

Inspector's Report

Change of use from single family

FS 17.FS0537

DEVELOPMENT:

house to residential facility at Ardbrae, Athboy, Co.Meath. **Building Control Authority:** Meath County Council **Building Control Authority Reg. No:** FS/16042 **Applicant/Appellant:** Nua Healthcare Services **Application Type:** Fire Safety Certificate **Building Control Authority Decision:** Grant Type of Appeal: First Party -v- Condition. Date of Site Inspection: n/a

INSPECTOR:

Patricia Calleary

1.0 INTRODUCTION

FS17.FS0537 relates to an appeal against the attachment of Condition No.4 to a fire safety certificate (FSC), being a FSC application which sought a modification to an identical Condition attached to a previously granted FSC under Meath County Council reference FS/15008.

2.0 SUBJECT MATTER OF APPEAL

Meath County Council granted a FSC (FS/15008) on 3 February 2015 for works involving the material change of use from a single family dwelling to a residential care facility and the carrying out of material alterations to the building at Ardbrae, Athboy, Co. Meath. Four conditions were attached. The building was originally constructed as a house with a floor area of c.211 sq.m on the ground floor and 144 sq.m on the first floor.

A subsequent fire safety certificate was submitted to Meath County Council (FS/16042) on 20 May 2016 seeking modification of Condition 4 which had included prescriptive requirements for water supply for the fire service. In seeking the modification, the applicant offered to provide a static water tank with a capacity of 2000 litres capacity as an alternative to the requirements specified in the condition. Meath County Council granted the FSC and in doing so attached the same 4 conditions as those previously attached to FS/15008 including condition no.4 without modification.

The appeal was subsequently lodged to An Bord Pleanála seeking the removal of Condition No.4 in its entirety.

The specific condition reads as follows:

Condition No.4: A fire mains system shall be provided consisting of 1 no. fire hydrant(s), and shall be capable of the following supply for fire-fighting purposes for a minimum duration of 2 hours.

Minimum flow: 1200 litres per minute at a minimum pressure of 2.5 bar. The system shall be in accordance with the recommendations of sub0section 5.1 and sub-section 5.2 of Technical Guidance Document B: 2006

or

A static water facility of at least 150,000 litres shall be provided for fire service use. The design and location of this shall be agreed with the Fire Authority prior to commencement of construction on site.

Reason: To ensure compliance with Part B of the Second Schedule to the Building Regulations, 1997-2006.

3.0 DOCUMENTS REVIEWED

The following documents were reviewed as part of my assessment of this appeal.

- Fire Safety Certificate application form;
- Fire Safety Certificate Application supporting drawings and documents;
- Applicant's technical Compliance Report;
- Fire safety certificate grant;
- Grounds of appeal by First Party;
- BCA Response to appeal;
- Technical and other related guidance.

4.0 FIRE SAFETY CERTIFICATION HISTORY

A fire safety certificate was previously granted by Meath County Council for the change of use from a single family house to a residential facility under BCA Ref: FS/15008.

5.0 GROUNDS OF APPEAL

The applicant/appellant points out that while the application related to the modification of Condition No. 4 which was attached to the previous fire safety certificate (FS/15008), the condition was repeated in the schedule of conditions. It is submitted that the condition is entirely unwarranted but that a static water tank of equal volumetric capacity to a fire appliance (1800 litres) was offered as part of the application in place of the requirements set out under Condition No.4.

The principal arguments put forward in support of the appeal include the following:

- The reason for the attachment of the condition is not supported by any specific requirement of Part B (Fire Safety) of the Building Regulations;
- Availability of water supply is set out under B5 (Access and facilities of the fire service);
- B5 requirement is met if there is a) sufficient means of external access for effective use of fire appliance, b) sufficient means of access into and within the building for fire-fighting personnel and c) sufficient fire mains and facilities to assist fire fighters.
- No requirement under this part of the Building Regulation to provide a supply of water for firefighting;

- No recommendation in TGD:B to provide a supply of water for firefighting purposes;
- Section 5.1.7 of TGD recommends the thresholds when external fire hydrants are required and the proposal does not meet the stated thresholds;
- The Fire Services Act 1981-2003 (and not the building regulations) sets the requirement for the provision of public water supply for firefighting by the sanitary authority. Refers to Section 29 of the Act;
- Concludes that Condition No.4 is unwarranted and requests An Bord Pleanála to direct the BCA to remove it.

6.0 APPEAL RESPONSES

6.1 Building Control Authority (BCA) Response

The BCA provided a response to the appeal and the following provides a summary of the key relevant points.

- Proposed change of use is from residential (dwellings) purpose group 1(c) to residential (institutional) purpose group 2(a);
- BCA considers the requirement for sources of water for firefighting purposes in accordance with Sub-section 5.1.6 of TGD:B can be either hydrant/external fire mains or static storage tanks/reservoirs;
- Assessment of the building was undertaken using guidance from documents in relation to 3 sources of water for firefighting purposes.¹
- The mains system or static water storage facility of 150,000 litres required is considered reasonable to assist the fire service in the protection of life and property;
- Authority's opinion that Section 29 of the Fire Services Act 1981 & 2003 referred to by the appellant relates to proposed construction of new developments or buildings such as housing development and is not applicable for a material alteration and change of use as proposed in the subject development;
- Section 29 of the Fire Services Act referred to by the appellant relates to construction of new development and is not applicable for the change of use/material alteration of an existing building;

¹ Three no. documents are referenced by the BCA which include the following:

^{1.} National guidance document on the provision of water for firefighting – Local Government Association and Water UK – Third Edition January 2007;

Municipal Water related to Fire Fighting and Protection – The Chief Fire Officers' Association Conference, Westport, Mayo, 1986 – Patrick J Tobin & Co. Consulting Engineers, Galway;
Fire Service Manual – Hydraulics, Pumps and Water supplies – HM Fire Service Inspectorate Publications Section 2001.

• Responsibility for the provision of water for firefighting purposes rests with the owner of the existing building.

7.0 LEGISLATION and TECHNICAL GUIDANCE

The following are considered relevant in my assessment of this appeal.

1. Building Control Regulations, 1997-2015.

Art 15: (Consideration of application) sets out the obligations of the Building Control Authority when considering an application as follows: 'Where an application is made to a building control authority for a fire safety certificate, the authority, in considering such application, shall— (a) be restricted to considering only the extent to which the design of the building or works complies with the requirements of Part B of the Second Schedule to the Building Regulations'.

2. Part B (Fire Safety) of the Building Regulations 1997-2014.

Part B of the second schedule to the Building Regulations 1997 (as amended) sets out the legal requirements in relation to fire safety in respect of new buildings and in respect of existing buildings undergoing works involving an extension, material alteration or a material change of use. The requirements under Part B represent the national statutory minimum standards of fire safety provision applicable to the aforementioned works. Specifically, B5 (Access and facilities for the fire service) states:

'A building shall be so designed and constructed that there is adequate provision for access for fire appliances and such other facilities as may be reasonably required to assist the fire service in the protection of life and property'.

3. Technical Guidance Document (TGD) B: Fire Safety (2006).

Where works are carried out in accordance with the national guidance in this document, this will, prima facie, indicate compliance with the fire safety requirements set out in Part B of the Second Schedule to the Building Regulations. The adoption of an approach other than that outlined in the guidance is not precluded provided that the relevant requirements of the Regulations are complied with.

Section B5- 'Access and facilities for the fire service' is particularly relevant in this appeal.

4. **The Fire Services Act 1981 & 2003**, particularly Section 29 (Public water supply for fire-fighting) and Section 26 (Fire and Emergency Operations Plans) are referenced in the appeal.

I have included extracts of the aforementioned documents within the appendix to this report.

In addition, in the response to the appeal, the BCA make reference to other non-statutory guidance which I have also considered in my assessment under Section 8.5 below.

8.0 ASSESSMENT

8.1 Introduction

I have read and considered the contents of the Fire Safety Certificate application, grounds of appeal, response by the BCA as well as relevant legislative provisions and technical guidance. I did not carry out any physical inspection of the building and my assessment is based on the information available on the appeal file.

Having reviewed this information, I am satisfied that the determination by the Board of this application as it had been made to it in the first instance would not be warranted and that it would be appropriate to use the provisions of Article 40(2) of the Building Control Regulations 1997-2015 in this case. The determination of the case therefore relates solely to the attachment of Condition No.4 to the fire safety certificate.

The findings of my assessment are set out below:

8.2 Condition No.4

The key issue in this appeal relates to the placing of the requirement to provide a water supply for fire-fighting onto the developer. Specifically, condition No.4 seeks to impose the provision of a **fire mains system including a hydrant** with a minimum flow rate of 1200 litres/min at a min pressure of 2.5 bar <u>or</u> alternatively the provision of **a 150,000 litre static water tank**. The case made by the first party appellant is that there is **no requirement** under The Building Regulations 1997, as amended, or related technical guidance provided within TGD:B 2006 to provide such a water supply for fire-fighting purposes.

The BCA considers that the requirement for sources of water for firefighting purposes is laid out under Section 5.1.6 of TGD:B 2006 and that either hydrant/external fire mains or static storage tanks/reservoirs are required.

The scope of the previous FSC application was limited to the change of use from a single family dwelling accommodation to a residential care home. It also included material and other alterations of a modest nature including the upgrading of fire safety measures by the installation of new fire doorsets, new fire detection system, emergency lighting as well as reconfiguration of some partitions. It is stated in the compliance report which accompanied the current application that the building would provide residential and outreach services for adults and children with complex support requirements and that the objective of the building is to mirror a home environment for service users to facilitate good quality of life. The building would be governed by HIQA standards and relevant national regulations. It is also stated that the building is better defined as a residential home (rather than residential institute) and that it would have 4 members of staff present in the building at all times.

This current application relates to modification to the provisions required under the attached condition 4, specifically the provision of water supply for firefighting purposes. It is clear that the applicant considers this requirement to be onerous and unnecessary to achieve compliance with Part B5 of the second schedule to the Building regulations 1997-2014.

8.3 Technical Guidance Document: Part B 2006.

Guidance provided in Section 5 of TGD:B 2006 relates to 'the provision of facilities for the fire service within and around buildings for the purpose of protecting life and mitigating property damage due to fire'. Section 5.0.1 sets out the facilities which may be necessary to assist the fire service depending on the size of the building. These include, among other, 'fire mains around and within the building, including the provision of hydrants'.

Section 5.0.2(d) sets out that the building size is the main factor determining the facilities needed to assist the fire service. It states that 'Water is obtained in the first instance from the supplies carried on the first responding fire appliances. This is supplemented with water from public mains or fire mains on the site, where available, or pumped from other adjacent sources such as rivers, canals, ponds or static storage tanks, where provided. Water may also be ferried by water-carrying tankers or relayed by pumping from remote sources'. Having regard to Section 5.0.2, It is immediately evident that there is no stated requirement for the provision of any static water storage facility or corresponding sizing

methodology and whether or not the stated fire mains and hydrant are required is discussed under.

The building which is the subject of this appeal involves both <u>material</u> <u>alterations</u> and <u>change of use</u>. My assessment therefore considers both the material change of use and material alterations aspect insofar as they relate to Condition No.4.

Section 5.0.3 deals with material alterations to **existing buildings** and sets out that the requirement of B5 may be met if the following criteria are met:

- (i) if the **access** and **facilities** for the fire service **are not altered** in such a way as to reduce the extent or performance of those that existed before the material alteration; and
- (ii) if the building is not extended or altered by the **addition of** *floor area* at any level or the subject of a material change of use.

It is clear from the drawings and description of the works outlined in the applicant's compliance report that criteria 5.0.3 (i) above would be satisfied if constructed in accordance with the drawings and documents. Therefore, Condition No.4 is not required to achieve compliance in relation to the <u>material alterations</u> aspect of the proposal. In relation to criteria 5.0.3 (ii), while no additional floor area is proposed the building is the subject of a material change of use from residential (dwelling) to residential (institutional) purpose group as set out under Table 0.1 of TGD:B. My consideration of the requirement for Condition No. 4 is concentrated therefore on the <u>change of use</u> element. In this respect, section 5.0.3 of the guidance states that it will be necessary to assess the access and facilities for the fire services in accordance with the guidance of the relevant subsection to this section.

Section 5.1.6 of the guidance is particularly relevant as it deals with sources of water for fire-fighting and it outlines that water for fire-fighting can be provided by way of a number of **possible** sources including:

- (a) Water carried on fire appliances (water tenders, water tankers, etc.);
- (b) Hydrants on external fire mains;
- (c) Static storage tanks or reservoirs where provided;
- (d) Other sources such as rivers, canals, ponds, etc., where adequate access for pumping is available.

Under section 5.1.7 of TGD: B, a hydrant is only required for a building with either an internal fire main<u>or</u> a building having a floor area **of greater than 1000 sq.m**. The subject residential care home is not required to have an internal dry or wet main as these apply to specific higher risk taller buildings or buildings with deep basements as detailed under 5.1.2 of the guidance and which clearly the residential home is not. In addition, the building with a stated floor area of 355 sq.m falls well below the 1000 sq.m threshold. Consequently, there is no requirement for an external fire hydrant as referenced in Section 5.1.6 (b), referred to above. Water supplies are can be provided from other possible sources outlined under Section 5.1.6 (a,c and d). The most obvious one is (a), water carried on fire appliances. I have considered this further under section 8.4 below.

I am very mindful of the importance of a water supply for fire-fighting purposes. However, the statutory guidance laid out under TGD:B 2006 does not have any prescriptive requirement for the developer to provide a water supply in this instance. Under the Building Control Regulations, the Building Control Authority is restricted to considering only the extent to which the design of the works complies with the requirements of Part B (Fire) of the Second Schedule to the Building Regulations.

I also consider it would be disproportionate, having regard to the limited scale of the 'change of use' proposed where fire safety prevention and detection measures internally in the building would be much improved, to require a static water tank which would provide a capacity of 150,000 litres equivalent to the capacity of 83 standard fire and rescue water appliances each which have a capacity to carry 1800 litres or 15 of the larger water tankers, each which generally hold c.10,000 litres.

Having regard to the foregoing, I consider that the Building Control Authority should be directed to delete Condition No.4.

8.4 The Fire Services Act 1981 and 2003

While The Fire Services Acts 1981 & 2003 lie outside of the fire safety requirements set out under the Building Regulations, I note it has been referenced in both the appeal and the BCA's response. I consider it is of assistance in my assessment in that it can fill the gap in understanding the legal basis for the provision of water supply for firefighting.

Section 29 of the Act deals with public water supply for fire-fighting. S29(1) sets out that 'the functions of a sanitary authority² for the provision of a

 $^{^{2}}$ S 7(4) of the Water Services (No.2) Act 2013 sets out that references to a sanitary authority in any enactment or instrument under any enactment shall, on and after the transfer day, in so far

supply of water shall extend to the supply of water for fire-fighting purposes'. S29(2) sets out the provision where insufficient water for fire-fighting purposes isn't available, i.e. 'the sanitary authority shall consult with the fire authority as to the measures required and shall take such measures as may be agreed'.

It is also of relevance to note that Section 26 of the Fire Services Act requires each fire authority to prepare fire and emergency operational plans in respect of 'organisation, appliances, equipment, fire stations, water **supplies** and extinguishing agents, training, operational procedure and such other matters as may be relevant, and for dealing with operations of an emergency nature'.

Such a plan has been prepared for Meath entitled 'Meath County Council Fire and Emergency Operation Plan'. Section 7 of the Plan sets out the provision for water supplies. It states that each standard class B pumping appliance carries 1800 litres of water in an on-board tank which would generally provide a 20 minute water supply to a high pressure hose reel capable of extinguishing room fires. In addition, it states that Meath has 3 no. tankers based at Navan, Trim, Ashbourne which hold 11,350l, 8500l and 11,350l respectively and that these water tankers assist in **rural fires** where **local water supplies may be deficient**.

It also states that 'each fire brigade surveys the condition, accessibility, water flow and marking of all public fire hydrants in its operational area on a regular basis' and that 'feedback on retroactive requirements is provided to Irish Water'. It is further stated that Meath County Council advises Irish Water on water supply required for commercial and housing developments when dealing with planning referrals and fire safety certificate applications.

I concur with the appellant in this case that it is the responsibility of the sanitary authority (whose functions have since been transferred to Irish Water) to provide an adequate supply of water for the purposes of firefighting and where the supply is not sufficient, this is a matter to be resolved between the sanitary authority/Irish Water and the fire authority. The Operational Plan aligns with the obligations of the Fire Services Act which places no responsibility on a developer for a development of the nature now proposed to provide water supply for firefighting purposes.

I note the point made by the BCA which considers that Section 29 of The Fire Services Act relates only to the construction of new buildings and not material alterations or change of use. Having reviewed the section, I do not concur with this view or the view.

as they relate to any function transferred by subsection (3), be construed as references to Irish Water.

8.5 Other

In the response to the appeal, the BCA specified the requirements of Condition 4 were based on an assessment of the building in which they referenced 3 documents, set out directly below.

- 1. National guidance document on the provision of water for firefighting (Jan 2007). This document was produced jointly by the water industry and the Fire & Rescue Services in the UK.
- Fire Service Manual Hydraulics, pumps and water supplies. This document was produced by the Home Office (Fire and Emergency Planning Directorate in the UK) 2001.
- 3. Municipal water related to firefighting and protection The chief fire officer's association conference (1986) is not readily available. This appears to be a technical paper presented at the aforementioned conference in 1986.

Having reviewed the available guidance referred to above (1 and 2), I note that they do not support the requirements of Condition No.4.

I have attached the relevant sections of the documents as an appendix to this report.

9.0 CONCLUSIONS AND RECOMMENDATION

Arising out of my assessment above, I recommend that the Building Control Authority should be directed to remove Condition No.4 from the fire safety certificate in accordance with the following draft order.

REASONS AND CONSIDERATIONS

Having regard to the nature and scale of the development proposed, the obligations on the Building Control Authority under Article 15 of the Building Control Regulations, 1997-2015 (consideration of application), to the guidance given in Technical Guidance Document B: Fire Safety (2006), particularly B5 (Access and facilities for the fire service), to the submissions made in connection with the Fire Safety Certificate application and appeal and to the contents of the Inspector's report, it is considered that condition no. 4, relating to water supply for fire-fighting, is not warranted in this case as it is not necessary in order to achieve compliance with the requirements of Part B5 of the Second Schedule to the Building Regulations 1997-2014.

Patricia Calleary Senior Planning Inspector 06 Sept 2016

Appendix: Extracts from the following:

- Technical guidance document B: 2006 (Fire Safety)
- The Fire Services Act 1981 & 2003
- Meath Fire Authority Operations Plan for fire and emergency operation.
- National guidance document on the provision of water for firefighting (2007)
- Fire Service Manual Hydraulics, pumps and water supplies HM Fire Service Inspectorate Publications section (2001)