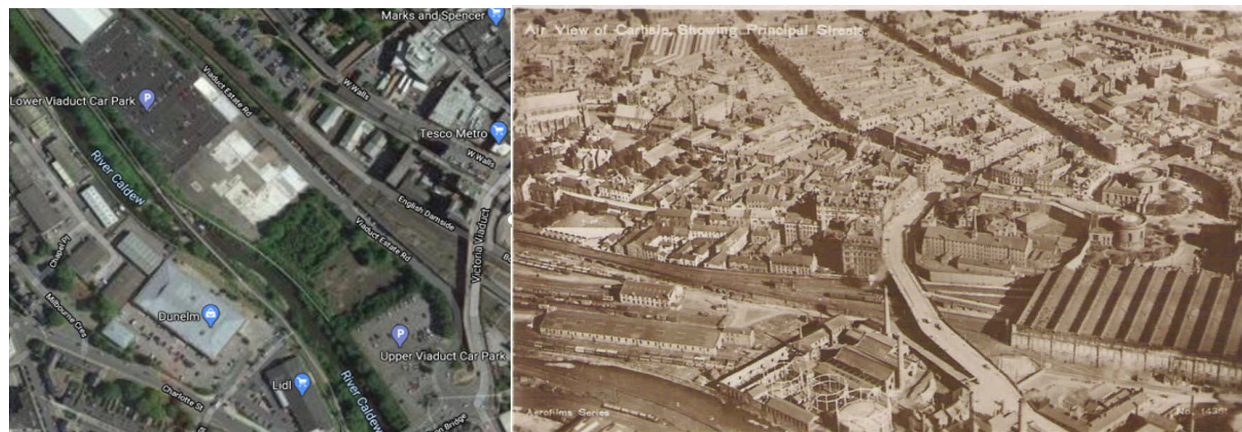


## Caldew Riverside, Carlisle



### CLIENT:

Carlisle City Council

### OVERALL VALUE:

£50k

### PRODUCTS & SERVICES:

Environmental Specialists  
 Date Gap Review  
 Ground Investigation  
 Site Conceptualisation  
 Risk Assessments  
 Remediation Design & Strategy  
 Specialist Surveys

### PROJECT DATES:

June 2019 – ongoing

### ARCADIS CONTACT:

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[Alison.pugh@arcadis.com](mailto:Alison.pugh@arcadis.com)

### Overview

Caldew Riverside is in the centre of Carlisle located adjacent to the River Caldew which is designated a Special Area of Conservation (SAC). This site has a varied history including a gas works, railway siding and warehousing. This is a key area for regeneration within the city and our client, Carlisle City Council are progressing this redevelopment in a staged approach. Arcadis was initially employed to undertake an extensive data review and gas analysis followed by the design of the likely remediation and associated costs. This allowed Carlisle City Council to secure external funding for the important next steps which involve ground investigation to further characterize the site and redefine the remediation required to bring the parcels of land forward for redevelopment.

### Key Challenges

Due to the industrial nature of the Caldew Riverside site, it had been investigated many times throughout the years and therefore there was a large volume of historic chemical and geological data which needed to be reviewed. This was in a mixture of electronic and but mainly pdf hard copy. To characterize the contamination status of each parcel, this data was digitized mainly by hand and screened against appropriate assessment criteria. This identified that there were areas across the site which lacked coverage and more investigation data would be required to fully understand the level of remediation that would be required prior to re-development.

Non Aqueous Phase Liquid (NAPL) originating from the historic gas works is present and migrating across the parcels of land to the north. Due to the length of time since the last investigations, it is unknown how far this has progressed and if this will restrict development of areas close to the former gas works.

Arcadis is currently preparing a ground investigation scope to provide more clarity on the areas where chemical data is lacking, establish the presence of NAPL / dissolved plume of hydrocarbon contamination and to understand the groundwater regime across the site. After this work, further assessment will be undertaken and remediation requirements for each parcel refined.

### What we are proud of

The digitisation of the existing chemical data has provided a database that can be built on and enhanced when additional investigation is undertaken across the site.

The regulators are key to the remediation and re-development of this site mainly due to the NAPL present. The project team has engaged with the Environment Agency at an early stage to discuss the site, the scope of the investigation proposed and a practical way forward.