

t:+353 (0)1 6765713 f:+353 (0)1 6785274

ABP Ref: ABP-312775-22 – Construction of four units, 42 – 45 Sarsfield Road, Doughcloyne, Wilton, Cork Addendum to MSA Report reference 23000r001 dated 12/06/2023

I have reviewed the further submission dated 12/10/2023 made on this appeal by Cork City Council in response to the request for further information from An Bord Pleanala dated 27/07/2023.

I have also reviewed the observations submitted by OSL Butler Consulting Engineers on 21/12/2023 on behalf of the appellant on the Cork City Council submission.

My findings on the Cork City Council Fire Brigade response to the Board's further information request are set out as follows:

Consideration of 3.2.4.2 of TGD-B

They are incorrect in their interpretation that 3.2.4.2 is applicable in this instance. They appear to be justifying their position by relying on their assessment of tangible similarity of the proposed design with a typical two storey semi-detached dwelling house to which 3.2.4.2 would apply, which is not sustainable in my opinion.

Consideration of 3.2.4.3

The Cork City Council Fire Brigade response on this is contradictory in so far as they correctly acknowledge that 3.2.4.3(a) is applicable and is being complied with. Their argument that 3.2.4.3(b) is not applicable on the basis that each maisonette constitutes a 2-storey building in its own right each sitting on top of a ground floor apartment, has no validity in my opinion.

Consideration of 3.2.5.5 and 3.2.5.6

The suggestion by Cork City Council Fire Brigade that these sections are applicable is based on their incorrect interpretation of Section 3.2.4.2

Consideration of 3.2.5.4

While this section is applicable to a building in purpose group 1(c) as in this case given that the top storey height is not 10 m or greater, the recommendations in this section relating to materials of limited combustibility are not applicable.

It is interesting to note that Cork City Council Fire Brigade have failed to recognise the existence of TGD-B Volume 2 2017 in their invoking of 3.2.5.6 "separating walls in dwelling house" of TGD-B 2006. While in my view this clause is not applicable here for reasons stated above, the comparable clause in the current TGD-B Volume 2 2017 clause 3.5.4.3 permits separating walls in three storey dwelling houses to be constructed of combustible materials.

Accordingly, if the proposed development was assumed to fall within the definition of a three-storey dwelling house (albeit it doesn't in my view), the recommendations in TGD-B Volume 2 2017 would be applicable. In 3.5.4.3 "Separating walls in timber

framed construction", it states that an exception to the requirement for separating walls to be constructed of non-combustible materials may be permitted in the case of separating walls in timber frame dwelling houses build in accordance with IS 440 Timber Framed Dwellings, where Technical Guidance Document D is also complied with in regard to the design, materials and workmanship of the separating wall.

In the appeal submission of 19/09/2021 from O'Shea Leader, the attached correspondence from Cygnum confirms that the design and installation of the timber frame structure is in compliance with IS 440.

The compliance of the design of the timber frame construction including compartment walls at 1st and 2nd floor to IS 440, is also again confirmed in the submission dated 19/12/2023 from OSL Butler Consulting Engineers to the Bord.

Consideration of requirement for a common fire detection and alarm system

The applicable recommendations in TGD-B 2006 (with 2020 amendments) are:

- A Grade D LD2 detection alarm system in accordance with BS5839 Part 6 2004 should be provided in each apartment.
- By reference to 1.4.14.4 a common fire detection and alarm system is only required in buildings containing flats or maisonettes where the flats or maisonettes are accessed by common protected corridors/lobbies stairways, which doesn't arise in this case. Accordingly, there is no requirement for a common fire detection and alarm system.

Recommendation

On the basis of my review of the further submissions, I remain of the option that the appeal should be allowed and the Building Control Authority be directed to grant the Fire Safety Certificate.

Consideration could be given to the attachment of the following conditions for increased clarity:

Condition 1:

The timber frame building elements in the building including the compartment walls at 1st and 2nd floor levels are to be in accordance with IS 440 Timber Framed Dwellings where the design, materials and workmanship used in the manufacture and construction of the wall are to be in accordance with the provisions of Technical Guidance Document M (Materials & Workmanship).

Note draft wording of Condition 1 based on provisions in TGD-B Vol 2 2017 for 3 storey dwellings.

Condition 2:

Fire detection and alarm coverage is to be provided in accordance with 1.4.14.4 and 1.5.5 of Technical Document B 2006 (as amended 2020) where a Grade D LD2 fire detection and alarm system is to be provided in each apartment and maisonette.

Michael Slattery BE MSc (Fire Eng) CEng FIEI MSFPE EUR ING Managing Director



Michael Slattery Associates 19 Windsor Place

Lower. Pembroke Street Dublin 2 Tel: +353 (0)1 6765713 Email: <u>dublin@msa.ie</u>

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