

EASTLEIGH WORKS CASE STUDY

When the HydroVein team have the opportunity to work on a site with such a vibrant engineering history, the strong sense of nostalgia is balanced by the excitement for the new lease of life being injected into the project to which we are contributing.



Originally a bustling carriage and wagon repair works and part of the 'London & South West Railway', Eastleigh Works boasts a history dating back as far as 1874, with its main rail contribution occurring between the early 1900's through to its closure in 2006. Like so many large engineering works of the mid century, Eastleigh Works also made a valuable contribution to the second world war effort, with production resources being diverted to producing parts enabling Blenheim Bombers to be repurposed as fighters.

The site was officially closed in 2006 when the then owners concluded it was no longer operationally viable. In more recent times, the works has seen something of a steady resurgence in activity.

Principal tenant Arlington Fleet Services have capitalised on the site's rail infrastructure and vast engineering sheds; with locomotive and carriage renovations and decommissioning projects all being undertaken again. Arlington also occupy the impressive office building.

New owners Diageo have had the foresight to understand that by selectively renovating and redeveloping particular zones, they can further enhance viability. But on a site with such a complex and traditional heavy engineering infrastructure, integration and compliance with modern requirements presents many challenges. There may have been a time when it was acceptable to run a water main under a railway line but with the advent of electrification such operating standards have thankfully long since been rewritten!



HydroVein were appointed to provide water industry expertise, water design, self-lay mains installation and service connections across both potable supply and that required for site fire safety by Hampshire & Isle of Wight Fire Services.

Establishing a starting point from plans which date back to the turn of the previous century was always going to be a challenge. Early exploration and testing by our team revealed that the existing water infrastructure required significant interventions, particularly that required to satisfy the safety criteria of the fire service.

Our recommendations included ‘bursting’ the original water main and installing new 90mm barrier pipe, along with new fire hydrants across the site. An assessment of whether to utilise water storage tanks or mains supply for fire was also undertaken.

Our expert team was required to liaise with Southern Water and make recommendations on the most appropriate design to balance the needs of the site and its users - both leasehold and freehold, with those of the landlord and other stakeholders, taking account of logistics, cost implications and the need for future-proofing. Considerations included utilising existing assets where possible but also fully understanding when it became more appropriate to introduce new technology, install new water mains, bulk meters, hydrants, meter points, new unique connections to parts of the site which would potentially become individual freeholds and much more.



If you have a particularly complex or challenging redevelopment site or require bespoke water infrastructure design and installation services then the HydroVein team are always here to assist.

