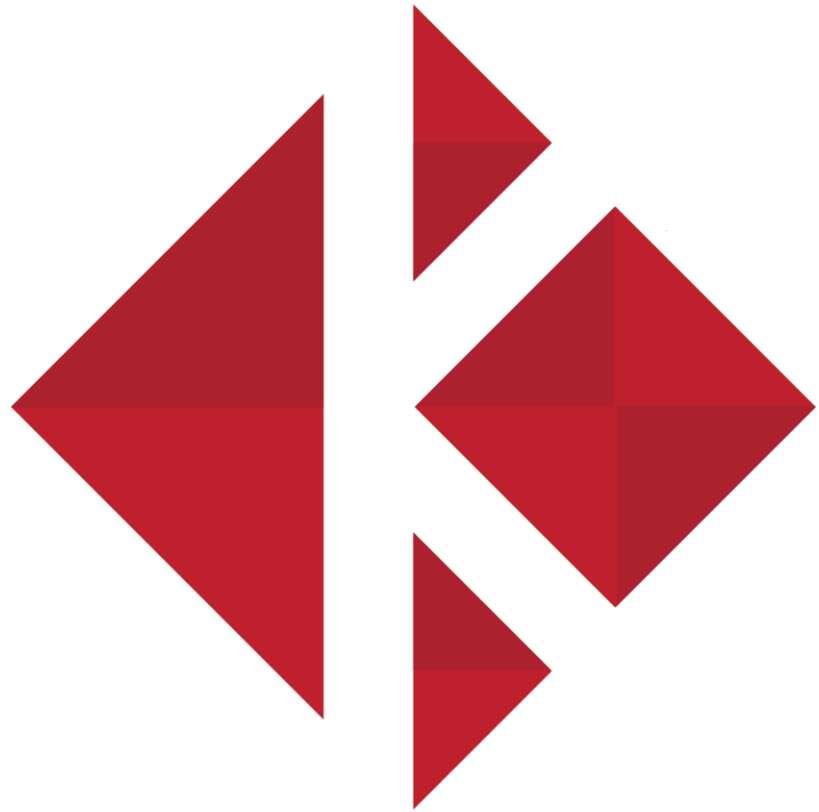




DRAINAGE MAINTENANCE SCHEDULE

EVONIK PHASE 2 WORKS

Client: EVONIK Date: 17/9/2021

DOC TYPE				PROJECT				REPORT TITLE				AUTHOR			SEQ NO.				REVISION					
R	E	P	-	E	V	O	-	M	A	I	N	-	M	M	-	0	0	1	-	R	E	V	-	-

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1 Document History and Validation

1.1 Revision History

Revision	Issue Date	Reason for Issue
Rev-	09 December 2022	Preliminary Issue

1.2 Document Validation (Latest Issue)



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Checked By
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Verified By
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2 Introduction

This report provides information relating to the drainage and its maintenance requirements at the Evonik site on Clayton Lane, Manchester ('the site'). The information and recommendations provided herein are intended for support and guidance of the maintenance team at the site, for the appropriate functioning of the drainage systems regular supervision and adequate use should be conducted.

This document should be read in conjunction with all other project information produced by Kennedy Redford.

2.1 Design standards and guidance

The following design standards, industry guidance, government guidance and literature is relevant to the development and design of drainage systems.

British Standards and European Norms (BS EN)

- BS EN 752: Drain and sewer systems outside buildings
- BS EN 12056: Gravity drainage systems inside buildings

Construction Industry Research and Information Association (CIRIA)

- C753: The SuDS manual

Department of Communities and Local Government (DCLG)

- Building Regulations Approved Document H: drainage and waste disposal published 2010
- National Planning Policy Framework (NPPF) published 2012
- Flood risk and coastal change Planning Policy Guidance, published 6 March 2014
- Climate Change Planning Policy Guidance, published 12 June 2014
- Water supply, wastewater and water quality Planning Policy Guidance, published 23 March 2015

Department of Environment, Food and Rural Affairs (DEFRA)

- Non-Statutory Technical Standards for Sustainable Drainage – Practice Guidance published 2015

Water Research Centre

- Design and Construction Guidance

2.2 Site Overview

2.2.1 Existing Site

The site is location off Clayton Lane, in Manchester, M11 4SR. The site is bounded by Oldfield Street to the North, Clayton Lane to the West and Ashton Canal to the South.

The proposed development has an area of 0.41ha and lies on the site of an existing office building and associated car parking. The existing site is used for the delivery of chemicals to the unit. There is an existing sluice valve in the case that there is a spillage.

2.2.2 Proposed development

The proposed redevelopment of the site encompasses the partial demolition and refurbishment of some Victorian brick buildings in the western part of the site. The final development area is entirely covered by concrete surfacing with a temporary structure placed on the surface.

3 Drainage Systems

3.1 Overall Drainage Systems

3.1.1 Existing Drainage

The existing drainage within the site has been identified from a survey undertaken by Subsite Surveys Ltd. This information is shown in Appendix A.

From review of the survey, it appears that there are 2No. connections into existing sewer systems within Oldfield Street and 2No. connections within Clayton Lane.

The existing site is covered over with impermeable concrete surfacing, therefore there are numerous gullies that feed into an existing combined drainage system throughout the site. The roof of the existing building to the western part of the site is drained using rainwater pipes and is also collected within the combined system.

There is an existing sluice valve in the case that there is a spillage. Management of procedures for sluice valve are currently covered under Evonik's existing standard operating procedures.

3.1.2 Proposed Drainage

It is proposed to retain all existing gullies and rainwater pipe connections throughout the site. Additional gullies service the proposed parking areas. The site is to remain impermeable. Therefore, the only change is the addition of surface collection points in the proposed parking.

The surface water collected on the proposed temporary structure in the centre of the site is to be drained using rainwater pipes and connect to the existing combined water system. This structure also requires a foul water connection, this also connects into the existing combined system.

The drainage layout is attached in Appendix B.

4 Maintenance

Maintenance of the foul and surface water drains, outside of the plot boundaries, for the development will fall under a private maintenance plan and are the responsibility of the site owner.

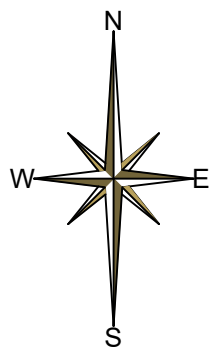
A maintenance regime should be enacted regularly as part of the normal facilities management duties. The suitability of the maintenance schedule below should be established following construction, any updates required should be made as necessary throughout the lifetime of the development. A record maintenance log should be kept and updated accordingly.

The following schedule should be used as the basis of maintenance at the site.

Maintenance Activity		Frequency of activity (months)				
		1	3	6	12	A/R
	Manholes (General)					
1	Check cover is not damaged and fits securely			X		
2	Check inlet and outlet are free flowing and not obstructed			X		
3	Check security of fitting for all manhole ironmongery			X		
4	Check benching for scour or build-up of debris			X		
5	Check joints in construction for damage or inflow				X	
6	Record maintenance inspection in log book			X		
	Gullies & drainage channels					
7	Check grating is undamaged and fits securely	X				
8	Inspect internal gully/sump chamber, remove debris from traps and check outfall is clear and free flowing			X		
9	Record maintenance inspection in log book	X				
	Conveyance Pipes					
10	Carry out flow test between manholes to ensure free flow of system				X	
11	Jetting and clearance of blockages, debris or silt					X
12	Inspection by CCTV – should problem arise as a result of the flow test					X
13	Cutting of growth into pipe					X
14	Record maintenance inspection in log book				X	

5 Appendix A – Subsite Surveys Ltd

6 Appendix B - Drainage Layout



- NOTE:
1. THIS DRAWING IS PRELIMINARY AND IS SUBJECT TO CHANGE DEPENDING ON FURTHER DEVELOPMENT OF THE G.A., SITE LAYOUT, RWP AND POP-UP LAYOUT.
 2. THIS DRAWING IS BASED ON DRAWING No. BS 1094-04 BY GLOVERS.
 3. TO BE READ IN CONJUNCTION WITH ALL RELEVANT KENNEDY REDFORD DRAWINGS.
 4. EXISTING SEWER LOCATIONS AND LEVELS TO BE CONFIRMED BY CONTRACTOR ON SITE, PRIOR TO WORK COMMENCING.
 5. ANY PART OF THE EXISTING DRAINAGE SYSTEM TO BE RETAINED AS PART OF THE NEW SCHEME SHALL BE CLEANED AND INSPECTED. ANY STRUCTURAL DEFECTS SHALL BE REPAIRED USING APPROPRIATE AND APPROVED MEANS.
 6. ALL REDUNDANT EXISTING DRAINAGE TO BE GRUBBED UP OR GROUTED, ANY EXISTING LIVE DRAINAGE SHOULD BE REPORTED TO THE ENGINEER AND RECONNECTED..
 7. PRIVATE DRAINS TO BE CONSTRUCTED IN ACCORDANCE WITH BUILDING REGULATIONS.
 8. ALL MANHOLE LEVELS ARE INDICATIVE ONLY.
 9. SETTING OUT OF RAINWATER PIPES POSITIONS OF ABOVE GROUND DRAINAGE BY OTHERS.
 10. LINEAR DRAIN AND GULLY LOCATIONS AND NUMBERS SUBJECT TO CHANGE.
 11. ALL CHANNEL DRAINAGE TO HAVE SILT BUCKETS ON OUTLETS.
 12. ALL ROAD GULLIES ARE TO BE TRAPPED AND RODDABLE.
 13. ALL GULLY AND RWP LEADS TO BE 150MM DIAMETER.
 14. ALL ROAD GULLIES & LEADS TO BE CLEARED OF DEBRIS UPON COMPLETION OF WORKS
 15. PROPOSED DRAINAGE IS SUBJECT TO CONFIRMATION (BY CONTRACTOR) OF LEVELS OF EXISTING DRAINAGE AT PROPOSED CONNECTION POINTS.
 16. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY WORKS AND CONSTRUCTION PROCEDURES.

- KEY
- EXISTING SURFACE WATER DRAIN
 - EXISTING COMBINED WATER DRAIN
 - ABANDONED DRAIN
 - PROPOSED SURFACE WATER DRAIN
 - PROPOSED LINEAR DRAIN
 - PROPOSED GULLY
 - EXISTING GULLY
 - PROPOSED RAINWATER PIPE
 - PROPOSED FOUL CONNECTION TO DRAIN
 - PROPOSED FOUL WATER DRAIN

P04	21.06.22	FOUL WATER ADDED	M.M	R.B	R.K
P03	01.06.22	SITE LAYOUT UPDATE	M.M	R.K	R.K
P02	01.04.22	RWP ADDED	M.M	R.K	R.K
P01	20.09.20	PRELIMINARY ISSUE	R.K	C.D	D.J
REV	DATE	DESCRIPTION	DRN	CHK	APR

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CLIENT



PROJECT NAME

EVONIK
CLAYTON LANE, MANCHESTER

DRAWING TITLE

PROPOSED SURFACE WATER
DRAINAGE STRATEGY

DATE	SCALE	SHEET SIZE	REV
20.09.20	1:200	A1	P04

DRAWING STATUS

S2 - ISSUED FOR INFORMATION

DRAWING NUMBER

191112 - KR - DR - XX - EX - DR - C - 1401