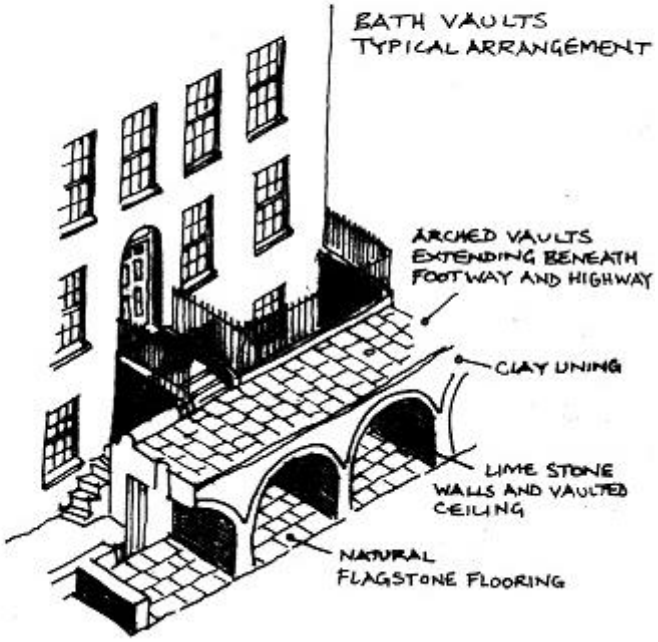
Bath's Historic Vaults

The rising popularity of Bath has led to increased demand for development of domestic vaults for conversion to habitable accommodation. This comes with a risk of harm to their heritage value and significance. **This short guidance note attempts to offer advice in order to provide a greater understanding of vaults, their original functions, heritage value, and the common problems relating to damp ingress** and the Local Planning Authority's position in determining listed building applications for their alteration and in particular damp proofing works.

Vaults are a common feature of 18th and 19th century buildings in Bath. They were usually built to support the highway above, and were a constructional response to the precipitous topography that surrounds Bath in order to provide a level site. They provided storage for coal and a service area for the principal building. It has been said that, in common with basements, they were the 'engine rooms' of the building. Although vaults are subterranean spaces they were actually built on what was the original ground level. Historic England says of vaults:

'Basement vaults are an important diagnostic feature of the planning of terrace houses in the 18th century and 19th centuries and a characteristic feature of the construction of houses and the support of terraces in Bath and surrounding districts. In our view the vaults associated with historic houses, though unseen, are an integral part of their historic integrity'.

Vaults are sometimes regarded as marginal and unimportant parts of the building. However, an informed understanding of the hierarchy of floors of most 18th and early 19th century buildings in Bath reveals that vaults are significant in both architectural and social historic terms. Frequently they possess evidential value relating to the firm social structures and hierarchies that existed in society during the 18th and 19th centuries.



Vaults, in common with basements, were intended to provide a service function within buildings. Unlike basements, they usually fall outside the main footprint of the principal building, separated by a lightwell and located beneath the highway to the front, and were never intended for

habitation. However, there are some examples of vaults that are located within the basement arrangement, often to the rear and were likely to have been used as water storage tanks for harvested rainwater before the introduction of mains water supply in the mid to late 19th century. As well providing a structural function in supporting the highway, they provided a solution when developing inclined ground. They were used for the storage of coal and often for service areas, for instance the laundering of clothes. Surviving features such as coal holes and sinks and coppers provide evidence and testimony for this use and such features can often be found in vaults. Vaults are often subdivided by limestone ashlar partitions in order to segregate these two uses: storage and service. Their character reflects their humble functions including stone floors (of either rubble or flagstones that can be either local limestone or pennant sandstone), limestone rubble masonry walls and, in some rare cases, brick can be found in Bath. The internal face of the masonry would usually have been covered with a lime wash finish, which would usually have been white in order to maximise levels of light. Joinery would have been modest and functional. Ceiling heights are characteristically low. These features are intrinsic to the character of vaults and their utilitarian functionality and alterations that attempt to increase their status risks causing harm to their character and significance. They also risk destroying the relationship to the principal building and the important hierarchy of parts of the building and their social historic context within the building and the wider social context of society at the time of their construction.

As part of their construction, vaults were often provided with an outer covering of clay to protect them from excessive damp ingress but as would be expected of subterranean space damp levels are higher than other parts of the property. However, damp levels differ greatly for a variety of reasons including: damage to the original outer clay or hydraulic lime render damp proof lining as a result of works by utilities companies; faulty and failing services; lack of maintenance and repair; inappropriate repair; poor ventilation and drainage; the existence of natural springs and the location of the vault in the city. In attempting to improve, repair and maintain vaults and reduce damp levels conservation best practice of minimal intervention and involving the use of appropriate permeable, traditional materials is highly recommended. This should include seeking independent, specialist advice from a conservation specialist such as an accredited conservation specialist surveyor in order to gain a thorough understanding of the causes of excessive damp. Once the causes have been identified and understood they should be successfully resolved as opposed to merely dealing with the symptoms, which is likely to result in harm to the character and significance of the vaults and may ultimately be ineffectual.

Whilst vaults should not be regarded as possessing the potential to provide habitable spaces they can invariably be improved to provide meaningful storage spaces and even utility spaces, both of which are consistent with their original functions. However, a sensitive, sympathetic and informed approach should be employed as opposed to resorting to dealing with the symptoms by utilising damp proofing methods such as using cementitious damp proofing renders or cavity membranes, which are harmful to the character and architectural interest of vaults. These works result in the covering of masonry intended to be exposed (other than a limewash finish) and the lifting of the original stone floor surface the disturbance of which is often detrimental. It also results in a gentrified appearance that is discordant with their service function, utilitarian character and their status within the building.

Expectations for the use of vaults should be realistic and consistent with their original function and use and trying to attempt to reduce damp to a level consistent with residential occupation is likely to cause considerable harm. It should also be noted that damp proofing works can, and has, resulted in an increase in levels of damp in neighbouring vaults. Attempts are sometimes made to justify particular methods of damp proofing on the basis of reversibility however this is not regarded as convincing. For instance a damp proofing cavity membrane requires multiple fixings that results in damage to historic masonry and the obscuring of masonry from view results in visual harm and a loss of essential character.

In the past many vaults were damp proofed using a variety of methods however in all cases this has resulted in harm and therefore there is now an imperative to preserve the remaining

unaltered vaults. However, the Council accepts that there will be a number of instances where the damage has already been done and these cases will need to be assessed on their individual circumstances. The general aim should be to conserve the significance of the vaults. This does not preclude appropriate and enhancing improvements and the Local Planning Authority and independent specialist architectural practitioners can provide expert advice and more detailed guidance as to the most appropriate approaches to improvement.