Fire statement form

Application information	
1. Site address line 1	Haven Road Retail Park
Site address line 2	Water Lane
Site address line 3	
Town	Exeter
County	Devon
Site postcode (optional)	EX2 8BY
2. Description of proposed development including any change of use (as stated on the application form):	Comprehensive redevelopment to deliver a new, mixed use neighbourhood, comprising demolition of existing buildings and construction of four residential-led mixed-use buildings of 2 to 6 storeys, including retail, café/restaurant and flexible commercial units (Class E) residential (Class C3) and co-living (Sui Generis) accommodation, pedestrian square and public realm, amenity areas, landscaping, access, parking, servicing and associated works.
3. Name of person completing the fire statement (as section 15.), relevant qualifications and experience. Guide: no more than 200 words	Oskar Dzielak MEng(Hons) Fire Safety Engineering 6 years' experience as a fire safety engineer AIFireE with the Institution of Fire Engineers. Relevant experience: City Road, Hoxton Oskar is currently working on the City Road project in Hoxton - a c. £100m mixed-use development providing 13,750m^2 of commercial space at ground to 6th floor, with 100 residential apartments across the 7th to 21st floor. An additional 2 basement storeys have been provided for non-residential and ancillary uses, with the overall building height measuring close to 80m. The scope of works is to deliver a RIBA Stage 4 fire strategy and provide continuous support throughout the detailed design and construction phases. Cambridge House, Croydon Oskar is currently working on the Cambridge House project in Croydon – a c. £24m residential development providing 1-, 2- and 3- bedroom apartments from 1st to 25th floor, with the overall building height of c. 78m. An additional basement level has been provided to accommodate plant and cycle storage. The scope of works is to deliver a RIBA Stage 4 fire strategy and provide continuous support throughout the detailed design and construction phases.
4. State what, if any,	It is understood that no consultation has been undertaken to date with Building Control and/or Devon and Shropshire

consultation has been undertaken on issues relating to the fire safety of the development; and what account has been taken of this. Guide: no more than 200 words	Fire and Rescue Service on this scheme. Orion Fire has undertaken reviews of the architectural floor plans and site plan to provide comments on any required alterations that may affect the planning application. The architect has incorporated the comments that would affect the land use planning of the scheme, such as fire service access and space separation. A fire safety summary of the layouts is included in a separate document, issued as part of this fire safety statement titled Pre-Planning Fire Strategy (ref: OF-000521-PFS-01-A) which outlines the key fire safety aspects within the design as a basis to support the design team for the proposed site to satisfy the functional requirements of Part B to the Building Regulations.

5. Site layout plan with block numbering as per building schedule referred to in 6.
(consistent with other plans drawings and information submitted in connection with the application)

Site layout plan is:
provided as a separate plan

Please refer to drawing supplied by Piper Whitlock Architecture Ltd (ref: PWA-000000-SK-0070 Proposed Site Block Key Plan)
Site Plans as supplied by the project architect. Additional comments affecting the site and the planning application are provided in Section 4 of the pre-planning fire strategy report 220610-Haven Road Exeter-OF-000521-PFS-01-A and will be supplied as part of this submission

The principles, concepts and approach relating to fire safety that have been applied to the development

6. Building schedule

Site information				Building information			Resident safety information		
a) block no. as per site layout plan above	b) • block height (m) • number of storeys excluding those below ground level • number of storeys including those below ground level	c) proposed use (one per line)	d) location of use within block by storey	e) standards relating to fire safety/ approach applied	f) balconies	g) external wall systems	h) approach to evacuation	i) automatic suppression	j) accessible housing provided

A – Plant/Storage Use	14m from the lowest adjacent ground level to the rooftop floor (4th floor) of the building which contains the open plant deck 3 storeys including storeys from ground level and above 3 storeys including storeys below ground level	industrial, storage or distribution	Ground Floor 2nd Floor 4th Floor	BS9991	No balconies for non resi use	class A2-s1,d0 or better	simultaneous	none	N/A non resi
A - Commercial Use	5m from the lowest adjacent ground level to the ceiling of the occupancy 1 storey including storeys from ground level and above	restaurant, cafe, hot food take-away, drinking establishment	Ground Floor	Approved document B: vol 2	No balconies for non resi use	class A2-s1,d0 or better	simultaneous	none	N/a non resi

	1 storey when including storeys below ground level								
A - Residential Use	10.8m when measured from the lowest adjacent external ground level to the topmost occupied storey 4 (GF+3) including ground floor and the highest occupied top storey 4 including storeys below the ground floor	residential flats, maisonettes, studios	Ground – 3rd Floor	BS9991	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	yes- other	M4(2)
B- Residential Use	10.8m when measured from the lowest adjacent external	residential flats, maisonettes, studios	Ground – 3rd Floor	BS9991	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	yes- other	M4(2)

	ground level to the topmost occupied storey (3rd floor) 4 (GF+3) including ground floor and the highest occupied top storey 4 (GF+3) no basement storey below ground level								
B-Commercial Use	5m from the lowest adjacent ground level to the ceiling of the occupancy 1 storey including storeys from ground level and above 1 storey when including storeys	restaurant, cafe, hot food take-away, drinking establishment	Ground Floor	Approved document B: vol 2	No balconies for non resi use	class A2-s1,d0 or better	simultaneous	none	N/a non resi

	below ground level and above								
B- Plant Rooms/Storage	14m from the lowest adjacent ground level to the rooftop (4th floor) of the building which contains the open plant deck 2 storeys including storeys from ground level and above 2 storeys including storeys from below ground level and above	industrial, storage or distribution	Ground Floor 4th Floor	BS 9991	No balconies for non resi use	class A2-s1,d0 or better	simultaneous	none	N/a non resi
C- Residential Use	17m when measured from the lowest adjacent external ground level to the	residential flats, maisonettes, studios	Ground - 5th Floor	BS9991	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(2)

	topmost occupied storey. 6 storeys (GF+5) including the ground floor and the top storey 6 storeys including the basement floor which does not contain dwellings								
C- Plant Rooms/Storage	17m when measured from the lowest adjacent external ground level to the topmost storey containing plant rooms (5^{th} floor) 2 storeys including the ground floor and the 5^{th} floor	industrial, storage or distribution	Basement Ground Floor 5^{th} Floor	BS9991	No balconies for non resi use	class A2-s1,d0 or better	simultaneous	Yes-commercial sprinklers, full	N/a non resi

	3 storeys. A basement storey below ground level is present which is dedicated to plant room/s								
C- Assembly Use	17m when measured from the lowest adjacent external ground level to the topmost storey containing communal amenity spaces e.g. terraces 6 storeys (GF+5) including the ground floor and the upper storeys 6 storeys including all storeys above and	flexible use	Ground Floor – 5th Floor	BS9991	No balconies for non resi use	class A2-s1, d0	simultaneous	Yes- commercial sprinklers, full	N/a non resi

	below ground floor								
D - Residential Use	14m when measured from the lowest adjacent external ground level to the topmost occupied storey. 5 storeys (GF+4) including the ground floor and the top storey 5 storeys (GF+4) including the ground floor and all lower and upper storeys	residential bedsits, cluster flats	Ground- 4th Floor	BS9991	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(2)
D-Assembly Use	14m when measured from the lowest adjacent external ground level to the topmost	flexible use	Ground - 4th Floor	BS9991	class A2-s1,d0 or better	class A2-s1,d0 or better	simultaneous	yes- commercial sprinklers, full	N/a non resi

	occupied storey which includes communal amenity spaces 5 storeys including the ground floor and the upper storeys 5 storeys including the ground floor and all upper and lower storeys								
D-Commercial Use	4m from the lowest adjacent ground level to the ceiling of the occupancy 1 storey including storeys from ground level and above 1 storey when	restaurant, cafe, hot food take-away, drinking establishment	Ground Floor	Approved document B: vol 2	No balconies for non resi use	class A2-s1, d0 or better	simultaneous	Yes-commercial sprinklers, full	N/a non resi

	including storeys below ground level and above								
D- Plant Rooms/Storage	4m from the lowest adjacent ground level to the ceiling of the occupancy 1 storey including storeys from ground level and above 2 storey when including storeys below ground level and above	industrial, storage or distribution	Basement Ground Floor	BS9991	no balconies	class A2-s1, d0 or better	simultaneous	yes- commercial sprinklers, full	N/A non resi

7. Specific technical complexities

Explain any specific technical complexities in terms of fire safety (for example green walls) and/or departures from information in building schedule above

Guide: no more than 500 words

No technical complexities were identified on the building, outside of items covered in Item 8.

Block A and B have a top occupied storey, which is not exclusively occupied by plant equipment, below 11m in height when measured from the lowest adjacent ground level. They will be equipped with residential sprinkler system designed to BS 9251 within the residential apartments. This is to meet the prescriptive requirements for an open plan internal flat layout.

The internal layouts of the flats have not been developed, however they will be designed as open plan. The cooking facilities will be reviewed upon

further development to identify that the hobs will maintain a satisfactory separation distance from any permanent obstructions. This assessment will be conducted at the next RIBA Stage 3.

Block C and D are classified as a Relevant Building under Regulation 7 and will meet the Regulation 7(2) and 7(3) requirements restricting the use of combustible materials within the external walls of Relevant Buildings. These will be limited to materials and specified attachments achieving classification A2-s1,d0 or A1 in accordance with EN 13501-1. Although Block A and B have a maximum occupied storey height of below 11m, they shall also meet the Regulation 7(2) and 7(3) requirements restricting the use of combustible materials within the external walls of Relevant Buildings.

8. Issues which might affect the fire safety of the development

Explain how any issues which might affect the fire safety of the development have been addressed.
Guide: no more than 500 words

Where the single direction travel distance in the common corridors exceeds 15m for Blocks A and C, the corridor shall be equipped with a mechanical smoke ventilation system of approximate minimum free area 0.8m^2 per shaft which will operate on smoke detection in the corridor. It shall be equipped with secondary power systems and duty/standby fans in addition to an inlet source of air.

Block D has a stairway which is not currently accessible from a fire appliance parking position along a code compliant access route at the front of the building. However, it has two potential entrances either through a communal entrance lounge from the Southeast elevation or via a direct entrance on the Northwest elevation from a public road, and therefore assuming a single fire location as per first principles it is considered that there will always be an unobstructed access route from a fire appliance parking position to the stairway. An independent dry riser inlet shall be provided adjacent to both entrances within 18m of a fire appliance parking position. If the horizontal pipework from an inlet to the outlet exceeds 18m in length it shall be justified at the detailed design stage and it will be proven by an assessment that satisfactory pressure and water flow levels for fire service operations can still be achieved.

Based on an initial external fire spread assessment, some fire protected areas of the external wall will be required to the Southwest elevation of Block A, and the Northeast and Southeast elevations of Block B.

Where the single direction travel distance in basement plant room/s exceeds the maximum distance permitted under the current design, either the internal layout will be further developed to ensure the maximum travel distances are met from all habitable points within the room, or an alternative means of escape shall be provided in the RIBA Stage 3.

Secondary power supplies to each Block will at this design stage be provided from an on-site generator to accommodate the high-power demand from the residential and commercial sprinkler pumps.

9. Local development document policies relating to fire safety

Explain how any policies relating to fire safety in relevant local development documents have been taken into account.
Guide: no more than 500 words

No additional document policies in addition to the requirements of the Building Regulations 2010 have been adopted at this design stage.

Emergency road vehicle access and water supplies for firefighting purposes

10. Fire service site plan

Explanation of fire service site plan(s) provided in 14. including what guidance documents have informed the proposed arrangements for fire service access and facilities?

Guide: no more than 200 words

The fire service site plan has been developed in accordance with the guidance of BS 9991.

All the protected stairways in Blocks A, B, C and D are equipped with a 1.0m^2 Automatic Openable Vent (AOV) at the head of the stair. All residential corridors are either equipped with natural ventilation in the form of 1.5m^2 smoke shafts or mechanical ventilation systems with 0.8m2 shafts where the single direction travel distance exceeds 15m.

Dry riser inlets are present adjacent to the entrance to each stairway on the external face of each Block. These should be clearly visible and located within 18m of a fire appliance parking position. All areas within each storey of each Block are within 45m of a dry riser outlet on each main landing of the protected stairways and no firefighting shafts are required. All non-residential units on the ground floor which are accessible from the external air have a minimum of 15% of the perimeter accessible by a fire appliance, or all points within the occupancy are accessible within 45m of a fire appliance parking position or riser main landing valve as measured along the route a hose would be laid.

Each stairway within Blocks A, B, C and D is accessed from the external air either directly or via lobbies. A stairway in Block D is accessed either via a communal lounge from the central access road on the southeast elevation or from Diamond Road on the northwest elevation, however a suitable justification has been provided for this variation in the above section.

11. Emergency road vehicle access

Specify emergency road vehicle access to the site entrances indicated on the site plan

Guide: no more than 200 words

A Figure outlining the fire appliance road vehicle access routes is available in the issued Fire Access Plan document issued by the architect ref: PWA-000000-SK-0060 rev P9 - Proposed GF Fire Access Plan). In all cases fire appliance parking positions are present on the access roads within 18m of a dry riser inlet location.

All fire access roads must be capable of meeting the prescriptive requirements for a Pump appliance to each access points to a building. They roads shall have vertical clearances free from obstructions and not be obstructed by parking locations, or storage areas e.g. refuse in front of the buildings.

Suitable turning facilities will be provided for two of the access roads passing through the development from Water Lane which have a dead end distance above 20m. These roads serve i) Block B southwest elevation and ii) Block C east elevation

An additional fire access road is provided to the northwest elevation of Block D into a service area, however as the dead end distance is below 20m no turnaround facilities are required.

Diamond Road will provide one of two potential vehicle access points for a stairway in Block D, the other will be from the central fire access road passing through the development to Block B southwest elevation. Where security gates are present on Diamond Road they shall be equipped with override mechanisms for the Fire and Rescue service.

All fire access roads will provide a parking position within 18m of a dry riser breeching inlet.
Is the emergency vehicle tracking route within the site to the siting points for appliances clear and unobstructed?
yes

12. Siting of fire appliances
Guide: no more than 200 words
See responses for Items 10, 11 and 14

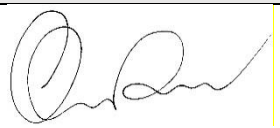
13. Suitability of water supply for the scale of development proposed
Guide: no more than 200 words
The flats in Blocks A, B, C and D will be equipped with residential sprinkler protection systems in accordance with the requirements of BS 9251 to open plan apartments. In Blocks C and D an enhanced residential sprinkler system will be extended to all non-residential and ancillary accommodation with a floor area below 100m^2, with a commercial EN 12845 sprinkler system for ancillary accommodation and non-residential units with a floor area above 100m^2. The specification for the commercial sprinkler system will be determined by the occupancy and fire load within the unit and will be informed by input from a sprinkler system specialist during the detailed design stage.

Dry riser systems will be supplied to Blocks A, B, C and D as per the specifications provided in the above section 10.

Hydrants shall be located at appropriate locations to provide water supply points for firefighting activities when required. For Blocks A, B, C and D this is within 90m of any dry riser inlets along the route a hose would be laid. Block A has an existing hydrant present within 100m of the building and within 90m of the proposed location for the dry riser inlets on the North-eastern face of the building adjacent to the main entrance. It is to be confirmed by the utilities engineer at RIBA Stage 3 and 4 whether this existing hydrant meets the operational and water flow requirements for BS 9991.

A map of the Water Mains has been supplied by Southwest Water Ltd for the Haven Road, Exeter site. The location of additional existing hydrants beyond that adjacent to Block A within the site boundary is to be confirmed by the utilities engineer.
Nature of water supply:
hydrant- public

Does the proposed development rely on existing hydrants and if so are they currently usable / operable?
yes

14. Fire service site plan Fire service site plan is: provided as a separate plan Overall Fire Service Site Plan: Piper Whitlock (ref: PWA-000000-SK-0060 rev P9 Proposed GF Fire Access Plan)	
Fire statement completed by	
15. Signature	
16. Date	27/06/2022