Enabling and Temporary Works

CHAPTER 15

15.1 Enabling Works

15.1.1 Situations will arise where there are concealed elements within a building whose condition needs to be assessed in advance of proposals being formulated in order to inform those proposals. For example, there may be a likelihood that beam ends are rotted, fungal infestation is suspected or a case where sources of water penetration need to be identified. In such situations enabling works will be needed, such as the opening up of floors or ceilings, removal of panelling and the like, before detailed proposals can be made. It is important that these enabling works do not damage the character of the protected structure or any element which contributes to its special interest.

15.1.2 A planning authority may also require an applicant to carry out a schedule of investigative works where it considers the proposed redevelopment of a protected structure may be inappropriate. For example, where it is considered proposals may lead to an overloading of structural elements such as floors or staircases, enabling works may be required to ascertain the capacity of structural elements to accept increased loading, before detailed planning application proposals can be considered. It may also be considered necessary to ascertain the existence or location of concealed features.

15.2 Temporary Works

15.2.1 Temporary works may be necessary to preserve the fabric of a protected structure during development. Old buildings which are undergoing refurbishment or conservation works are particularly vulnerable to damage during the course of those works. Every care should be taken during works to a protected structure to ensure that the historic fabric is protected, particularly delicate features and high quality finishes. The methods and details of temporary works may need to be approved by the planning authority prior to the commencement of any works.

15.3 Potential Causes of Damage

15.3.1 Potential causes of damage should be considered by the planning authority when attaching conditions to a grant of planning permission in order to prevent or minimise damage to a protected structure as a result of building works. Even where the building owner has employed specialist consultants, the planning authority may consider the need for expert advice to satisfy itself that the matter of damage during the course of works has been properly addressed and to assess potential risk to the protected structure and those features which contribute to its special interest.

The importance of the original structural system and its capacity to accommodate a proposed development should be ascertained at an early stage in order to inform the design. This may require some limited opening-up works. Alternatively, some opening-up may be necessary ascertain the existence of suspected hidden fabric or features of importance, such as early structural timbers

Detailed consideration should be given at an early stage to the design of measures to protect structures and important features likely to be affected by a development, including those on adjacent sites. A protected structure should not be exposed to damage from construction works or from vehicle impacts and should not be used for purposes that might cause damage

15.4 Structural failure

15.4.1 The planning authority could require that expert advice be sought by an applicant from suitably qualified architects or structural engineers to ensure that the structural stability of the building will not become endangered during building works. The quality and expertise of site personnel and the ongoing monitoring of site works could also be specified. Where a protected structure is particularly fragile or where significant temporary works are anticipated, the planning authority could require an applicant to submit designs for temporary works for approval in advance of the erection of any scaffolding or shoring.

15.4.2 Careful propping of elements of special interest within the building may be necessary before works commence. Valuable and irreplaceable objects, such as decorative plaster ceilings, should be propped if there is any risk to their stability. Propping itself can cause damage and should be designed and installed by properly trained and experienced personnel under the guidance of an architect or other building specialist who is aware of the value of the fabric. It should be established that no damage would be done by the movement or the concentration of loading from scaffolding, shoring or other temporary works on existing fabric or foundations.

15.5 Mechanical damage

15.5.1 Irreparable harm can be done to a historic structure by mechanical damage caused during the course of building works, particularly in the erection of scaffolding. Externally, sills, glazing, cornices, string courses, balconies, steps, paving and railings are particularly vulnerable to breakage, scratching and other damage. Inside a building, carved stonework and joinery, decorative plasterwork and decorative wall and floor finishes such as paint, wallpaper and tiling are all prone to accidental damage during general building works. Roofs, paving and flooring located below work in progress should be protected from items supported off them and from items dropping onto them from overhead.

15.5.2 A planning authority may require that all valuable ornamental work be provided with the necessary protective coverings before work commences. Where there are windows or doors with rare or interesting glass these should be protected, if necessary on both sides, to prevent breakage. Protection in situ should generally be preferred to removal. Historic glass should not be sacrificed to facilitate the erection of scaffold poles or ties through windows, doors or fanlights.

15.5.3 Scaffolding should be erected by trained scaffolders, guided by architects or other building specialists who are aware of the importance of the building fabric. Any part of a scaffold which touches, or is erected close to, historic fabric should be provided with protection to prevent damage and the ends of poles should be covered with plastic caps.

15.5.4 As with the potential problem of structural damage, the planning authority could require the employment of experienced site personnel, such as scaffolders, and proper site management in order to minimise the risk of accidental damage.

Structures may be in need of propping prior to, and during the course of, works which should be designed and installed to avoid causing damage to unstable fabric

The erection and dismantling of scaffolding in rooms or spaces with important surface decoration or finishes requires especial care. Scaffolders experienced in such work may be required in these circumstances

Glass is more vulnerable than most materials to damage during works, especially during the erection or dismantling of scaffolding. Historic glass should be protected at least to the exterior and, if necessary, also to the interior. Glazed windows should never be broken to facilitate scaffolding poles or ties, nor held open unless adequate protection is given to the glass and the sash is supported

Structures should be adequately protected from the effects of the weather where the temporary removal of windows, doors or roofs is necessary. The protective sheeting and any necessary supports should be attached securely and be fully reversible, without causing damage to window-frames, roof trusses or masonry

15.6 Fire

15.6.1 Refurbishment and maintenance works pose a risk of fire to a historic structure, and construction work to protected structures should be properly managed to minimise this risk. Clear safety instructions should be included in all contracts for works to protected structures. For example, 'hot' working procedures should generally be avoided in historic structures or, where unavoidable, should be carefully monitored. Examples of 'hot' working procedures could include works involving cutting, welding and burning-off of paint. Other threats may arise from the storage of flammable materials such as paints or solvents within the protected structure, the burning of debris and rubbish near the structure or the inadequate provision of fire-extinguishing equipment.

15.7 Weather

15.7.1 Works necessitating the temporary removal of all or part of the weatherproof envelope of a building, such as roofs, windows or doors, should also include the provision of a specified level of protection to the fabric from the weather. Temporary roofs should allow for the discharge of rainwater well away from the building to avoid flooding the interior or weakening the foundations.

15.8 Theft of Architectural Features and Vandalism

15.8.1 Building sites are particularly vulnerable to burglary, vandalism and arson. The presence of scaffolding on the exterior of a building may make the upper storeys accessible to burglars and vandals when a site is unattended.

15.8.2 The theft of architectural features and materials is widespread throughout the country. These features are at a particular risk when a protected structure is

vacant or in the process of refurbishment. Vulnerable items include fireplaces, pieces of ironmongery, lead roof-cladding, carved stone features, panelling and the like. Where there are valuable interior or exterior features, these should be provided with protection before the contract work commences and adequate security should be provided to the structure during the course of the works. The protective casing to valuable features could be provided with alarms, security seals and/or viewing panels, and should be inspected regularly during the course of the works.

15.8.3 Where the structure is temporarily unoccupied for the duration of building works, the owner may be permitted to remove valuable features carefully from the building and move them to a safe and secure storage area for reinstallation at an early date. Owners of vulnerable items should be encouraged to make adequate records of them to help in their recovery in case of theft.

It is advisable that site supervisors or other senior personnel routinely check on all important protected items to make sure that alarms are not tampered with or the fixtures not surreptitiously loosened behind the protective boarding in preparation for theft

Historic joinery or other fixtures which have been temporarily removed from their locations should be stored carefully and safely within the structure and not left stacked on floors where they may be vulnerable to damage or theft prior to their re-incorporation within the building