWAY
- DP0X PROPOSED DOWNPIPE 0X (REFER TO SAPOFLOW SIPHONIC DRAINAGE DESIGN)
- PROPOSED ACO (OR SIMILAR APPROVED) DRAINAGE CHANNEL
- ACO QMAX ACCESS CHAMBER OR SIMILAR APPROVED
- PROPOSED FOUL WATER DRAIN AND MANHOLE
- PROPOSED FOUL DRAINAGE TO BE ABANDONED/REMOVED
- PROPOSED FOUL WATER RISING MAIN
- EXISTING B402 RISING MAIN
- PROPOSED THRESHOLD DRAINAGE
- PROPOSED LAND DRAIN
- GATE VALVE

KEY PLAN



ISSUE/REVISION

C4	12/04/2023	FOUL DRAINAGE AMENDMENTS
C3	21/03/2023	REQUESTED LAYOUT UPDATES
C2	26/01/2023	FOR CONSTRUCTION
C1	20/12/2022	FOR CONSTRUCTION
PCD	09/12/2022	DRAFT ISSUE
T1	29/04/2022	RIBA 3 ISSUE
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60663052

SHEET TITLE

BUILDING 401
PROPOSED DRAINAGE
SHEET 1 OF 2

SHEET NUMBER

60663052-ACM-401-XX-DR-C-52014