Project Number: 1983
Project Name: Charles Street
Date: 26 June 2026

DeSimone

Risk Avoidance Measures Statement

Proposed Residential Development, Charles Street, Manchester (M1 7DE)
Planning Application Number: 138808/FO/2023

1. Purpose of Statement

This Risk Avoidance Measures Statement has been prepared to support the discharge of United Utilities' planning condition relating to the protection of the existing water main at the Charles Street site boundary. The statement specifically addresses the proposed surface water outfall pipe crossing below the existing United Utilities water main beneath the footpath.

The purpose of this document is to confirm the identified risk controls, design safeguards and construction methodology that will be applied to avoid damage, loading, undermining, settlement or access restrictions affecting the United Utilities asset.

2. Existing Asset and Proposed Crossing

Item	Details
Existing UU asset	United Utilities 3 inch / 75 mm water main
Proposed asset	proposed surface water outfall pipe
Location	Below footpath at the proposed crossing point
Depth to soffit of UU water main	0.540 m below ground level, based on provided survey/design information
Depth to soffit of proposed surface water pipe	0.704 m below ground level, based on provided design information
Vertical clearance at crossing	139 mm from top of proposed surface water pipe to underside/soffit of UU water main
Design allowance	The proposed surface water pipe can be locally lowered during final setting out, if required by United Utilities, to increase the clear separation at the crossing.

All final levels at the crossing will be confirmed on site prior to installation and recorded before backfilling. Any minor level adjustment required to suit United Utilities' asset protection requirements can be accommodated within the proposed surface water outfall design.

3. Risk Avoidance Objective

The principal objective is to avoid risk to the United Utilities water main by ensuring that the proposed surface water outfall pipe and associated construction activities do not physically damage, surcharge, undermine, contaminate, restrict access to, or otherwise adversely affect the water main during construction or in the permanent condition.

4. Identified Risks and Avoidance Measures

Risk	Risk Avoidance Measure	Residual Position
Close proximity between proposed surface water pipe and UU water main at crossing	Final set-out levels to be checked on site prior to laying the surface water pipe. The pipe can be locally lowered, where required, to provide additional separation to the UU water main.	Crossing level controlled during installation and verified before backfill.
Accidental strike to UU water main	Locate and mark the UU water main	Risk of service strike minimised

during excavation	prior to works. Use GPR/survey information, trial holes where required, permit-to-dig controls and hand excavation within the agreed exclusion zone around the water main.	through controlled, non-mechanical excavation adjacent to the main.
Overloading of water main from plant, temporary works or materials	No plant, stored materials, trench boxes or temporary works to impose direct loading on the water main. Appropriate trench support to be designed and installed where required.	Water main remains unloaded and supported throughout the works.
Undermining or loss of support to water main	Excavation beneath/adjacent to the water main to be sequenced so that support is maintained. Temporary support/shoring to be provided where required. Backfill to be placed and compacted in accordance with the specification.	No loss of bedding/support to the water main.
Differential settlement following installation	Install the surface water pipe on suitable bedding and surround, with competent backfill and compaction. Reinstate the footpath construction to prevent voids and settlement.	Settlement risk controlled in the permanent condition.
Future maintenance conflict	Maintain clear asset separation and avoid placing permanent structures, chambers or obstructions directly over the water main without UU agreement.	UU access to inspect, maintain and repair the water main is retained.
Unapproved deviation from design during construction	Engineer to review final levels at the crossing prior to backfill. Record as-built levels and photographic evidence confirming the completed arrangement.	Compliance evidence available for UU review / asset protection close-out.

5. Construction Method Controls

- Prior to excavation, the UU water main shall be positively located and clearly marked on site using the available UU records, GPR survey information and trial holes where required.
- A permit-to-dig / safe system of work shall be implemented for all excavation within the vicinity of the UU water main.
- Mechanical excavation shall not be undertaken close to the water main. Hand-digging shall be used where necessary to prevent accidental damage.
- The surface water pipe level shall be checked before laying through the crossing and coordinated with the surveyed level of the UU water main.
- If requested by United Utilities or required following final site verification, the proposed surface water pipe shall be lowered locally to increase separation before the crossing is completed.
- Temporary works, trench support and excavation sequencing shall ensure the UU water main remains fully supported and is not undermined.
- No construction load, stockpile, plant outrigger or temporary works item shall be placed so as to surcharge or bear directly on the water main.
- Where instructed by United Utilities or the engineer, additional local protection such as sleeving, bridging or a protection slab shall be installed.

6. Permanent Design Commitments

- The proposed surface water pipe shall be installed so that it does not transfer load to the UU water main and does not compromise the water main bedding, surround or future operation.
- Final crossing levels shall be verified on site and the completed clearance recorded before backfilling.

- No permanent structure, chamber, foundation or obstruction shall be placed directly over the UU water main without prior agreement from United Utilities.
- Finished ground levels and footpath surfacing shall be reinstated to maintain access to the UU asset and avoid additional loading or settlement.
- As-built records shall be retained, including final crossing levels and photographs prior to backfilling.

7. Clearance and Level Verification Statement

The identified clearance at the crossing point is 139 mm between the top of the proposed surface water outfall pipe and the underside/soffit of the existing United Utilities water main. The proposed surface water pipe can be locally lowered during final setting out, if required by United Utilities or following site verification, to increase the clear separation between the assets.

The final crossing arrangement will be confirmed by site measurement prior to backfill. As-built level information and photographic records will be retained to demonstrate that the United Utilities asset has been protected during the works.

8. Conclusion

The proposed surface water outfall pipe crossing beneath the existing United Utilities 3 inch / 75 mm water main has been reviewed and risk avoidance measures have been identified for both the construction phase and permanent condition.

Subject to final site verification of levels, implementation of controlled excavation methods, maintenance of support to the water main, avoidance of construction loading, and provision of as-built evidence, the proposed works will avoid adverse impact on the United Utilities water main during construction and in the permanent condition. The proposed surface water pipe can be locally lowered at the crossing if required to suit United Utilities' asset protection requirements.