

Manchester College

Drainage Maintenance Plan

Condition 10

Project number: 60594458

23rd October 2024

Quality information

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Revision History

Revision	Revision date	Details	Authorized	Name	Position
P01	24/10/2024	FIRST ISSUE	YES	SEAN CURTIN	PRINCIPAL ENGINEER

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Table of Contents

1.	Introduction.....	5
2.	Management & Maintenance Plan.....	6
	Appendix A – Drainage Layout	8

Tables

Table 1 - Piped Drainage, Channel Drains and Manhole Chambers Maintenance Schedule.....	6
Table 2 - Flow Control Device Maintenance Schedule	6
Table 3 - Geocellular Storage System Maintenance Schedule	7

1. Introduction

The following report has been prepared in response to Planning Condition 10.

The conditions stated the following:

Prior to the first use of the development, details of the implementation, maintenance and management of the sustainable drainage scheme shall be submitted for approval in writing by the City Council, as Local Planning Authority. This shall include:

- *Verification reporting providing photographic evidence of construction;*
- *Management and maintenance plan for the lifetime of the development which shall include the arrangements adoption by any public body or statutory undertaker, or any other arrangements to secure the operation of the sustainable drainage scheme throughout its lifetime.*

The management and maintenance plan shall be implemented upon first use of the development and thereafter retained and maintained”.

Verification reporting providing photographic evidence of construction can be seen in Site Visit Civils Report C002 with the site visit being on 22/02/2024.

2. Management & Maintenance Plan

All drainage proposed for the development is to remain privately owned and operated by Manchester College maintenance team. Both the foul and surface water will discharge into the existing 600mm diameter combined sewer located in Great Ducie Street to the south of the development.

The ongoing management and maintenance of the proposed surface water drainage systems will fall under the responsibility of the site owner.

Piped Drainage and Manhole Chamber Maintenance

Table 1 - Piped Drainage, Channel Drains and Manhole Chambers Maintenance Schedule

Maintenance Schedule	Required Action	Frequency
Before Start up	Removal of any inappropriate material from within the chamber and dispose off-site	At Start
	All pipelines to be flushed with water to remove silt and check for blockages	At Start
Regular Maintenance	Removal of debris (which could include leaves, rubbish, branches) from areas served by drainage (where it may cause risk to performance)	Monthly
Remedial Actions	For blockages resulting in flooded manhole chambers, drain down manhole chamber and unblock	As required
	For pipe blockages, rod between access points to unblock	As required
Monitoring	Lift covers and inspect chambers. Inspect covers, surrounding gullies and ACO channels for signs of damage and incorrect operation. If required, undertake remedial action.	As required

Flow Control Device

Table 2 - Flow Control Device Maintenance Schedule

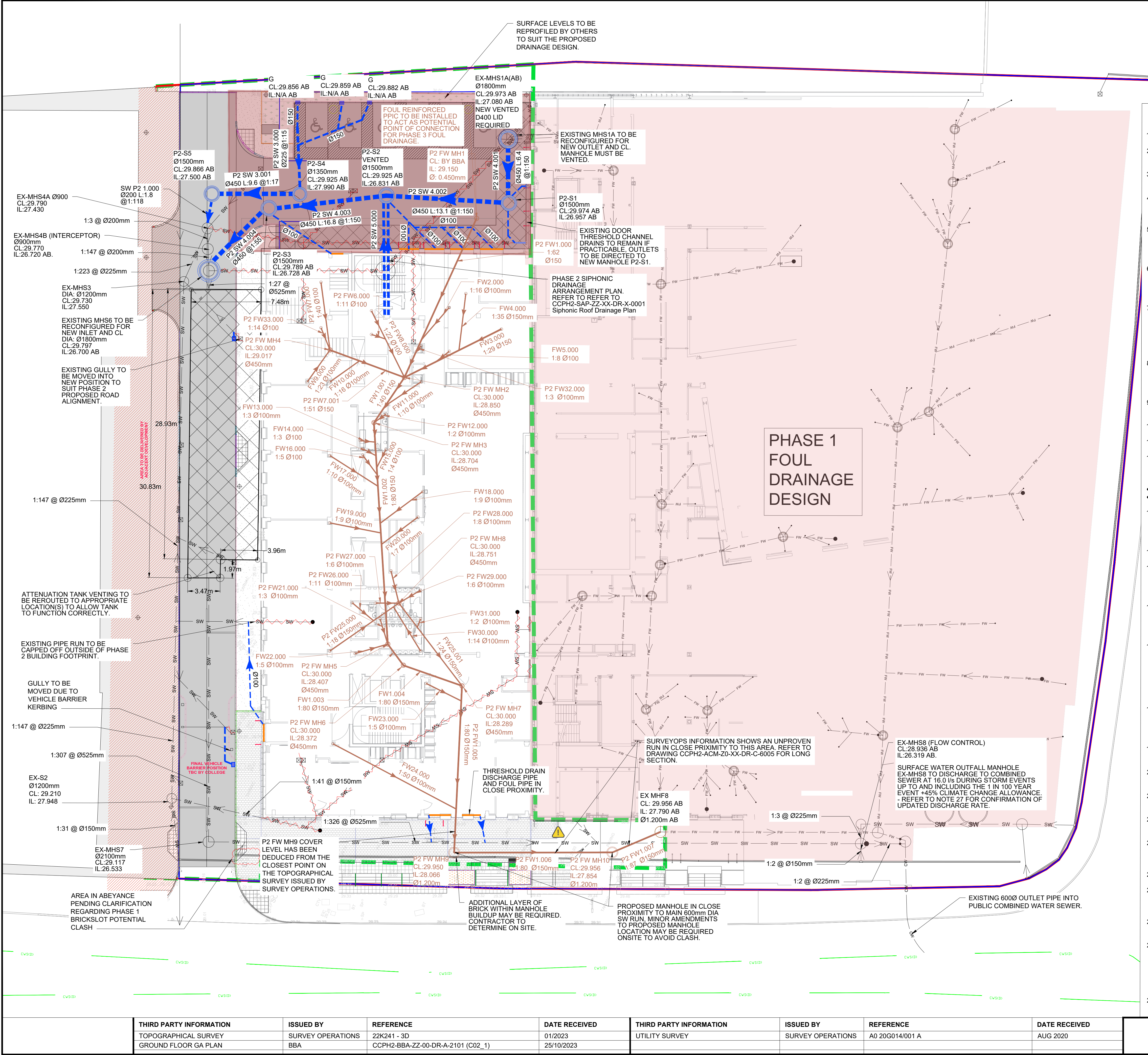
Maintenance Schedule	Required Action	Frequency
Before Start	Removal of any inappropriate material from within the chambers and dispose off-site	At Start
Regular Maintenance (as per manufacturer's requirements)	Removal of debris (which could include leaves, rubbish and branches) from areas served by the drainage (where it may cause risk to performance)	Monthly
Remedial Actions	For blockages resulting in flooded manhole chambers, drain down manhole chamber and unblock	As required
Monitoring	Inspect unit and hose down is required	Monthly at the start for three months, then six monthly

Geocellular Storage Systems**Table 3 - Geocellular Storage System Maintenance Schedule**

Maintenance Schedule	Required Action	Frequency
Before Start Up	A pre-handover inspection should be carried out and the geocellular storage system cleaned prior to the final handover.	At start
Regular Maintenance (as per manufacturer's requirements)	- Remove litter and blockages as required; records of inspections and maintenance undertaken should be kept by the client. - Inspect all chambers for silt and oil build up; sweeping external surfaces.	As required Every 12 months
Remedial Actions	- A spillage kit appropriate to the size of the road surfaces should be kept by the site caretaker. This should include absorbent pads, socks, and rain seals - As soon as a spillage is identified, the drain inlets in that area should be covered to prevent pollution entering the system. The pollution should then be cleared from the road surface. The local channel system and/or separator receiving the spillage should be emptied of all pollution that has entered. - The Environment Agency should be informed of the spillage and the appropriate actions should be taken	As required
Monitoring	Inspection of channels, road/yard gullies for signs of blockage and oil spillage	3 monthly

Appendix A – Drainage Layout

ISO A1 594mm x 841mm
Last saved by: NATASHA.MEHMOOD(2024-10-16) Last Plotted: 2024-10-17
Filename: \\na.aecomnet.com\is\ENEA\Manchester_UK\MCRC5F02\UFI\UasiPr-385460_Manchester_College900_CAD_GIS912_CAD Phase 2\BIBAS\Planning Authority\CCPH2-ACM-Z0-XX-DR-C-6000 Drainage Strategy Layout C02.dwg



NOTES

- DO NOT SCALE FROM THIS DRAWING. ONLY STATED DIMENSIONS ARE TO BE USED.
- ALL DIMENSIONS ARE IN METRES AND ALL LEVELS IN METRES ABOVE ORDNANCE DATUM UNLESS NOTED OTHERWISE.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER SCHEME DRAWINGS AND DOCUMENTS.
- THIS DRAWING IS TO BE USED FOR THE STATED PURPOSE OF ISSUE ONLY AND MUST NOT BE USED FOR ANY OTHER PURPOSE THAN THAT INDICATED.
- ONLY WRITTEN DIMENSIONS SHALL BE USED. CRITICAL DIMENSIONS AND LEVELS SHALL BE VERIFIED ON SITE BY THE CONTRACTOR PRIOR TO WORK COMMENCEMENT.
- ANY DISCREPANCIES IN DIMENSIONS OR DETAILS ON OR BETWEEN THESE DRAWINGS SHALL BE DRAWN TO THE ATTENTION OF THE PROJECT MANAGER FOR CLARIFICATION.
- ATTENUATION TANK VENTING ARRANGEMENT WILL REQUIRE RE-ROUTING DUE TO PHASE 2 LAYOUT. IT IS ESSENTIAL THAT THE ATTENUATION TANK HAS 2 VENTS IN OPPOSITE CORNERS OF THE TANK FOR FURTHER DETAILS, SEEK MANUFACTURERS GUIDANCE.
- ALL PIPES ARE TO BE POLYPROPYLENE STRENGTH CLASS SN8. ALL PIPES SHALL HAVE FLEXIBLE JOINTS. HDPE PIPES MUST COMPLY TO BS EN 13476-(1-3) AND WIS 4-35-01.
- ALL PIPEWORK TO BE INSTALLED IN LINE WITH MANUFACTURER'S RECOMMENDATIONS.
- PIPE BED AND SURROUND TO BE CLASS S1 TO BS EN 1295-1.
- ALL MANHOLES TO BE CIRCULAR PRE-CAST CONCRETE.
- ALL COVERS ARE TO BE DUCTILE IRON TO BS EN 124. LOAD CLASSES SHALL BE AS FOLLOWS:
 - NON-VEHICULAR AREAS - B125
 - VEHICULAR AREAS - D400
- PHASE 1 DRAINAGE SHOWN AS 'TO BE ABANDONED' SHALL BE COMPLETELY REMOVED. PIPE ENDS AT THE CUT OFF POINTS ARE TO BE CONNECTED TO OR CAPPED/GROUTED IF NOT REQUIRED.
- MANHOLE INVERT LEVELS SHOWN ARE FOR THE OUTGOING PIPE.
- ALL SEWERS, MANHOLES AND ANCILLARIES ARE TO BE CONSTRUCTED IN LINE WITH THE SPECIFICATION AND DETAILS IN 'SEWERS FOR ADOPTION, 7TH EDITION'.
- ALL COVERS ARE TO BE DUCTILE IRON TO BS EN 124. ALL INTERNAL MANHOLES SHALL BE DOUBLE SEALED AND RECESSED TO BE ABLE TO TAKE THE SURROUNDING FLOOR FINISH.
- SYPHONIC MANHOLES TO BE AQUAVANTAGE (SAP CODE 241255) WITH A WATERWAY OF 5250CM2 OR THE SAINT GOBIAN WATERWAY 2400 (SAP CODE 211234) WITH A WATER WAY OF 2400CM2 OR EQUIVALENT APPROVED. MINIMUM VENTED AREA OF MANHOLE COVER IS 0.274m².
- INTERNAL MANHOLES ARE TO BE FITTED WITH RECESSED COVERS, SEEK MANUFACTURERS GUIDANCE FOR STANDARD DETAILS AND INSTALLATION REQUIREMENTS.
- ALL FOUL POPUPS HAVE BEEN DESIGNED TO HAVE A CONNECTION POINT 750mm BELOW FFL.
- FOUL PENETRATION POINTS TO COME EQUIPT WITH ON / ABOVE GROUND RODDING ACCESS.
- COVER LEVELS NORTH EAST OF ATTENUATION TANK HAVE BEEN DESIGNED BY BBA.
- Y CONNECTION FOR ALL PIPE TO PIPE CONNECTIONS WITHIN THE PROPOSED DRAINAGE NETWORK.
- SADDLE CONNECTION FOR ALL PIPE TO PIPE CONNECTIONS WHEN CONNECTING THE PROPOSED NETWORK TO THE EXISTING DRAINAGE NETWORK.
- SIPHONIC DRAINAGE DESIGNED BY OTHERS.
- ALL EXTERNAL GULLYS TO BE ACO UNIVERSAL GULLY OR EQUIVALENT APPROVED. REFER TO MANUFACTURER GUIDE FOR INSTALLATION.
- REFER TO DRAWING NO. CCPH2-ACM-Z0-XX-DR-C-6002 FOR FLOW CONTROL MANHOLE DETAILS.
- 139403/NMC/2024 - A NON-MATERIAL AMENDMENT PLANNING APPLICATION WAS SUBMITTED AND APPROVED ON 21.03.2024 TO INCREASE THE MAXIMUM DISCHARGE RATE INTO THE COMBINE SEWER FROM 15 LITRES PER SECOND TO 16 LITRES PER SECOND.
- REFER TO CCPH2-ACM-Z0-XX-SH-C-5204 FOR THE MANHOLE SCHEDULE.



PROJECT

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KEY

- PHASE 2 BOUNDARY
- OWNERSHIP BOUNDARY
- EXISTING SURFACE WATER
- EXISTING DRAINAGE TO BE ABANDONED/REMOVED
- EXISTING SURFACE WATER MANHOLE
- PROPOSED SURFACE WATER
- PROPOSED SURFACE WATER MANHOLE
- PROPOSED ROAD GULLY
- PROPOSED THRESHOLD DRAIN
- PHASE 1 PPIC
- PHASE 1 FOUL WATER
- PHASE 2 PROPOSED PPIC
- PHASE 2 PROPOSED FOUL WATER
- EXISTING COMBINED PIPE
- PHASE 1 DRAINAGE DESIGN
- SURFACE LEVELS TO BE REPROFILED BY OTHERS (SEE NOTE 20)
- FOUL PENETRATION POINTS EQUIPT WITH ON / ABOVE GROUND RODDING ACCESS FEATURE
- UU COMBINED SEWER

ISSUE/REVISION

C02	17/10/2024	PLANNING AUTHORITY	NM	GT	DH
C01	05/02/2024	PLANNING AUTHORITY	NM	GT	VB
I/R	DATE	DESCRIPTION	BY	CK	AP

SUITABILITY

S2 - Suitable for information

PROJECT NUMBER

60594458

SHEET TITLE

THE MANCHESTER COLLEGE
PHASE 2
DRAINAGE STRATEGY LAYOUT

SHEET NUMBER

CCPH2-ACM-Z0-XX-DR-C-6000

SCALE

1:200 @ A1

REVISION

C01

