

To:	MCC Planning	Job number:	1826-01
From:	Civic Engineers	Date:	30/03/2022
Subject:	Jersey Street, Ancoats	Cc:	

Title: Bridge Demolition and Highway Regrading - Drainage Statement

Jersey Street proposals are part of the wider Ancoats public realm masterplan and will be implemented as an early phase of the overall development area. The project consists of removal of the existing Jersey Street bridge (which allowed the former canal arm from the Rochdale canal) to pass under Jersey Street.

The works to remove the bridge also require regrading of the existing highway and portions of the land surround the bridge.

Within the Jersey Street public realm proposals, the proposed surface water drainage strategy seeks to utilise Sustainable Drainage Systems (SuDS), which aim to reduce flood and pollution risk through techniques such as roadside raingardens. These features capture surface water run-off from adjacent hardstanding areas, carriageways and footways and filter, store and reduce peak storm flows.

Early response from The Canals and River Trust suggest discharge of surface water into the Rochdale Canal is not feasible. Therefore, given infiltration is likely to be ruled out on the basis of ground conditions (made ground with potential for contamination) and there are no dedicated public surface water sewers or culverted watercourses within the vicinity of the site, the proposal is to discharge surface water into the combined sewer.

The proposal to continue to discharge surface water into the proposed combined sewer does not detract from the need to improve the existing situation, make best use of green areas within streets and to reduce the burden on the public sewer system. This is to be achieved through the introduction of raingardens.

Jersey Street is currently drained via a series of standard road gullies located within both channels of the cambered carriageway cross section. In the interim situation and whilst a temporary surfacing is in place, existing gullies will be related and re-set to suit the finished surface level in a position close to existing to make use of existing gully branch pipes.

It is proposed that raingardens are introduced as a replacement for road gullies within the majority of the proposed development area and where this works with the proposed levels strategy. The raingardens will consist of a stone sub-base, coordinated with existing utilities using separation membranes where applicable, with perforated filter drain pipework beneath. The perforated pipework will be connected to existing gully branches to reduce the need for new connections or disruption to the existing public sewers.

Therefore, the betterment gained on existing run-off rates is achieved by:

- Reducing the burden on the public sewer network by slowing down the rate at which surface water enters the drainage system and reducing the peak discharge rate of surface water entering the public sewer system
- Encouraging evapotranspiration and plant uptake of surface water by allowing surface water to remain at or close to the surface as long as possible

In addition to the proposed surface water drainage proposals, the regrading of Jersey Street impacts the cover levels to the existing public sewer and as such it is likely that a section of the public sewer will need to be re-constructed to ensure suitable cover depth to the pipework is achieved.