

Date: 10/01/00

Ref: 45/3/136

Note: The following letter which has had personal details edited out was issued by our former department, the Department for Environment, Transport and the Regions (DETR). DETR is now Communities and Local Government - all references in the text to DETR now refer to Communities and Local Government.

Building Act 1984 - Section 39

Appeal against refusal by the District Council to relax Requirement B1 (Means of Escape) and Requirement B5 (Access and facilities for the Fire Service) of the Building Regulations 1991 (as amended) in respect of proposals to convert a Lighthouse (Listed Grade II) into a dwelling

The appeal

3. The proposed work which is the subject of this appeal relates to the change of use of a disused lighthouse to a single dwelling. The structure is listed Grade II. It is located on a land based site between two residential properties whose curtilages extend round the back of the site. The structure therefore fully occupies a constrained site to the rear and sides, and is accessed via a driveway.

4. The structure is circular in plan and slightly tapered from base to lantern. The District Council states that the building is approximately 19.5m high overall with the top floor being at 14.77m above ground level and it having an average internal diameter of 5m. The walls are 1200mm thick and are built of brick and granite; and all floors are constructed of 350mm thick solid granite. The viewing gallery floor, which is accessed by the existing stair ladder, contains the lighthouse lantern which is required to be restored and retained as a condition of the Listed Building Consent.

5. The structure contains 7 floors. The proposed accommodation for each floor, and the height of each floor above ground floor level, is as follows:

Ground Floor: Entrance/Reception 0.0m

First Floor: Bedroom 1 +4.26m

Second Floor: Bathroom +7.98m

Third Floor: Bedroom 2 +11.78m

Fourth Floor: Bedroom 3 +15.28m

Fifth Floor: Living/Dining +18.57m

Sixth Floor: Kitchen +21.67m

Seventh Floor: Viewing Gallery +24.77m

6. The structure as existing contains an open stair and your original intention was to provide a 60 minute protected stair discharging down to the first floor level with a separate escape from the first floor window but retaining the existing open stone stairs at ground floor level for conservation purposes. However, a drawing submitted as part of your final proposals for full plans approval shows a 60 minute protected stair (including 60 minute fire doors) extending down from the fifth floor to a ground floor final exit accessed via the meter cupboard. In addition, your proposals incorporate an automatic fire detection and alarm system to be installed to BS5839: (Fire detection and alarm systems for buildings) Part 1: 1988 (Code of practice for system design, installation and servicing).

7. The District Council accepts that the design of the building and the fact that it is listed make it impractical to make provision for alternative means of escape from floors above 7.5m or to provide a fire fighting shaft. However, the District Council considered that if this was to be the basis of your proposal then it contained insufficient compensatory features. The Council therefore rejected your proposals on the grounds of their non-compliance with Requirement B1 (Means of escape) and Requirement B5 (Access and facilities for fire service).

8. With respect to Requirement B1, you believe that your clients cannot make provision for an alternative means of escape and that your proposals for the 60 minutes protected stair up to the fifth floor of the building, together with the alarm system, are the best compensatory measures which can be applied - particularly having regard to the fact that the building is listed Grade II. With regard to Requirement B5, you do not fully accept the District Councils contention that the site conditions do not lend themselves to compliance with this requirement. Notwithstanding your reservation about the latter requirement, you therefore applied for a relaxation of both Requirement B1 and Requirement B5 which the District Council states was refused. It is against that refusal that you have appealed to the Secretary of State.

The appellant's case

10. With respect to Requirement B1, you consider that provision of an alternative escape route from the floors above 7.5m high would be impracticable and unreasonable given the restricted space available and the listed status of the building. You believe however that the package of measures proposed will provide adequate means of escape in case of fire for the occupants of the proposed dwelling. You have also made reference to a previous appeal relating to a Water Tower the circumstances of which, in your opinion, are similar to this case.

11. In support of your appeal you have made the following points:

(i) the existing structure of the building is of limited combustibility. The walls are solid brick and granite approximately 1200mm thick and all the floors are constructed of solid granite 350mm thick. You believe that with this construction the rate of spread of any fire would be slowed significantly

(ii) as proposed, the kitchen and dining rooms are located at the top of the building above the sleeping accommodation; thus reducing the additional problems associated with sleeping above a fire risk

(iii) a protected staircase would serve all floors up to the fifth floor. This should facilitate escape from the first to fifth floor stories past a fire contained in a room below. The staircase would be enclosed in 60 minute fire resistant construction with 60 minute self closing fire doors opening onto the stair. Both the protected stair and that serving the floors above the fifth floor will be constructed of materials of limited combustability. Your original intention was that the fire doors opening onto the stair would be held open by an automatic hold-open device which would be activated by the fire alarm. However you now state that this option is omitted but that you would like the issue to be reviewed because of your clients' preference for a more open plan arrangement. The sixth floor kitchen is accessed via a spiral stair from the fifth floor living/dining room through a balcony void space

(iv) a fire detection and alarm system in accordance with BS 5839: Part 1 1988 with smoke detectors will be installed in each room, except the kitchen and dining space which are covered by heat detectors. The occupants of the house will therefore be aware of a fire and should be able to make their escape before fire could prejudice safe escape via the stair.

12. With respect to Requirement B5 you state that, whilst the building may not provide ideal access for fire fighting, your proposals do not rely on the use of a high reach appliance to provide means of escape. You have considered fire fighting access for the building and have commented as follows:

(i) in the event of a fire you believe that common sense will prevail and that additional access could be made through the garden of the adjoining property

(ii) the existing driveway is understood to be constructed of gravel on tarmac with a sand base. You consider that this would be adequate for supporting a fire service high reach appliance

(iii) you have agreed to widen the existing gateway onto the site to a width of 2.5m to enable a fire appliance to drive right up to the base of the lighthouse

(iv) the nearest fire hydrant is approximately 20m from the front door

(v) you have stated that if concerns still exist, your clients have agreed to invite the fire service to visit the site with their high reach appliance in order to test the access arrangements.

The District Council's case

13. (i) The means of escape from the dwelling would be unsatisfactory. Although a protected route has been indicated throughout most of the building, no alternative route for floors above 7.5m has been provided. Your argument that this is compensated for by a smoke detection and alarm system is not accepted as this would be a requirement in any event.

(ii) Fire resisting doors held open with an automatic door release system are at risk of being obstructed due to the restricted space available and are also not acceptable in single stair buildings.

(iii) Consultation with the Fire Authority confirmed that the present access drive and the suggested access across a neighbouring property are not suitable. The comments from the Fire Authority also indicate that even if these accesses were suitable, the use of a high reach appliance should not be considered as a satisfactory substitute for adequate means of escape from the building.

The Department's view

14. The Department accepts that there is a need to ensure the future of listed buildings of the type which is the subject of this appeal. This requires local authorities to adopt a flexible approach to assist in finding alternative uses for such buildings. Such an approach must, however, be balanced with the need to provide a reasonable level of safety for the occupants of a building and to develop the measures to achieve this. One such safety measure is the provision of fire detection and alarm systems for domestic buildings which, to a limited extent, is included in the guidance given in *Section 1 of Approved Document B (Fire safety)*.

15. It may be reasonable to adopt design solutions which are at variance with the recommendations given in *Approved Document B* where the extent of fire detection is greater than the recommended minimum. However, there is a limit to the effectiveness of early warning in a very tall domestic building where fire resisting doors may well be obstructed by the occupants and external rescue is deemed to be impractical because of the height of the building. Fire in the rooms of domestic buildings are known to develop quickly and whilst the fire itself may not spread due to the limited combustibility of the materials used in the construction of the building, it has been established from fire case studies that smoke can rapidly fill vertical spaces such as stairways.

Requirement B1

16. The conventional solution for means of escape in a building of this height would be to provide alternative escape routes for rooms which are more than 7.5m above ground level. The District Council accepts that such a requirement would be unreasonable in this case because of the restricted space, both inside and outside the building; and the Department accepts this judgement. The Department does not however consider the provision of early

warning of a fire to be a sufficient compensatory feature in this case because there is only single door protection to the stair and the protected stair does not extend to the kitchen on the sixth floor.

17. *Appendix E of Approved Document B* includes kitchens in the definition of a habitable room for the purposes of Part B (Fire safety) of the Building Regulations and therefore the occupants of this room need to be able to escape in safety. Your proposal is to provide an open spiral stair between the sixth floor kitchen and the living accommodation on the floor below. The Department does not therefore consider that your proposals show adequate means of escape.

Requirement B5

18. With regard to access for the Fire Service, Requirement B5(2) states: Provision shall be made within the site of the building to enable fire appliances to gain access to the building. In this case the Department considers that for a building of this height it would normally be essential for Fire Service vehicle and personnel access to be provided fully in accordance with the guidance given in *Approved Document B* in the event that safe escape via the internal escape stair was prejudiced; although the Department accepts the view of the District Council (as reported at paragraph 7 above) that in this particular instance the provision of a fire fighting shaft would be unreasonable in such a narrow width building. However, *Table 20 of Approved Document B* suggests that the minimum width of gateways for the purposes of vehicle access should be 3.1m. In your case you are only able to provide a gateway width of 2.5m and there are also doubts over other aspects of accessibility for the Fire Service.

19. The Fire Authority have implied that, because of the height of the building, the only appliance suitable for rescue purposes would be a hydraulic platform. But they express doubts as to whether their equipment could reach the seventh floor and estimate a total period of approximately 25-30 minutes to effect such an operation. They therefore stress that potential access by a high reach appliance should not be seen as part of a solution to providing a means of escape.

20. The guidance in *Approved Document B* relating to Requirement B5 recognises, amongst other things, that tall buildings present particular problems for the fire service when fighting a fire and effecting rescues. The Department also recognises that the guidance given in *Approved Document B* may not be suitable in every case and it may be more appropriate to offer other compensatory measures. In this case the Department does not consider that you have provided adequate access facilities for the Fire Service.

21. The Department takes the view that the difficulties of complying with Requirement B5 could not easily be resolved. However, the installation of a suitable sprinkler system might resolve the issue of compliance with Requirement B1; and therefore indirectly resolve the issue of compliance with Requirement B5. Any proposals for the installation of sprinklers might usefully

re-visit the role which hold-open door devices could play. These would be matters for you to put to the District Council and for them to decide upon their appropriateness in terms of compliance.

The Secretary of State's decision

22. Paragraphs 14-21 above have considered, and commented upon, the potential for your proposed work to achieve compliance with requirements B1 and B5. However, you have appealed to the Secretary of State in respect of the refusal by the District Council to relax these two requirements.

Requirements B1 and B5 are life safety matters and as such the Secretary of State would not normally consider it appropriate to either relax or dispense with them.

23. The Secretary of State has given careful consideration to the facts of this case and the arguments put forward by both parties. He has also noted your reference to a previous appeal decision which you contend constitutes a similar one to this. However the Secretary of State is required to consider all cases on their individual merits, and issues specific to previous cases will not necessarily be relevant to subsequent ones.

24. The Secretary of State is sensitive to the need to recognise the constraints which may be imposed on compliance with the Building Regulations when the building concerned is a listed one, and he has taken into account the technical issues arising with regard to achievement of compliance of your proposed work. However, he has concluded that the extenuating circumstances of this particular case are insufficient to counter the potential danger which would be inherent in relaxing Requirement B1 (Means of escape) or Requirement B5 (Access and facilities for the fire service) of Schedule 1 to the Building Regulations 1991 (as amended). In his view, the District Council therefore came to the correct decision in refusing to relax these two requirements. Accordingly, he dismisses your appeal.