Building Safety Regulator

Planning Gateway One

Why we need change

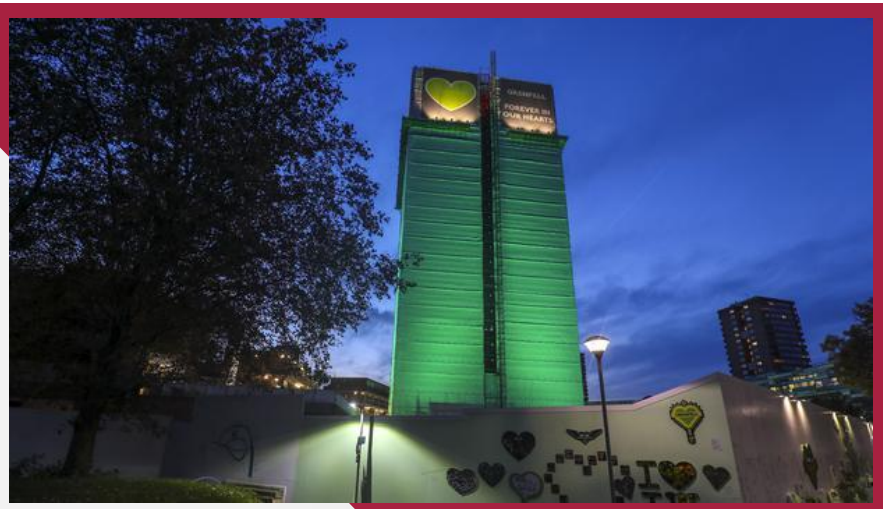
Building Safety Regulator HSE

The Grenfell Tower fire on 14 June 2017 represented the greatest loss of life in a residential fire since the Second World War. 71 fatalities were confirmed by the coroner – and a further former resident passed away in January 2018.

Independent Review of Building Regulations and Fire Safety led by Dame Judith Hackitt.

Dame Judith's final report, published in May 2018, found that the current system for ensuring fire and structural safety in high-rise residential buildings was "**not fit for purpose"** and made 53 recommendations to address these failings.

Intervention at the planning stage and the establishment of a Building Safety Regulator.



New Regulatory Regime – High-rise Buildings

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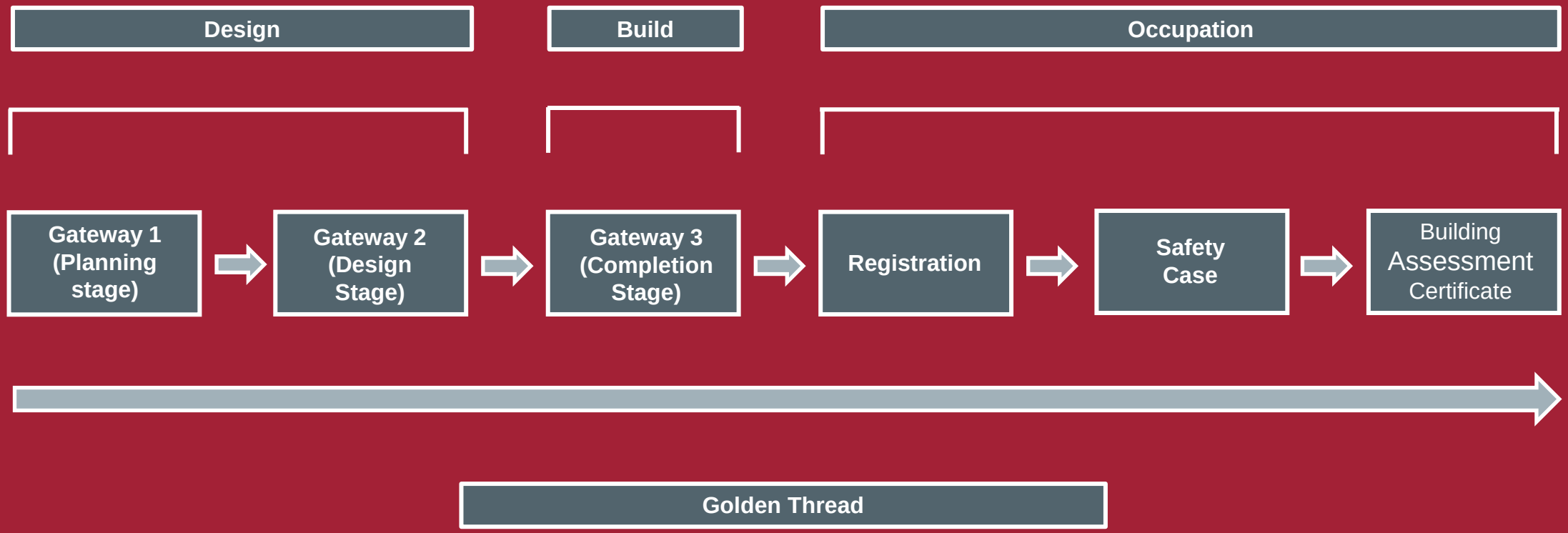

Previous approach to fire safety

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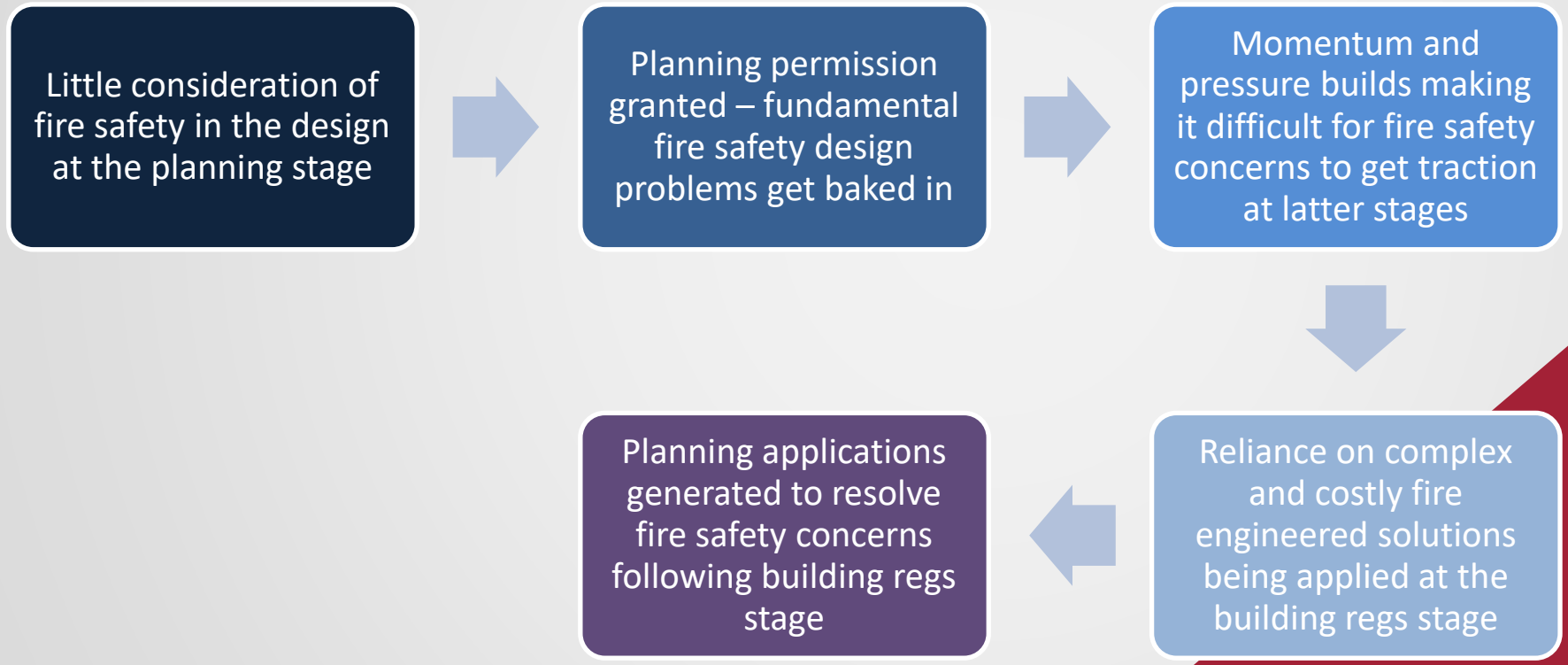

The RIBA Plan of Work organises the process of briefing, designing, delivering, maintaining, operating and using a building into eight stages. It is a framework for all disciplines on construction projects and should be used solely as guidance for the preparation of detailed professional services and building contracts.

Planning application stage

0 Strategic Definition	1 Preparation and Briefing	2 Concept Design	3 Spatial Coordination	4 Technical Design	5 Manufacturing and Construction	6 Handover	7 Use
Projects span from Stage 1 to Stage 6; the outcome of Stage 0 may be the decision to initiate a project and Stage 7 covers the ongoing use of the building.							
Stage Outcome at the end of the stage							
The best means of achieving the **Client Requirements** confirmed	**Project Brief** approved by the client and confirmed that it can be accommodated on the site	**Architectural Concept** approved by the client and aligned to the **Project Brief**	Architectural and engineering information **Spatially Coordinated**	All design information required to manufacture and construct the project completed	Manufacturing, construction and **Commissioning** completed	Building handed over, **Aftercare** initiated and **Building Contract** concluded	Building used, operated and maintained efficiently
If the outcome determines that a building is the best means of achieving the **Client Requirements**, the client proceeds to Stage 1		The brief remains "live" during Stage 2 and is derogated in response to the **Architectural Concept**		Stage 4 will overlap with Stage 5 on most projects	There is no design work in Stage 5 other than responding to **Site Queries**		Stage 7 starts concurrently with Stage 6 and lasts for the life of the building
Core Tasks during the stage							
Prepare **Client Requirements** Develop **Business Case** for feasible options including review of **Project Risks** and **Project Budget** Ratify option that best delivers **Client Requirements** Review **Feedback** from previous projects Undertake **Site Appraisals**	Prepare **Project Brief** including **Project Outcomes** and **Sustainability Outcomes**, **Quality Aspirations** and **Spatial Requirements** Undertake **Feasibility Studies** Agree **Project Budget** Source **Site Information** including **Site Surveys** Prepare **Project Programme** Prepare **Project Execution Plan**	Prepare **Architectural Concept** incorporating **Strategic Engineering** requirements and aligned to **Cost Plan**, **Project Strategies** and **Outline Specification** Agree **Project Brief Derogations** Undertake **Design Reviews** with client and **Project Stakeholders** Prepare stage **Design Programme**	Undertake **Design Studies**, **Engineering Analysis** and **Cost Exercises** to test **Architectural Concept** resulting in **Spatially Coordinated** design aligned to updated **Cost Plan**, **Project Strategies** and **Outline Specification** Initiate **Change Control Procedures** Prepare stage **Design Programme**	Develop architectural and engineering technical design Prepare and coordinate design team **Building Systems** information Prepare and integrate specialist subcontractor **Building Systems** information Prepare stage **Design Programme**	Finalise **Site Logistics** Manufacture **Building Systems** and construct building Monitor progress against **Construction Programme** Inspect **Construction Quality** Resolve **Site Queries** as	Hand over building in line with **Plan for Use Strategy** Undertake review of **Project Performance** Undertake seasonal **Commissioning** Rectify defects Complete initial **Aftercare**	Implement **Facilities Management** and **Asset Management** Undertake **Post Occupancy Evaluation** of building performance in use Verify **Project Outcomes** including **Sustainability Outcomes**
Project Strategies might include: – **Conservation** (if applicable) – **Cost** – **Fire Safety** – **Health and Safety** – **Inclusive Design** – **Planning** – **Plan for Use** – **Procurement** – **Sustainability** See *RIBA Plan of Work 2020 Overview* for detailed guidance on **Project Strategies**	No design team required for Stages 0 and 1. Client advisers may be appointed to the client team to provide strategic advice and design thinking before Stage 2 commences.			Specialist subcontractor designs are prepared and reviewed during Stage 4		for Use	Adaptation of a building (at the end of its useful life) triggers a new Stage 0
Core Statutory Processes during the stage: Planning Building Regulations Health and Safety (CDM)							
Strategic appraisal of **Planning** considerations	Source pre-application **Planning Advice** Initiate collation of health and safety **Pre-construction Information**	Obtain pre-application **Planning Advice** Agree route to **Building Regulations** compliance Option: submit outline **Planning Application**	Review design against **Building Regulations** Prepare and submit **Planning Application** See ***Planning Note*** for guidance on submitting a **Planning Application** earlier than at end of Stage 3	Submit **Building Regulations Application** Discharge pre-commencement **Planning Conditions** Prepare **Construction Phase Plan** Submit form F10 to HSE if applicable	Carry out **Construction Phase Plan** Comply with **Planning Conditions** related to construction	Comply with **Planning Conditions** as required	Comply with **Planning Conditions** as required

This would include review against fire standards

PGO Casework

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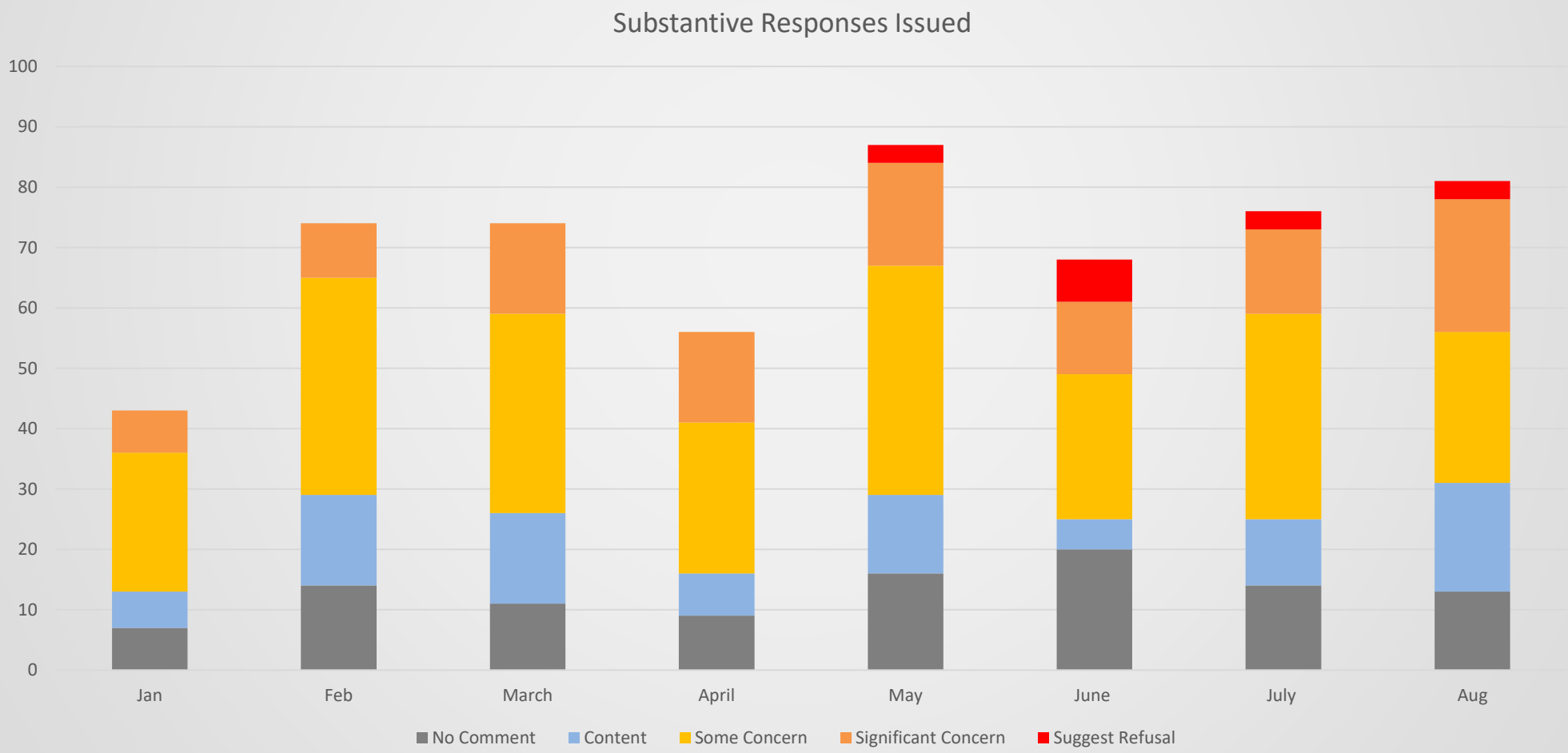
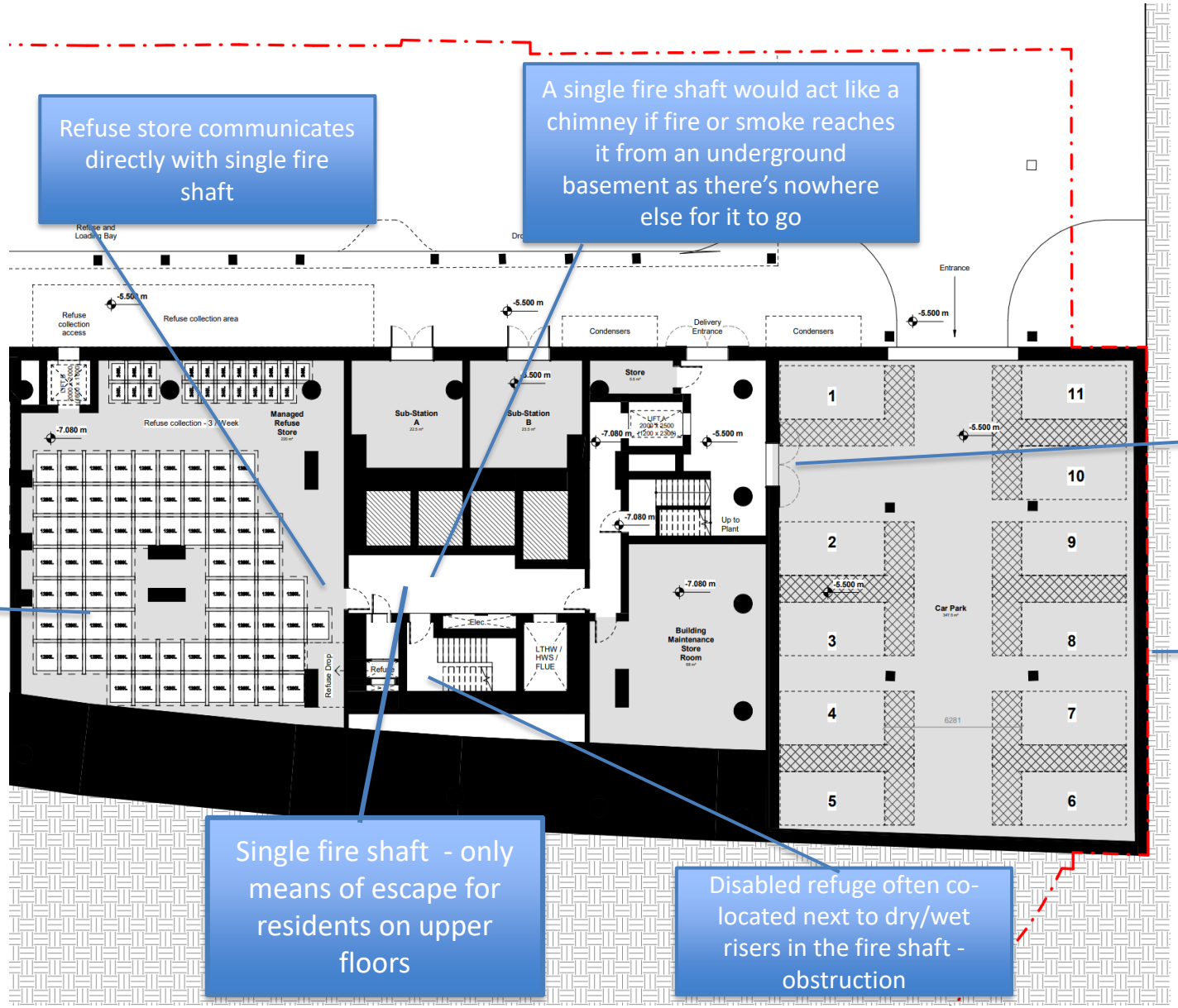


Typical design concerns



Refuse store communicates directly with single fire shaft

A single fire shaft would act like a chimney if fire or smoke reaches it from an underground basement as there's nowhere else for it to go

In higher risk buildings ancillary areas like bin stores are considered "places of special fire hazard".

Basement car park connects with the single fire shaft

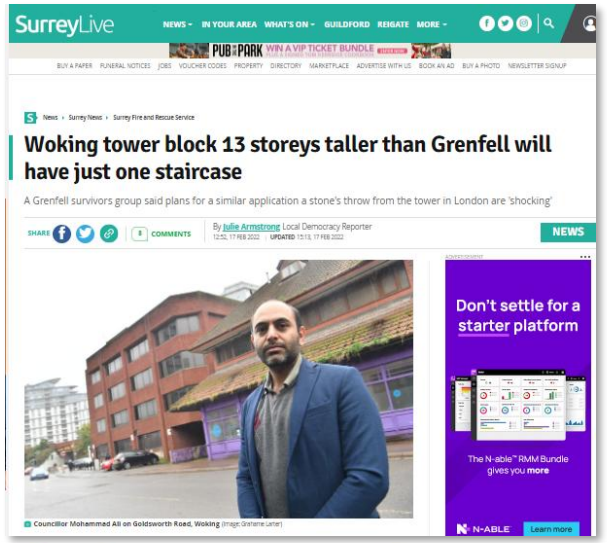
Smoke vents close to neighbouring properties

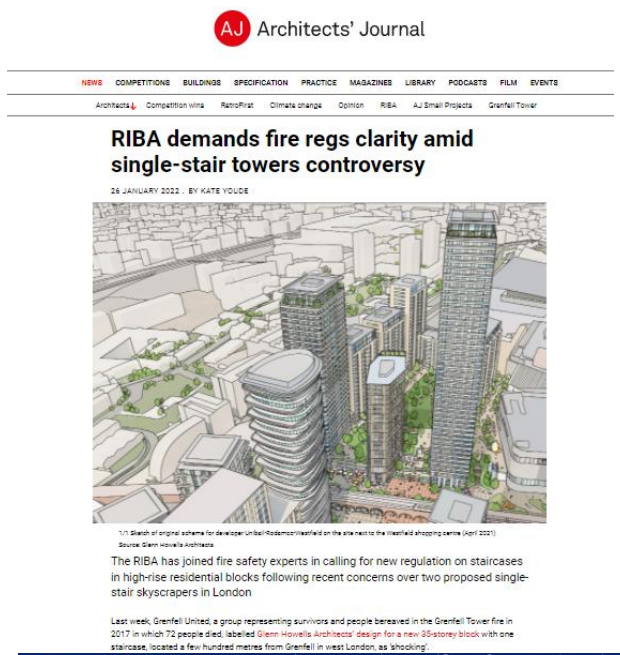
Single fire shaft - only means of escape for residents on upper floors

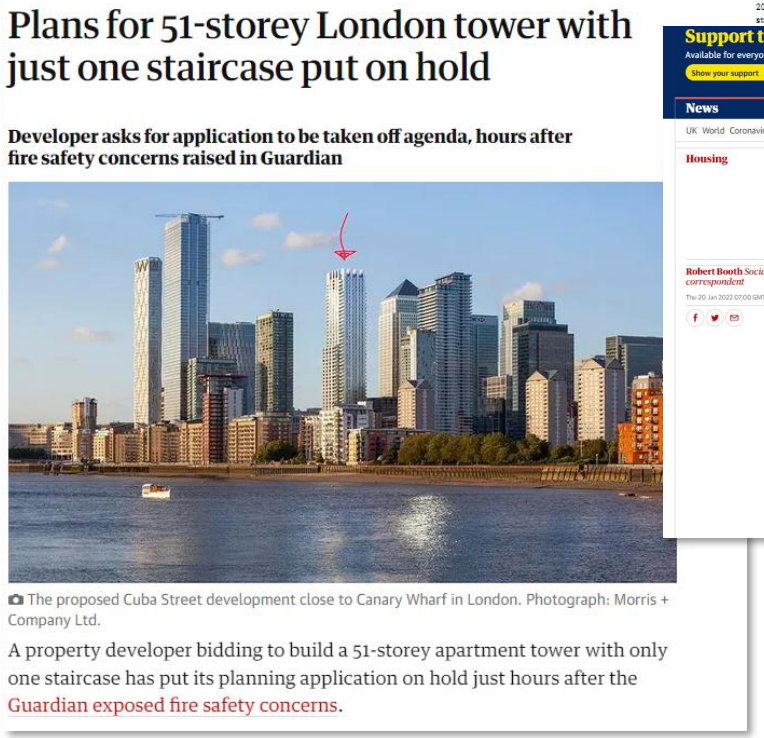
Disabled refuge often co-located next to dry/wet risers in the fire shaft - obstruction

Single stair buildings

- Note the recent circular letter issued by DLUHC – applicability of approved documents to very tall buildings.
- Particular focus on buildings over 50m in height.
- HSE will identify the fact that it's a single stair building to decision makers and the public.
- HSE will expect the single stair to be protected.
- HSE will look for evidence in the planning application that fire engineered approaches offer a level of safety equivalent to fire standards.
- HSE will look for designers to design out problems, rather than rely on complex/costly design solutions later.



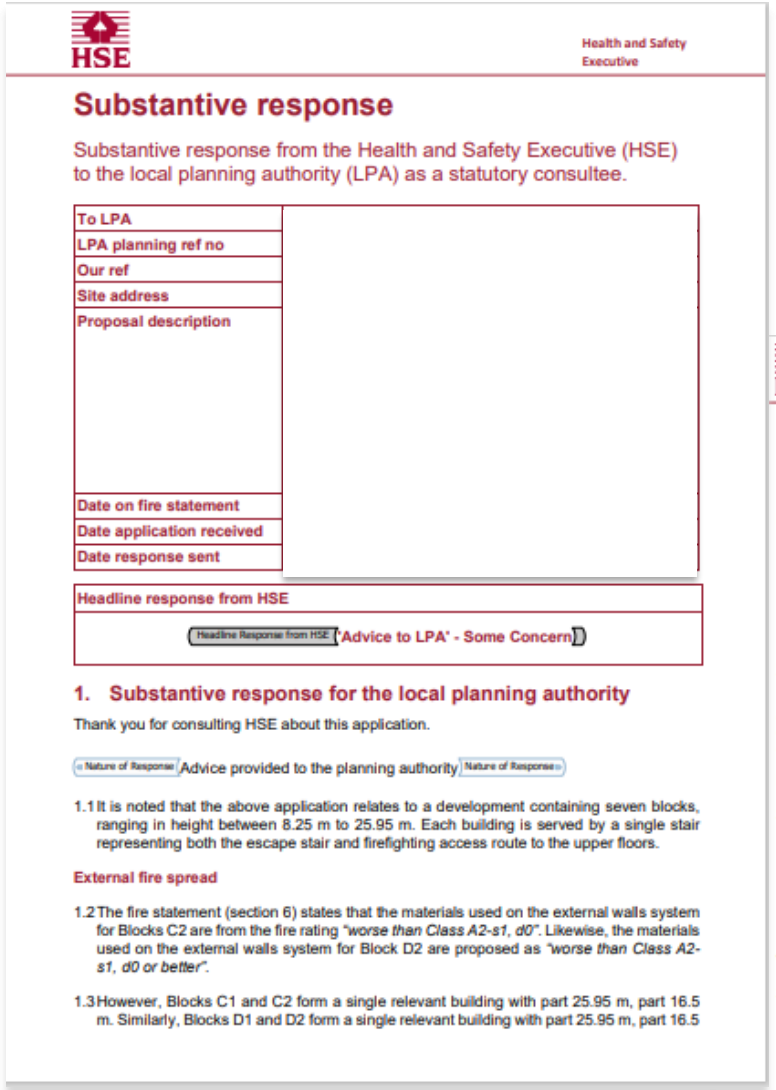




HSE

Substantive responses

- HSE raised concerns on over 60% of cases in 2022.
- Actively challenging the view that fire safety should only be dealt with at the building regs stage.
- HSE comments are published on the LPAs planning register as a matter of public record.
- HSE substantive responses provide advice for local planning authorities, and applicants.
- LPAs give due weight to HSEs planning advice and are reluctant to determine planning applications with outstanding HSE planning concerns.
- HSE advice will provide a strong basis for engagement with developers once the Building Safety Regulator becomes the Building Control Body for Higher Risk Buildings



HSE

Health and Safety Executive

Substantive response

Substantive response from the Health and Safety Executive (HSE) to the local planning authority (LPA) as a statutory consultee.

To LPA	
LPA planning ref no	
Our ref	
Site address	
Proposal description	
Date on fire statement	
Date application received	
Date response sent	

Headline response from HSE
Headline Response from HSE 'Advice to LPA' - Some Concern

1. Substantive response for the local planning authority

Thank you for consulting HSE about this application.

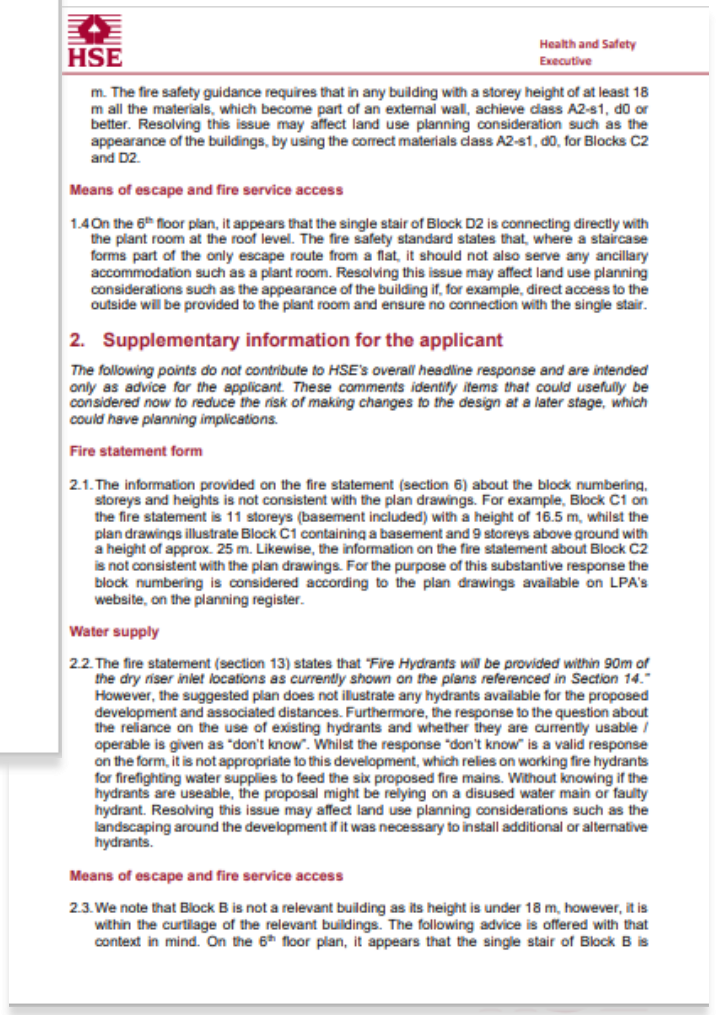
Nature of Response Advice provided to the planning authority Nature of Response

1.1 It is noted that the above application relates to a development containing seven blocks, ranging in height between 8.25 m to 25.95 m. Each building is served by a single stair representing both the escape stair and firefighting access route to the upper floors.

External fire spread

1.2 The fire statement (section 6) states that the materials used on the external walls system for Blocks C2 are from the fire rating *"worse than Class A2-s1, d0"*. Likewise, the materials used on the external walls system for Block D2 are proposed as *"worse than Class A2-s1, d0 or better"*.

1.3 However, Blocks C1 and C2 form a single relevant building with part 25.95 m, part 16.5 m. Similarly, Blocks D1 and D2 form a single relevant building with part 25.95 m, part 16.5



HSE

Health and Safety Executive

m. The fire safety guidance requires that in any building with a storey height of at least 18 m all the materials, which become part of an external wall, achieve class A2-s1, d0 or better. Resolving this issue may affect land use planning consideration such as the appearance of the buildings, by using the correct materials class A2-s1, d0, for Blocks C2 and D2.

Means of escape and fire service access

1.4 On the 6th floor plan, it appears that the single stair of Block D2 is connecting directly with the plant room at the roof level. The fire safety standard states that, where a staircase forms part of the only escape route from a flat, it should not also serve any ancillary accommodation such as a plant room. Resolving this issue may affect land use planning considerations such as the appearance of the building if, for example, direct access to the outside will be provided to the plant room and ensure no connection with the single stair.

2. Supplementary information for the applicant

The following points do not contribute to HSE's overall headline response and are intended only as advice for the applicant. These comments identify items that could usefully be considered now to reduce the risk of making changes to the design at a later stage, which could have planning implications.

Fire statement form

2.1. The information provided on the fire statement (section 6) about the block numbering, storeys and heights is not consistent with the plan drawings. For example, Block C1 on the fire statement is 11 storeys (basement included) with a height of 16.5 m, whilst the plan drawings illustrate Block C1 containing a basement and 9 storeys above ground with a height of approx. 25 m. Likewise, the information on the fire statement about Block C2 is not consistent with the plan drawings. For the purpose of this substantive response the block numbering is considered according to the plan drawings available on LPA's website, on the planning register.

Water supply

2.2. The fire statement (section 13) states that *"Fire Hydrants will be provided within 90m of the dry riser inlet locations as currently shown on the plans referenced in Section 14."* However, the suggested plan does not illustrate any hydrants available for the proposed development and associated distances. Furthermore, the response to the question about the reliance on the use of existing hydrants and whether they are currently usable / operable is given as "don't know". Whilst the response "don't know" is a valid response on the form, it is not appropriate to this development, which relies on working fire hydrants for firefighting water supplies to feed the six proposed fire mains. Without knowing if the hydrants are useable, the proposal might be relying on a disused water main or faulty hydrant. Resolving this issue may affect land use planning considerations such as the landscaping around the development if it was necessary to install additional or alternative hydrants.

Means of escape and fire service access

2.3. We note that Block B is not a relevant building as its height is under 18 m, however, it is within the curtilage of the relevant buildings. The following advice is offered with that context in mind. On the 6th floor plan, it appears that the single stair of Block B is

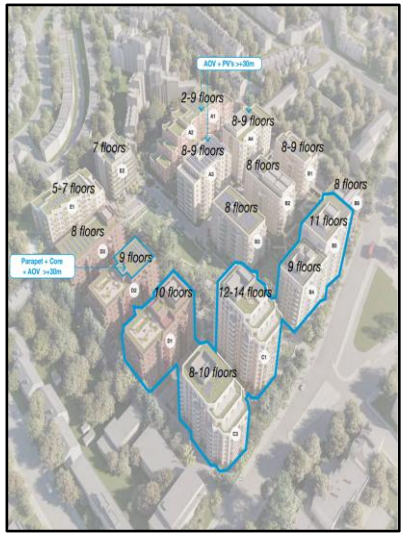
Case studies where HSE made a difference

1

Design revisions

- Commitment to provision of covered car park with smoke vents situated so as not to affect means of escape
- Removal of open louvres on the south façade of covered car park in favour of a solid construction – to reduce the risk of external fire spread across nearby boundary
- Increased protection of lifts and firefighting lift by a fire curtain.
- Commitment to provide increased protection for the common corridor from the atrium.

2



Design revisions

- Proposed site includes 15 relevant buildings
- Redesign of staircases to separate basement access from stairs serving dwellings on upper floors.
- Additional protection provided for corridors to firefighting shafts.
- Additional fire main inlets to be provided to provide better access to firefighting water.
- Redesign of lightwells over basement to prevent fire spread from basement to firefighting stairs
- Commitment to provide information about fire safety precautions related to the provision of green roofs.

3

Design revisions

- Provision of 2 firefighting shafts provided in accordance with HSE comments
- Design change to create fire sterile access to firefighting stair
- Improved information in the fire statement about the provision of dry riser inlets/outlets.
- Clarification of escape route travel distances

4

Design revisions

- Revision of design to include two firefighting shafts, each with provision of firefighting lifts and firefighting stair
- Commitment to design development with separation of firefighting shaft from loading bay
- Commitment to separate firefighting lift from ancillary accommodation
- Revision of design to move location of smoke shaft to an acceptable location
- Commitment to ensure locations of disabled refuges are acceptable

HSE