

Project Name:	ARDWICK GREEN	Job Number:	2075
Date:	03/04/2025	Prepared By:	JSF
Document No:	2075-CIV-XX-XX-FN-C-0001	Revision No:	0

Title

Introduction

This File Note has been prepared to outline changes to the detailed design of the surface water drainage network serving a new residential development off Ardwick Green North, Manchester.

Original Design

The detailed drainage strategy originally submitted in support of discharging Condition 15 of permission ref 135857/FO2022 was approved on 4th October 2024. The original surface water drainage design restricted surface water run-off into the existing public sewer in Ardwick Green North at a rate of 3.5l/s, with all excess surface water run-off for storm events up to 1 in 100 year annual exceedance probability (AEP) plus a 45% allowance for climate change being contained within the site demise. Surface water drained through a permeable asphalt surface with storage being provided in a no fines sub-base which was lined with an impermeable membrane.

Updated Design

Once construction works commenced on site, the appointed Contractor when considering site logistics raised concerns on the installation of the no fines sub-base and its suitability to provide a safe working platform to construct the buildings. Installing the permeable asphalt surface was discounted due to the risk of dust/detritus clogging the pores during the construction period which would impact its operation effectiveness post completion and the request was made to consider alternative proposals for the surface water attenuation.

The design was subsequently updated to propose the below ground attenuation to be provided in the form of a *Polystorm* modular attenuation tank manufactured by Polypipe. The attenuation tank has a capacity of 61m³, equivalent to the minimum requirements of the approved design.

Pollution prevention requirements were assessed against PPG3 which, although withdrawn from formal publication in December 2015 remains to be the sole guidance on best practice published by a public body. PPG3 recommends oil separators should be installed on car parks of over 50 spaces or 800m². The development car park has an area of approximately 325m², so is significantly below this threshold therefore it is deemed that an oil separator is not required.

The updated drainage general arrangement and construction details are appended to this note, together with the associated hydraulic calculations.