Fire Engineering Analysis Report
TRG-220089-RT-01-FE-I04

Project
Lancaster West Sitewide
Fire Service Access and Facilities

Client
Lancaster West Neighbourhood Team
Baseline Studios
Whitchurch Road
London
W11 4AT

Date of Issue
24-Jan-23

TRIGON
FIRE SAFETY ENGINEERING

Contents

Amendments

Issue No.	Date	Author	Reviewer	Comment
Issue 01	9-Sept-22	F. Lee	D. Bostelmann	First Issue.
Issue 02	18-Nov-22	F. Lee	D. Bostelmann	Update following client comments.
Issue 03	2-Dec-22	F. Lee	D. Bostelmann	Update to Appendix A.2.
Issue 04	24-Jan-23	F. Lee	D. Bostelmann	Update to include information provided for Bramley House.

Important Information

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1. Introduction

1.1.1 Trigon has been instructed to carry out a desktop review of the plans of the residential buildings associated with the Lancaster West Estate and Bramley House, to understand the Fire Service access roads around the site, and the provisions made available to the Fire Service upon attendance. The review does not address the non-residential or basement areas within the site boundary.

1.1.2 As part of the review David Bostelmann and Francis Lee undertook a site visit on 28th June 2022 to review and record the existing access provisions around the site.

1.1.3 As part of the works, a set of marked-up site plans to identify the vehicle access routes within the site boundary have been produced by Trigon and have been included in Appendix A.2 of this Report. The locations for existing fire hydrants, fire service control switches and premise information boxes (PIB's) have also been illustrated on these marked-up drawings. Fire vehicle access issues have also been acknowledged by Trigon and have been considered in Section 3 of this report.

1.1.4 This report also provides a review of how the existing fire service access and facilities may have complied with the recommendations of the guidance at the time of construction, and how they compare to the recommendations of standard guidance used today.

1.1.5 It is likely that at the time of construction the standard guidance for the design and construction of residential buildings was CP3: Chapter IV: Part 1 (1962) 'Precautions Against Fire – Fire precautions in flats and maisonettes over 80ft in height'[A.1.1] or 'CP3: Chapter IV: Part 1 (1971) 'Precautions Against Fire Part 1 Flats and maisonettes (in blocks over 2 storeys)'[A.1.2] which superseded the 1962 version.

1.1.6 The Lancaster West Estate is to undergo various refurbishment works to improve the living quality and energy efficiency of a number of blocks within the site, delivering real benefits to residents. As members of the design team for the proposed refurbishment works to the site, some of the proposals are known to Trigon and have been discussed, where necessary, in Section 3 of this report.

1.1.7 There is no requirement under the Building Regulations 2010[A.1.1] or the Regulatory Reform (Fire Safety) Order 2005 [FSO][A.1.4] to make improvements to the access and facilities for the fire and rescue service. However, it is considered that, where significant works are being carried out, it would be appropriate to improve the access arrangements as part of the works. In addition, the client wants to further understand the recommendations of guidance applicable to the site such that where works are carried out it is ensured that suitable access can be maintained during and after construction works.

2. Statutory Guidance

2.1 The Building Regulation 2010

2.1.1 Any building works would be subject to the requirements of the Building Regulations 2010, which apply across England and Wales. For fire safety, the functional requirements of Part B of Schedule 1 to the Building Regulations 2010 are set out under the following headings:

- Requirement B1 – Means of Warning and Escape.
- Requirement B2 – Internal Fire Spread (linings).
- Requirement B3 – Internal Fire Spread (structure).
- Requirement B4 – External Fire Spread.
- Requirement B5 – Access and Facilities for the Fire Service.

2.1.2 A number of the existing blocks will be altered and refurbished, therefore Regulation 4(3) of the Building Regulations requires that the works are carried out such that the blocks comply with the applicable requirements of Schedule 1 to the Building Regulations or, where it did not comply with any such requirement, is no more unsatisfactory in relation to that requirement than before the work was carried out.

2.1.3 Where building works are not being carried out, there is no obligation under the Building Regulations to make any alterations with regards to fire and rescue service access.

2.2 The Regulatory Reform (Fire Safety) Order 2005

2.2.1 Responsibility for compliance with the Regulatory Reform [Fire Safety] Order 2005 (FSO) will rest with the "responsible person". In a residential building, this will usually be the person who may have control of other parts of the premises. In other cases, the person(s) who has control of the premises will be the "responsible person".

2.2.2 Where building work and fire protection measures comply with Part B of the current Building Regulations, additional physical measures should not normally be required under the FSO unless high-hazard materials or processes are introduced into the blocks.

2.2.3 The FSO places on the "responsible person" specific duties such as carrying out a fire risk assessment. More detailed guidance is available in a series of Fire Safety Risk Assessment Guides published for HM Government[A.1.5].

2.2.4 This fire safety strategy has been developed on the assumption that the blocks will be suitably managed. This includes documenting the basis on which the fire safety design was planned, the type of management organisation envisaged for running the blocks, and the consequential management responsibilities.

2.2.5 The FSO requires that, in order to safeguard the safety of fire-fighters in the event of a fire, the responsible person must ensure that the premises and any facilities, equipment, and devices provided in respect of the premises for the use by or protection of fire-fighters are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order, and in good repair.

2.3 Fire Safety (England) Regulations 2022

2.3.1 The Fire Safety (England) Regulations 2022, was announced on 22nd May 2022 and are due to come into force on 23rd January 2023. The Regulations will make it a requirement in law

for responsible persons of high-rise blocks of flats to provide information to the Fire Service to assist them to plan and, if needed, provide an effective operational response. This includes the requirement for the responsible person to:

- Install and maintain a secure information box in or on the building,
- Prepare a record of the design of the external walls of the building, including details of the materials from which they are constructed,
- Prepare a plan for each floor of the high-rise residential building, including identifying the location of all lifts and identifying if the lift is one for use by firefighters or an evacuation lift, and the key fire-fighting equipment in the whole building.
- Prepare a single-page building plan identifying key fire safety provisions (as listed in The Regulations).
- Undertake monthly routine checks of lifts for use by firefighters, evacuation lifts and essential fire-fighting equipment within the building.
- Ensure that the building contains clear markings of floor identification and identification of domestic premises.
- Display fire safety instructions in a conspicuous part of any building.
- Provide the required information about fire doors to the residents of the building.
- Provide the local fire and rescue authority by electronic means with the documents.

Secure information box

2.3.2 The Regulations will require the responsible person to install a suitably secure information box in or on their high-rise building. They will also be required to provide in the box:

- Their UK contact details
- The UK contact details of any other person who has the facilities to and is permitted to access the building as the responsible person considers appropriate
- Copies of the building's floor plans – which identify specified key fire-fighting equipment
- A single-page block plan - which identifies specified key fire-fighting equipment

2.3.3 Access should be given to the fire service. Boxes should be maintained, and their contents kept up to date in line with the duties imposed by the regulations and the FSO.

2.3.4 The regulations require the box to be suitable for the purpose for which it is intended and should be reasonably secure from vandalism and unauthorised access. The information in the boxes is information only of use by and interest for the fire service. Access should be provided to the fire service.

2.3.5 Chapters 2-4 of "The Code of Practice for the Provision of Premises Information Boxes in Residential Buildings" produced jointly by the FIA and the NFCC sets out good practice on secure locations to install information boxes.

Wayfinding signage

2.3.6 The Fire Safety (England) Regulations 2022 will make it a legal obligation for all high-rise residential buildings in England to install Wayfinding Signage in their buildings. This includes clear markings identifying floor and individual flat numbers.

3. Fire Service Access and Provisions

3.1 Summary of the Design Guidance

3.1.1 The table below provides a summary of the recommendations set out in the Approved Document B[A.1.6] in order to meet the functional requirements of the Building Regulations 2010.

3.1.2 As the requirements of the Building Regulations are functional in nature, there is no obligation to follow the standard guidance of ADB if compliance can be demonstrated in some other way.

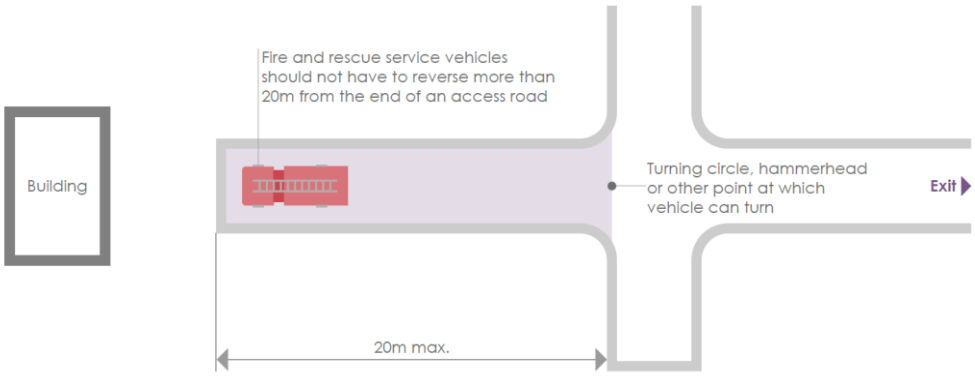
3.1.3 ADB refers to other standards and guidance documents with supplementary recommendations such as specific clauses in BS 9999[A.1.7] as well as BS 9991[A.1.8].

3.1.4 BS 9991 provides alternative guidance for residential premises and BS 9999 provides guidance for commercial/non-residential premises. BS 9999 and BS 9991 present risk-based approaches which take into account specific building features such as early warning systems or sprinkler protection. This risk-based structure also takes into account varying human factors.

3.1.5 For the basis of this report, it is proposed to generally follow the guidance in ADB.

Table 2.1: Summary of recommendations

Key Items	Implications and recommendations
Fire Mains	For residential buildings fitted with dry fire mains, both of the following apply: • Access should be provided for a pumping appliance to within 18m of each fire main inlet connection point. Inlets should be on the face of the building. • The fire main inlet connection point should be visible from the parking position of the appliance. The outlets from the fire mains should be located within the protected stairway enclosure.
Fire Vehicle Access	For dwellinghouses, access for a pumping appliance should be provided within 45m of all points inside the dwellinghouse. For flats, either of the following provisions should be made: • Provide access for a pumping appliance to within 45m of all points inside each flat, measured along the route of the hose. • Provide fire mains and ensure the furthest point of the furthest flat can be reached within 45m of the fire main outlet. Also measured along the route of the hose. Dead-end access routes longer than 20m require turning facilities in the form of a turning circle, a hammerhead turn, or another alternative method at which vehicles can turn (see illustration below).

Key Items	Implications and recommendations
Illustration of Fire Vehicle turning Facilities	
Fire Service Route	The access roads should meet the recommendations as set out in Table 13.1 of ADB: • Minimum width of road between kerbs = 3.70m • Minimum width of gateways = 3.10m • Minimum turning circle between kerbs = 16.80m • Minimum turning circle between walls = 19.20m • Minimum clearance height = 3.70m • Minimum carrying capacity = 12.50 tonnes Note 1 Note 1: It should be noted that LFB requires 14 tonnes as per recommendation in GN29[A.1.9].
External Hydrants	At least one existing fire hydrant should be located within 90m of the entrance to the building or within 90m of the fire main inlets. Each hydrant should be clearly indicated by a plate, affixed nearby in a visible position, in accordance with BS 3251[A.1.10]. Where this is not achievable, then a new hydrant should be provided. Located within 90m of any building entrance or fire main inlet that was not previously within 90m of an existing hydrant. **Whilst on-site, it was noted that a number of Hydrants were missing marker plates, it is suggested to contact the London Fire Brigade to ascertain whether they would want to review this further.**
Premises Information Boxes (PIBs)	In accordance with BS 9999 Annex O and the upcoming Fire Safety (England) Regulations 2022, operational information for the Fire Service should be made available. This can be provided in the form of a Premises Information Box (PIB), specifically outlining any relevant information, including engineered solutions adopted within the blocks. A PIB should contain the following information: • The fire safety strategy, • Description of the building, • Operational Contingency Plans, • Simple plans of the blocks which should include information on firefighting/means of escape installations (including internal fire rating and any identified hazards), and • Operating instructions for fire protection and fixed firefighting equipment. The PIB is to be developed and maintained throughout by the responsible person who should consult with the Fire Safety Officer to ensure that the information is appropriate. The PIB should be located in a PIB specific box, sited so that it is readily available to attending Fire and Rescue Service.

Key Items	Implications and recommendations
Wayfinding Signage	To assist the fire service to identify each floor in a block of flats with a top storey more than 11m above ground level, floor identification signs and flat indicator signs should be provided.

3.2 Building Provisions

3.2.1 Considering the recommendations of the guidance as summarised above, the fire service access and facility provisions for each block, within the site boundary for Lancaster West Estate and Bramley House, have been detailed in Sections 4 to 14 of this report.

3.2.2 Trigon carried out a non-intrusive, familiarisation site visit on 28th June 2022 to gain a greater understanding of the provisions available to the Fire Service upon arrival to the site. Trigon recorded their findings and observations using Autodesk's Plangrid and has summarised these in the sections below. For completeness, as requested by the client the findings from the Plangrid have been included as a report in Appendix A.3, however, it should be noted that this provides notes from the site visit only.

3.2.3 The site visit consisted of walking around the site, and conducting visual inspections from outside of the buildings.

4. Treadgold House

4.1 Description

4.1.1 Treadgold House is an existing residential block with a top storey height less than 18m above ground floor level, originally constructed in the 1960s, and provides access to a mixed range of single and two-storey dwellings. The building comprises five storeys (ground, plus first to fourth floor levels).

4.1.2 The building adopts a defend in place evacuation strategy whereby in the event of fire, only the flat of fire origin will be notified by the alarm. Unless otherwise notified by the attending fire and rescue service, the remainder of the building will be expected to continue as normal and will not be alerted that there is a fire in another part of the building.

4.1.3 It is understood that the relevant legislation at the time of construction was CP3: Chapter IV: Part 1 (1962) 'Precautions Against Fire – Fire precautions in flats and maisonettes over 80ft in height' which was later superseded in 1971 by CP3: Chapter IV: Part 1 (1971) 'Precautions Against Fire Part 1 Flats and maisonettes (in blocks over 2 storeys)'.

4.1.4 The L shaped block consists of two wings off the centralised stair core. Dwellings on the upper floors are all approached via an external balcony deck of solid construction.

4.1.5 The stair is constructed of reinforced concrete and is open-sided to fresh air, providing permanent ventilation to the stair.

4.1.6 The external cladding is solid brick construction. Materials within the build-up of the external walls are currently unknown.

4.2 Fire mains

4.2.1 No dry riser system has been installed.

4.2.2 In accordance with the guidance at the time of construction (CP3), there was no recommendation for a dry riser to be provided as the building did not comprise a storey higher than 18m above ground floor level.

4.2.3 Where dry risers were not provided, the following recommendations were given in CP3:

- If the building had all floor levels under 9m above ground level, access roads should be provided so that fire appliances may approach within 45m of any point within any flat (measured along the expected hose lie).
- Where such buildings have floors higher than 9m but not higher than 18m from ground level on any side and are not fitted with wet or dry risers, access roads should be provided for turntable ladders or hydraulic platforms as the case may be, along the face of a perimeter wall or walls of the building from which there is access into the interior of the building.

4.2.4 Based on the above, it was deemed acceptable to construct Treadgold House without a dry riser, provided access to the building was considered suitable for turntable ladders or hydraulic platforms.

4.2.5 Current guidance in ADB would recommend that block of flats should provide either; access for a pumping appliance to within 45m of all points inside each flat, or a fire main (dry riser).

4.3 Fire vehicle access

4.3.1 As noted, the Treadgold House development has not been provided with a dry riser.

4.3.2 In accordance with ADB where dry risers are not provided, access for a pumping appliance should be provided within 45m of all points inside each flat, measured along the route of the hose.

4.3.3 The expected hardstanding location of the fire vehicle is on entrance to the private car park associated with Treadgold House. The furthest point in the furthest flat has been measured to be up to 90m, along the route of the hose from the expected fire vehicle location.

4.3.4 Based on the guidance set out in ADB, if the design for Treadgold House was submitted for Building Regulation approval today, it is likely that the provision of a dry riser would be recommended to satisfy the functional requirements. It is therefore recommended that in the event that significant works are carried out at the block, consideration should be given to installing a dry riser(s).

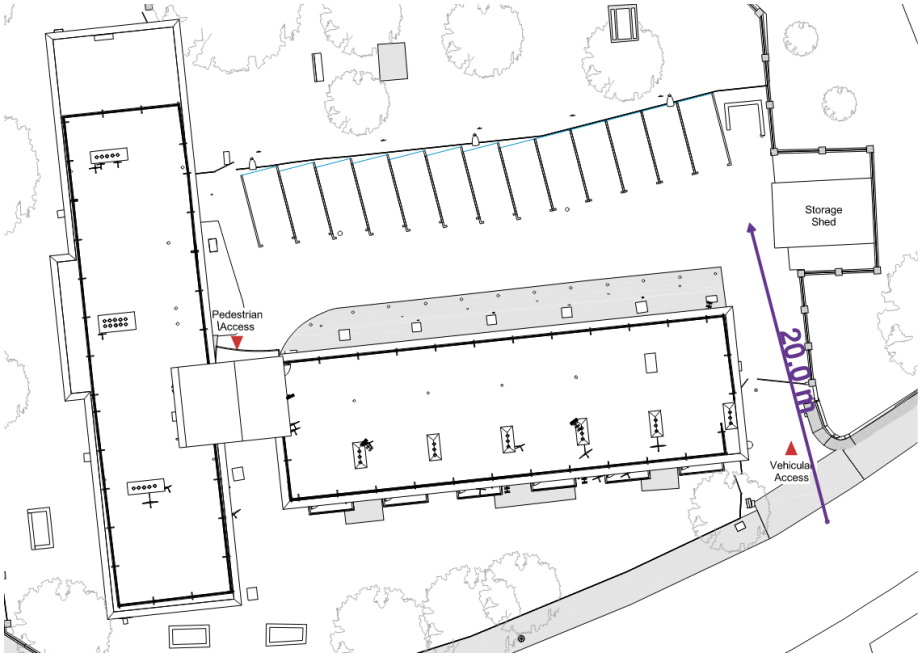
4.3.5 Where dead-end access routes are longer than 20m, the recommendations of ADB would expect suitable turning facilities to be provided. Fire vehicle access up to the main entrance of the building is provided via the car park. Access to within 18m of the main entrance of the building requires vehicle access down a dead-end route that exceeds 20m. Whether suitable turning facilities are available in the car park is to be confirmed, however, it is deemed unlikely based on the space shown available on plan.

4.4 Fire service route

4.4.1 Access to the building is provided at ground floor level, with access to the stair core available from the car park to the rear (pedestrian entrance to the building illustrated in the figure below).

4.4.2 The gated entrance to the car park has a fob entry system including an intercom and a firefighting override switch.

Figure 4.1 – Fire service route to Treadgold House



4.4.3 CP3 at the time of construction recommended that any access roads or ways have a minimum width of 3.6 m and be capable of carrying a pumping appliance with a laden weight of 10.1605 tonnes (approximately 10 tons). Any necessary bends in roads should be able to accommodate an appliance having a minimum turning circle of 17 m diameter. Minimum clearance height should be 3.6 m and any gates should have a width of 3m in the clear and be openable from either side.

4.4.4 Only minor alterations exist between the guidance given in CP3 and the current guidance given in ADB (see also Table 1 above) for fire service access routes.

4.4.5 Based on the large distance separations between kerbs (up to 7m) on approach to Treadgold House, it is expected that suitable access to the building has been provided.

4.4.6 Whether suitable turning facilities are available in the car park is to be confirmed. A full car park is likely to hinder the firefighter's ability to manoeuvre a hammerhead turn.

4.5 External hydrants

4.5.1 CP3 recommended at the time of construction that "fire hydrants should be provided within the confines of the site if necessary, in consultation with the local fire and water authorities". Whereas current guidance in ADB recommends at least one hydrant to be located within 90m of the entrance to the building.

4.5.2 It is Trigon's understanding that at least one hydrant is available within 82m of the entrance to the building, and a second hydrant is available within 120m of the entrance.

4.5.3 Based on the above it is considered that the design of Treadgold House meets the recommendations of CP3 at the time of construction and the recommendations of the current ADB.

4.6 Premise information boxes (PIBs)

4.6.1 Treadgold House has been provided with a PIB in the courtyard of the car park.

4.6.2 Access to the building is provided via the car park and therefore the PIB is likely to be in clear eyesight upon approach to the building.

4.7 Basement

4.7.1 No basement level exists.

4.8 Trigon comments

4.8.1 The fire service access and facilities at Treadgold House appears to have met with the recommendations of the guidance at the time of construction.

4.8.2 Since the construction of the building, various guidance documents have superseded the design standard at the time of construction and therefore the design of Treadgold House may not necessarily meet the recommendations of current guidance.

4.8.3 There is no requirement under the Building Regulations 2010 or the FSO to make improvements to the access and facilities for the fire and rescue service. However, to bring the Treadgold House in line with the current design standard, the proposed retrofit works intend to provide the following:

- A dry riser, located within the stair with main outlets provided at each floor level. Inlet provided at ground level, adjacent to the main entrance to the building.
- Wayfinding signage.

4.8.4 Surrounding roads will remain unchanged and therefore turning facilities in the car park, allowing fire vehicle access to within 18m of a dry riser inlet, will not be provided.

5. Verity Close

5.1 Description

5.1.1 Verity Close comprises six existing residential blocks of flats, and a mixed range of two and three-storey dwellinghouses, originally constructed in the 1970s.

5.1.2 The block of flats are expected to adopt a defend in place evacuation strategy whereas the dwellinghouses will operate an independent evacuation strategy whereby dwellinghouses are provided with an independent fire detection and fire alarm system, and only the dwellinghouse of fire origin will evacuate in the event of a fire.

5.1.3 It is understood that the relevant legislation at the time of construction for the design and construction of blocks of flats was CP3: Chapter IV: Part 1 (1962) 'Precautions Against Fire – Fire precautions in flats and maisonettes over 80ft in height' or CP3: Chapter IV: Part 1 (1971) 'Precautions Against Fire Part 1 Flats and maisonettes (in blocks over 2 storeys)' which superseded the 1962 edition.

5.1.4 The blocks of flats have been constructed as small single-stair buildings with two flats per floor, accessed from a protected lobby at each floor level.

5.1.5 The block of flats are understood to be constructed of reinforced concrete construction, with a solid brick cladding system. Materials within the build-up of the external walls are currently unknown.

5.1.6 A fob entry system has been provided at the main entrance to each block, including an intercom and a firefighting override switch.

5.1.7 The dwellinghouses are single occupancy family homes of typical construction (block and brick), with timber stud partitions and a pitched timber roof.

5.1.8 No building on Verity close has a top storey height greater than 18m above ground floor level.

5.2 Fire mains

5.2.1 No dry riser system has been installed.

5.2.2 In accordance with the guidance at the time of construction (CP3), there was no recommendation for a dry riser to be provided as the building did not comprise a storey higher than 18m above ground floor level.

5.2.3 Where dry risers were not provided, the following recommendations were given in CP3:

- If the building had all floor levels under 9m above ground level, access roads should be provided so that fire appliances may approach within 45m of any point within any flat (measured along the expected hose lie).
- Where such buildings have floors higher than 9m but not higher than 18m from ground level on any side and are not fitted with wet or dry risers, access roads should be provided for turntable ladders or hydraulic platforms as the case may be, along the face of a perimeter wall or walls of the building from which there is access into the interior of the building.

5.2.4 Based on the above, it was deemed acceptable to construct six blocks of flats on Verity Close without a dry riser, provided access to the building was considered suitable for turntable ladders or hydraulic platforms.

5.2.5 Current guidance in ADB would recommend that block of flats should provide either; access for a pumping appliance to within 45m of all points inside each flat, or a fire main (dry riser).

5.3 Fire vehicle access

5.3.1 As noted, none of the residential blocks of flats on Verity Close have been provided with a dry riser.

5.3.2 In accordance with ADB where dry risers are not provided, access for a pumping appliance should be provided within 45m of all points inside each flat, measured along the route of the hose.

5.3.3 Access to Verity Close is provided from Dulford Street. The furthest point in the furthest flat has been measured to be up to 59m from the fire vehicles expected hardstanding location, measured along the route of the hose.

5.3.4 Vehicle access to the dwellinghouses on Verity Close is provided within 45m of the furthest points in the furthest houses, from Silchester Road and Verity Close.

5.3.5 Based on the guidance set out in ADB, if the design for these blocks of flats were submitted for Building Regulation approval today, it is likely that the provision of a dry riser would be recommended to satisfy the functional requirements. It is therefore recommended that in the event that significant works are carried out at the block, consideration should be given to installing a dry riser(s).

5.3.6 Verity Close provides adequate turning facilities for fire vehicles and is expected to satisfy the recommendation of ADB.

5.4 Fire service route

5.4.1 Access to each dwellinghouse and the blocks of flats is provided from Verity Close.

5.4.2 CP3 at the time of construction recommended that any access roads or ways have a minimum width of 3.6 m and be capable of carrying a pumping appliance with a laden weight of 10.1605 tonnes (approximately 10 tons). Any necessary bends in roads should be able to accommodate an appliance having a minimum turning circle of 17 m diameter. Minimum clearance height should be 3.6 m and any gates should have a width of 3m in the clear and be openable from either side.

5.4.3 Only minor alterations exist between the guidance given in CP3 and the current guidance given in ADB (see also Table 1 above) for fire service access routes.

5.4.4 Based on the large distance separations between kerbs (up to 6m) on approach to and on Verity Close, it is expected that suitable access to these buildings has been provided with adequate turning facilities.

5.5 External hydrants

5.5.1 CP3 recommended at the time of construction that "fire hydrants should be provided within the confines of the site if necessary, in consultation with the local fire and water authorities". Whereas current guidance in ADB recommends at least one hydrant to be located within 90m of the entrance to the building.

5.5.2 It is Trigon's understanding that at least one hydrant is available within 69m of the entrance to the building, and a second hydrant is available within 82m of the entrance.

5.5.3 Based on the above it is considered that the external hydrant provisions for the buildings associated with Verity Close meet the recommendations of CP3 at the time of construction and the recommendations of the current ADB.

5.6 Premise information boxes (PIBs)

5.6.1 PIBs were not present for the block of flats on Verity Close and therefore should be considered.

5.7 Basement

5.7.1 No basement levels exist.

5.8 Trigon comments

5.8.1 The fire service access and facilities to the block of flats and the dwellinghouses on Verity Close appear to have met with the recommendations of the guidance at the time of construction.

5.8.2 Since the construction of the building, various guidance documents have superseded the design standards at the time of construction and therefore the design of these buildings may not necessarily meet the recommendations of current guidance.

5.8.3 There is no requirement under the Building Regulations 2010 or the FSO to make improvements to the access and facilities for the fire and rescue service. However, should any future works intend to bring the buildings on Verity Close in line with the current design standard, then the design would likely include the following provisions:

- A dry riser provided to each block of flats, located within the stair with main outlets provided at each floor level. Inlet provided at ground level, typically adjacent to the main entrance to the building.
- Fire vehicle access to within 18m of a dry riser inlet
- PIBs to each block of flats.
- Wayfinding signage.

6. Clarendon Walk

6.1 Description

6.1.1 Clarendon Walk is an existing residential block comprising six storeys (basement, ground, first to fourth floors) with a top storey height less than 18m above ground floor level. Originally constructed in the 1960s, the building provides access to eight ground floor dwellings that open directly to external fresh air and sharing no internal communal areas, and 96 two-storey dwellings that are accessed off internal corridors.

6.1.2 It is noted that some of the dwellings scissoring over and under other dwellings.

6.1.3 Access to the upper floors is achieved via the stairs. Access to the stairs is achievable via fob-access, the intercom system, or the firefighting override switch.

6.1.4 The building adopts a defend in place evacuation strategy whereby in the event of fire, only the flat of fire origin will be notified by the alarm.

6.1.5 It is understood that the relevant legislation at the time of construction was CP3: Chapter IV: Part 1 (1962) 'Precautions Against Fire – Fire precautions in flats and maisonettes over 80ft in height' which was later superseded in 1971 by CP3: Chapter IV: Part 1 (1971) 'Precautions Against Fire Part 1 Flats and maisonettes (in blocks over 2 storeys)'.

6.1.6 Each flat is provided with means of escape in two directions. The four stair cores serving Clarendon Walk are constructed of reinforced concrete and are open-sided to fresh air, providing permanent ventilation to the stairs.

6.1.7 The external cladding is solid brick construction. Materials within the build-up of the external walls are currently unknown.

6.2 Fire mains

6.2.1 No dry riser systems have been installed.

6.2.2 In accordance with the guidance at the time of construction (CP3), there was no recommendation for a dry riser to be provided as the building did not comprise a storey higher than 18m above ground floor level.

6.2.3 Where dry risers were not provided, the following recommendations were given in CP3:

- If the building had all floor levels under 9m above ground level, access roads should be provided so that fire appliances may approach within 45m of any point within any flat (measured along the expected hose lie).
- Where such buildings have floors higher than 9m but not higher than 18m from ground level on any side and are not fitted with wet or dry risers, access roads should be provided for turntable ladders or hydraulic platforms as the case may be, along the face of a perimeter wall or walls of the building from which there is access into the interior of the building.

6.2.4 Based on the above, it was deemed acceptable to construct Clarendon Walk without a dry riser, provided access to the building was considered suitable for turntable ladders or hydraulic platforms.

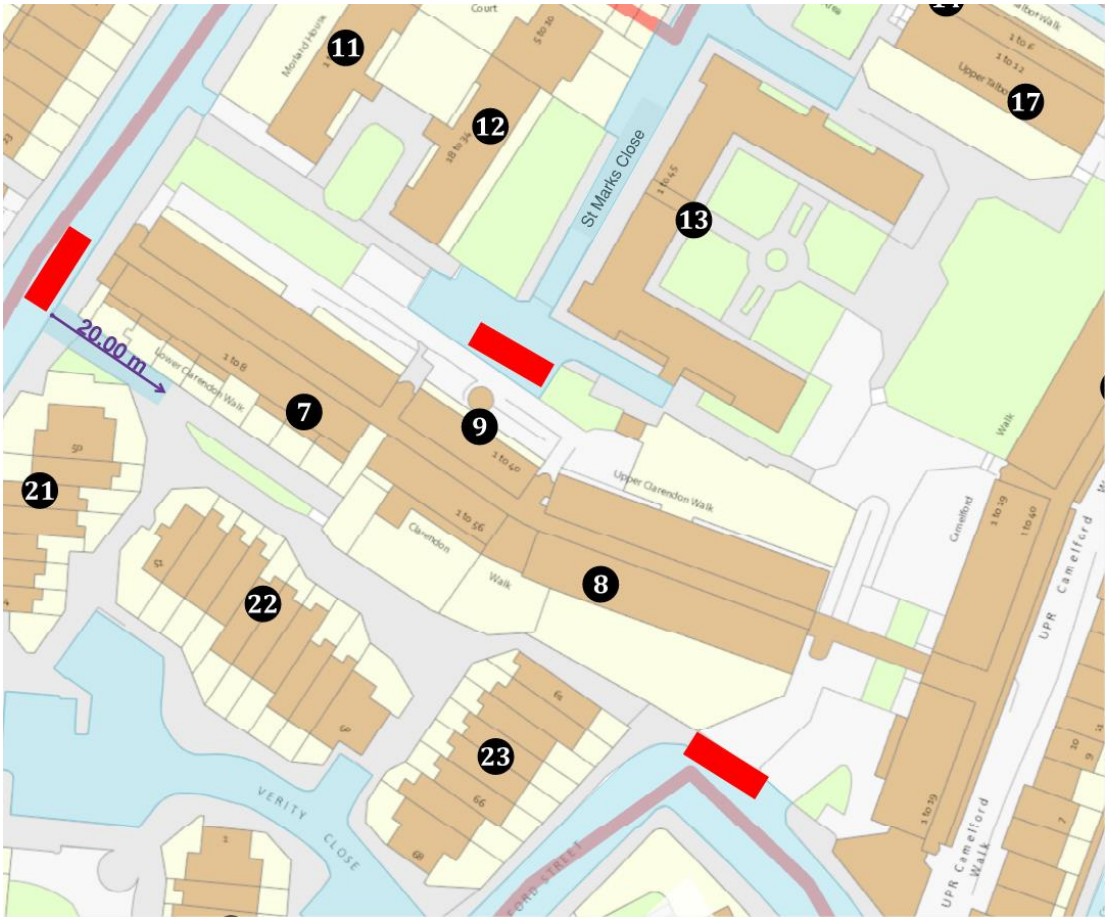
6.2.5 Current guidance in ADB would recommend that block of flats should provide either; access for a pumping appliance to within 45m of all points inside each flat, or a fire main (dry riser).

6.3 Fire vehicle access

6.3.1 As noted, the stairs associated with the Clarendon Walk development have not been provided with a dry riser.

6.3.2 Fire vehicle access will be approached from Lancaster Road, Dulford Street/Clarendon Road, or St Marks Close (the private Fire Brigade access road) that enters the site from St Marks Road.

Figure 6.1 – Fire vehicle access to Clarendon Walk



6.3.3 In accordance with ADB where dry risers are not provided, access for a pumping appliance should be provided within 45m of all points inside each flat, measured along the route of the hose.

6.3.4 The expected hardstanding locations for the fire vehicle on approach to Clarendon Walk have been shown red in the figure above. The furthest point in the furthest flat has been measured to be up to 85m, along the route of the hose from the expected fire vehicle location.

6.3.5 Based on the guidance set out in ADB, if the design for this building was submitted for Building Regulation approval today, it is likely that the provision of a dry riser would be recommended within each stair with fire vehicle access provided within 18m of each inlet valve to satisfy the functional requirements. It is therefore recommended that a dry riser is provided in each stair core as part of the proposed works for Clarendon Walk.

6.3.6 Where dead-end access routes are longer than 20m, the recommendations of ADB would expect suitable turning facilities to be provided.

6.3.7 Vehicle access to Clarendon Walk is considered restricted. Travel distances to the entrance of at least one of the stair cores, measured from the fire vehicles expected hardstanding location, have been measured to exceed 18m.

6.4 Fire service route

6.4.1 CP3 at the time of construction recommended that any access roads or ways have a minimum width of 3.6 m and be capable of carrying a pumping appliance with a laden weight of 10.1605 tonnes (approximately 10 tons). Any necessary bends in roads should be able to accommodate an appliance having a minimum turning circle of 17 m diameter. Minimum clearance height should be 3.6 m and any gates should have a width of 3m in the clear and be openable from either side.

6.4.2 Only minor alterations exist between the guidance given in CP3 and the current guidance given in ADB (see also Table 1 above) for fire service access routes.

6.4.3 Fire vehicle approach via Dulford Street and Silchester Road it expected to satisfy the recommendations of the guidance based on the large distance separations between kerbs (up to 7m) on approach to Clarendon Walk.

6.4.4 The fire brigade access road to the central stair cores, via Talbot Grove House has a kerb to kerb distance of 3.7m, falling in line with the minimum recommendations of the guidance. During Trigon's visit to the site, it was noted that subcontractors were parking up on the kerbs along St Marks Close (the private Fire Brigade access road), hindering the likelihood of fire vehicle access to Clarendon Walk via this route.

6.4.5 Should the proposed works intend to improve the fire service access routes to all stair cores, then the recommendations as set out in Table 13.1 of ADB (summarised in Table 1 of this report) should be considered.

6.5 External hydrants

6.5.1 CP3 recommended at the time of construction that "fire hydrants should be provided within the confines of the site if necessary, in consultation with the local fire and water authorities". Whereas current guidance in ADB recommends at least one hydrant to be located within 90m of the entrance to the building.

6.5.2 It is Trigon's understanding that at least one hydrant is available within 80m of each stair core. A markup has been provided in Appendix A.2 (Fire Brigade Access and Facilities [4 of 5]) identifying the existing hydrant locations surrounding the site. Though, it is unclear whether or not these hydrants have been commissioned and are in full operation.

6.5.3 Based on the above it is considered that the external hydrant provisions for Clarendon Walk met the recommendations of CP3 at the time of construction and the recommendations of the current ADB.

6.6 Premise information boxes (PIBs)

6.6.1 Clarendon Walk has been provided with a PIB to the front entrance of each stair core, in clear visibility on firefighters approach to the building.

6.7 Basement

6.7.1 The main basement area is located under Camelford Walk, Camelford Court and Talbot Walk and is used as a storage area which is managed by others (Safestore Self Storage). The area under Clarendon Walk is used by the Lancaster West team as a store and welfare space. In addition, a hostel and nursery are located under Clarendon Walk.

6.7.2 The stairs that serve the residential portions do not continue down to the basement levels.

6.7.3 Fire service access to the basement is to be reviewed. This should be coordinated with Safestore Self Storage.

6.8 Trigon comments

6.8.1 The fire service access and facilities at Clarendon Walk appear to have met with the recommendations of the guidance at the time of construction.

6.8.2 Since the construction of the building, various guidance documents have superseded the design standard at the time of construction and therefore the design of this building may not necessarily meet the recommendations of current guidance.

6.8.3 There is no requirement under the Building Regulations 2010 or the FSO to make improvements to the access and facilities for the fire and rescue service. However, as part of the proposed works to Clarendon Walk that intend to refurbish and improve the current conditions, the following provisions will be provided as part of the fire safety strategy (REF: TRG-200300-RT-01-I04, dated: 2-Nov-22):

- Dry risers within each stair, with main outlets provided at each floor level. Inlets provided at ground floor level, typically adjacent to the entrance into the stair.
- Suitable fire vehicle access to each stair core. With dry riser inlets within 18m of the expected fire vehicles hardstanding location.
- Unobstructed access routes that meet the recommendations of ADB's Table 13.1.
- Wayfinding signage.

6.8.4 Further to the recommendations set out in the fire safety strategy for the proposed works, it is recommended that access to St Marks Close (the private Fire Brigade access road) is limited to fire brigade access and permit holders only.

7. Camelford Walk

7.1 Description

7.1.1 Camelford Walk is an existing residential block with a top storey height less than 18m above ground floor level, originally constructed in the 1960s. The building comprises five storeys (ground, plus first to fourth floor levels), providing access to 59 residential dwellings.

7.1.2 The building adopts a defend in place evacuation strategy whereby in the event of fire, only the flat of fire origin will be notified by the alarm.

7.1.3 It is understood that the relevant legislation at the time of construction was CP3: Chapter IV: Part 1 (1962) 'Precautions Against Fire – Fire precautions in flats and maisonettes over 80ft in height' which was later superseded in 1971 by CP3: Chapter IV: Part 1 (1971) 'Precautions Against Fire Part 1 Flats and maisonettes (in blocks over 2 storeys)'.

7.1.4 All dwellings within Camelford Walk have been provided as a two-storey flat, some of which scissor over and under other dwellings.

7.1.5 Each flat is provided with means of escape in two directions. The three stair cores serving Camelford Walk are constructed of reinforced concrete and are open-sided to fresh air, providing permanent ventilation to the stairs.

7.1.6 The external cladding is solid brick construction. Materials within the build-up of the external walls are currently unknown.

7.2 Fire mains

7.2.1 No dry riser systems have been installed.

7.2.2 In accordance with the guidance at the time of construction (CP3), there was no recommendation for a dry riser to be provided as the building did not comprise a storey higher than 18m above ground floor level.

7.2.3 Where dry risers were not provided, the following recommendations were given in CP3:

- If the building had all floor levels under 9m above ground level, access roads should be provided so that fire appliances may approach within 45m of any point within any flat (measured along the expected hose lie).
- Where such buildings have floors higher than 9m but not higher than 18m from ground level on any side and are not fitted with wet or dry risers, access roads should be provided for turntable ladders or hydraulic platforms as the case may be, along the face of a perimeter wall or walls of the building from which there is access into the interior of the building.

7.2.4 Based on the above, it was deemed acceptable to construct Camelford Walk without a dry riser, provided access to the building was considered suitable for turntable ladders or hydraulic platforms.

7.2.5 Current guidance in ADB would recommend that block of flats should provide either; access for a pumping appliance to within 45m of all points inside each flat, or a fire main (dry riser).

7.3 Fire vehicle access

7.3.1 As noted, the Camelford Walk development has not been provided with a dry riser.

7.3.2 In accordance with ADB where dry risers are not provided, access for a pumping appliance should be provided within 45m of all points inside each flat, measured along the route of the hose.

7.3.3 The expected hardstanding location of the fire vehicle is on Dulford Street and St Mark Road, where access to the north and south stair cores can be achieved. The furthest point in the furthest flat has been measured to be up to 110m, along the route of the hose from the expected fire vehicle location.

7.3.4 Access to the central stair core is restricted, with an estimated travel distance up to 76m from the fire vehicle hard standing location (on the private road, Talbot Grove House) to the entrance into the stair at ground floor level.

7.3.5 Based on the guidance set out in ADB, if the design for Camelford Walk was submitted for Building Regulation approval today, it is likely that the provision of a dry riser in each stair core, and better access to the central stair core, would be recommended to satisfy the functional requirements. It is therefore recommended that a dry riser is provided in each stair core as part of the proposed works for Camelford Walk.

7.4 Fire service route

7.4.1 CP3 at the time of construction recommended that any access roads or ways have a minimum width of 3.6 m and be capable of carrying a pumping appliance with a laden weight of 10.1605 tonnes (approximately 10 tons). Any necessary bends in roads should be able to accommodate an appliance having a minimum turning circle of 17 m diameter. Minimum clearance height should be 3.6 m and any gates should have a width of 3m in the clear and be openable from either side.

7.4.2 Only minor alterations exist between the guidance given in CP3 and the current guidance given in ADB (see also Table 1 above) for fire service access routes.

7.4.3 Based on the large distance separations between kerbs (up to 7m) on approach to Camelford Walk, it is expected that suitable access roads to the building has been provided.

7.5 External hydrants

7.5.1 CP3 recommended at the time of construction that "fire hydrants should be provided within the confines of the site if necessary, in consultation with the local fire and water authorities". Whereas current guidance in ADB recommends at least one hydrant to be located within 90m of the entrance to the building.

7.5.2 It is Trigon's understanding that at least one hydrant is available within 75m of each stair core. A markup has been provided in Appendix A.2 (Fire Brigade Access and Facilities [4 of 5]) identifying the existing hydrant locations surrounding the site. Though, it is unclear whether or not these hydrants have been commissioned and are in full operation.

7.5.3 Based on the above it is considered that the external hydrant provisions for Camelford Walk meet the recommendations of CP3 at the time of construction and the recommendations of the current ADB.

7.6 Premise information boxes (PIBs)

7.6.1 A PIB has been provided at the entrance to the south stair, and on the gable wall to the dwellinghouses (Camelford Court) upon approach to the north stair.

7.6.2 A PIB to the central stair core was not visible during Trigons site visit.

7.7 Basement

7.7.1 The main basement area is located under Camelford Walk, Camelford Court and Talbot Walk and is used as a storage area which is managed by others (Safestore Self Storage). The area under Clarendon Walk is used by the Lancaster West team as a store and welfare space. In addition, a hostel and nursery are located under Clarendon Walk.

7.7.2 The stairs that serve the residential portions do not continue down to the basement levels.

7.7.3 Fire service access to the basement is to be reviewed.

7.8 Trigon comments

7.8.1 The fire service access and facilities at Camelford Walk appear to have met with the recommendations of the guidance at the time of construction.

7.8.2 Since the construction of the building, various guidance documents have superseded the design standard at the time of construction and therefore the design of the building may not meet the recommendations of current guidance.

7.8.3 There is no requirement under the Building Regulations 2010 or the FSO to make improvements to the access and facilities for the fire and rescue service. However, as part of the proposed works to Camelford Walk that intend to refurbish and improve the current conditions, the following provisions will be provided as part of the fire safety strategy (REF: TRG-200300-RT-01-I04, dated: 2-Nov-22):

- Dry risers within each stair, with main outlets provided at each floor level. Inlets provided at ground level, typically adjacent to the entrance into the stair.
- Suitable fire vehicle access to each stair core. With dry riser inlets within 18m of the expected fire vehicles hardstanding location.
- Unobstructed access routes that meet the recommendations of ADB's Table 13.1.
- PIBs provided to each stair core at ground floor level.
- Wayfinding signage.

8. Camelford Court

8.1 Description

8.1.1 Camelford Court comprises 26 dwellinghouse units varying between two and three storeys.

8.1.2 Each dwellinghouses has been provided with an independent fire detection and fire alarm system, and only the dwellinghouse of fire origin will evacuate in the event of a fire.

8.1.3 The dwellinghouses are single occupancy family homes of typical construction (block and brick), with timber stud partitions and a pitched timber roof.

8.1.4 The external cladding is solid brick construction. Materials within the build-up of the external walls are currently unknown.

8.2 Fire mains

8.2.1 No dry riser system has been installed.

8.3 Fire vehicle access

8.3.1 For dwellinghouses, access for a pumping appliance should be provided within 45m of all points inside the dwellinghouse. Entrance to the houses is provided from upper Camelford Walk (not suitable for fire vehicle access). Vehicle access is provided from Camelford Court, St Marks Road, and Dulford Street.

8.3.2 Fire vehicle access through upper Camelford Walk to the front entrances of the dwellinghouses is unavailable.

8.3.3 The furthest point in the furthest dwelling has been measured to be up to 60m, along the route of the hose from the expected fire vehicle location.

8.3.4 To provide a dry rising main along an external area is not considered advantageous as it is unlikely that this will be used by the fire service. It is considered more likely that the Fire Service would fight a fire from Camelford Court via the back gardens.

8.4 Fire service route

8.4.1 Access to each dwellinghouse is provided via upper Camelford Walk.

8.4.2 The surrounding roads providing access to upper Camelford Walk provide suitable access to the site, based on the large distance separations between kerbs (up to 7m) on approach to Camelford Court.

8.4.3 Should the proposed works intend to provide fire vehicle access to the front entrances of the dwellinghouses, then the recommendations as set out in Table 13.1 of ADB (summarised in Table 1 of this report) should be considered.

8.5 External hydrants

8.5.1 It is Trigon's understanding that at least one hydrant is available within 80m of the entrance to each dwellinghouse, and is therefore expected to satisfy the recommendations of the design standards at the time of construction, and now.

8.5.2 A markup has been provided in Appendix A.2 (Fire Brigade Access and Facilities [4 of 5]) identifying the existing hydrant locations surrounding the site. Though, it is unclear whether or not these hydrants have been commissioned and are in full operation.

8.6 Premise information boxes (PIBs)

8.6.1 PIBs for Camelford Court were not visible during Trigons site visit.

8.7 Basement

8.7.1 The main basement area is located under Camelford Walk, Camelford Court and Talbot Walk and is used as a storage area which is managed by others (Self Store).

8.7.2 The dwellinghouses do not share a link with the basement levels.

8.7.3 Fire service access to the basement is to be reviewed.

8.8 Trigon comments

8.8.1 The fire service access and facilities at Camelford Court appear to have met with the recommendations of the guidance at the time of construction.

8.8.2 Since the construction of the building, various guidance documents have superseded the design standard at the time of construction and therefore the design of Camelford Court may not meet the recommendations of current guidance.

8.8.3 Camelford Court falls part of the proposed 'Lot 2' works that intend to refurbish and improve the current conditions. Fire vehicle access provisions have been addressed in the fire safety strategy for the proposed works (REF: TRG-200300-RT-01-I04, dated: 2-Nov-22), which considers the extended hose laying distances from the expected hardstanding location as suitable in this instance as:

- There is no requirement under the Building Regulations 2010 or the FSO to make improvements to the access and facilities for the fire and rescue service.
- The route via Upper Camelford Walk will be easy to traverse as it is external and along a flat route.
- The fire service could also fight a fire from Camelford Court via the houses back gardens.

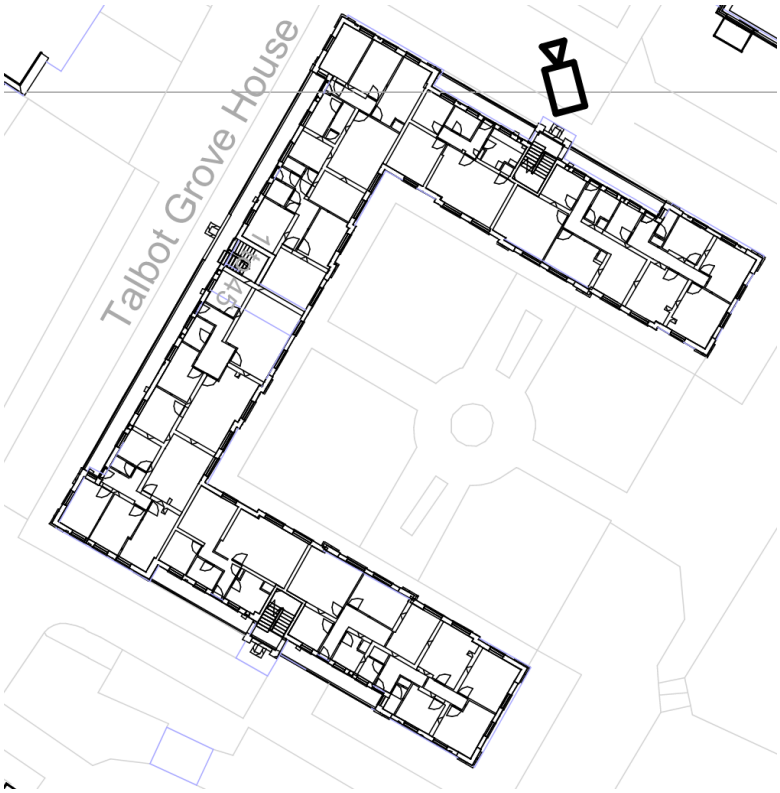
9. Talbot Grove House

9.1 Description

9.1.1 Talbot Grove House is a block of flats that was reportedly built in the mid-1930s, as per the Fire Safety Advice Report (Feasibility Study Report) produced by IFC (REF: IFC Report FSA/21898/01, dated: November 2021).

9.1.2 The building comprises three five-storey residential blocks of flats (Ground, plus first to fifth floor levels).

Figure 9.1 – Talbot Grove House



9.1.3 The top storey height is approximately 11.8m above ground floor level and therefore does not require the provision of a firefighting shaft.

9.1.4 Each block is served by a single open stair core, with flats accessed via external balcony decks of solid construction.

9.1.5 The stair is constructed of reinforced concrete and is open-sided to fresh air, providing permanent ventilation to the stair.

9.1.6 The external cladding is solid brick construction. Materials within the build-up of the external walls are currently unknown.

9.2 Fire mains

9.2.1 No dry riser system has been installed.

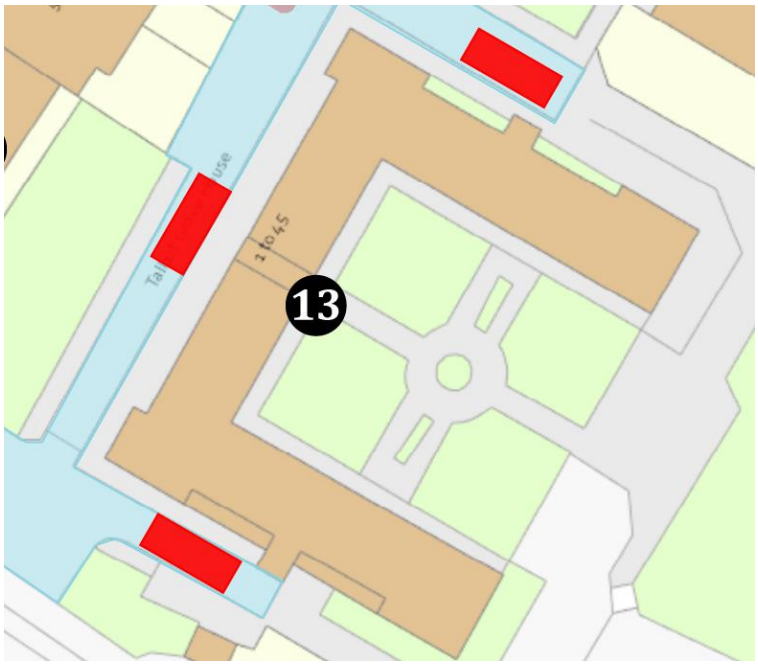
9.2.2 A dry riser may not have been considered necessary to meet the recommendations of guidance at the time of construction. However, current guidance would recommend that block of flats should provide either; access for a pumping appliance to within 45m of all points inside each flat, or a fire main (dry riser).

9.3 Fire vehicle access

9.3.1 In accordance with ADB where dry risers are not provided, access for a pumping appliance should be provided within 45m of all points inside each flat, measured along the route of the hose.

9.3.2 The expected fire vehicle hardstanding locations to each stair core have been shown red in the figure below, via St Marks Close (the private Fire Brigade access road). The furthest point in the furthest flat has been measured to be up to 50m from the expected fire vehicle location.

Figure 9.2 – Fire vehicle access to Talbot Grove House



9.3.3 Based on the guidance set out in ADB, if the design for Talbot Grove House was submitted for Building Regulation approval today, it is likely that the provision of dry risers within each stair core would be recommended to satisfy the functional requirements. It is therefore recommended that in the event that significant works are carried out at the block, consideration should be given to installing a dry riser.

9.3.4 Access to Talbot Grove House provides adequate turning facilities for fire vehicles.

9.4 Fire service route

9.4.1 Access to each stair core is provided via Talbot Grove House.

9.4.2 Talbot Grove House has varying kerb to kerb distances. In some parts, the kerb to kerb separation is measured at 3.7m, marginally falling in line with the minimum recommendations of the guidance.

9.4.3 During Trigon's visit to the site, it was noted that subcontractors were parking up on the kerbs along Talbot Grove House, hindering the likelihood of fire vehicle access to the central and south cores.

9.4.4 Should the proposed works intend to improve the fire service access routes to all stair cores, then the recommendations as set out in Table 13.1 of ADB (summarised in Table 1 of this report) should be considered.

9.5 External hydrants

9.5.1 It is Trigon's understanding that at least one hydrant is available within 46m of each stair core. A markup has been provided in Appendix A.2 (Fire Brigade Access and Facilities [4 of 5]) identifying the existing hydrant locations surrounding the site. Though, it is unclear whether or not these hydrants have been commissioned and are in full operation.

9.5.2 Based on the above it is considered that the external hydrant provisions for Talbot Grove House meet the recommendations of the current ADB.

9.6 Premise information boxes (PIBs)

9.6.1 A single PIB has been provided on the corner of the building in clear visibility for the attending firefighters.

9.7 Basement

9.7.1 No existing basement level.

9.8 Trigon comments

9.8.1 Under the Building Regulations 2010 or the FSO to make improvements to the access and facilities for the fire and rescue service.

9.8.2 The existing Feasibility Study Report produced by IFC set out a number of recommendations for 'B5- Access and Facilities for the Fire and Rescue Service' upon review of the proposed refurbishment works, listed below:

- Though IFC address that the hose laying distances from the expected fire appliance hardstanding location to 'significantly exceed the recommended limit' of the guidance. They consider it to have a lesser impact in Talbot Grove House than it would typically have in a block of flats where the shared escape routes enclosed. This is based on there being open deck access to each flat, and the fire brigade being able to pull the hose up from the ground floor using rope. However, they do note that if the client wishes to take a proactive approach during the refurbishment works, a dry riser to each block to improve facilities for the fire service should be considered.
- Wayfinding signage consisting of floor identification signs and flat indicator signs on every landing within the protected stairway was also recommended.

9.8.3 Should the proposed works intend to bring the Talbot Grove House in line with the current design standard, then it is Trigons opinion that the design should include the following provisions:

- Dry risers within each stair, with main outlets provided at each floor level. Inlets provided at ground level, typically adjacent to the entrance into the stair.

- Suitable fire vehicle access to each stair core. With dry riser inlets within 18m of the expected fire vehicles hardstanding location.
- Unobstructed access routes that meet the recommendations of ADB's Table 13.1.
- PIBs provided to each stair core at ground floor level.
- Access to St Marks Close (the private Fire Brigade access road) to be limited to fire brigade access and permit holders only.
- Wayfinding signage.

10. Morland House

10.1 Description

10.1.1 Morland House is a block of flats that was reportedly built in the mid-1930s, as per the Fire Safety Advice Report (Feasibility Study Report) produced by IFC (REF: IFC Report FSA/21898/02, dated: November 2021).

10.1.2 The building comprises two four-storey residential blocks of flats (Ground, plus first to fourth-floor levels).

10.1.3 The top storey height is approximately 9m above ground floor level and therefore does not require the provision of a firefighting shaft.

10.1.4 Each block is served by a single open stair core, with flats accessed via external balcony decks of solid construction.

10.1.5 The stair is constructed of reinforced concrete and is open-sided to fresh air, providing permanent ventilation to the stair.

10.1.6 The external cladding is solid brick construction. Materials within the build-up of the external walls are currently unknown.

10.2 Fire mains

10.2.1 No dry riser system has been installed.

10.2.2 A dry riser may not have been considered necessary to meet the recommendations of guidance at the time of construction. However, current guidance would recommend that blocks of flats should provide either; access for a pumping appliance to within 45m of all points inside each flat, or a fire main (dry riser).

10.3 Fire vehicle access

10.3.1 In accordance with ADB where dry risers are not provided, access for a pumping appliance should be provided within 45m of all points inside each flat, measured along the route of the hose.

10.3.2 Access to each stair is from the central courtyard.

10.3.3 The expected fire vehicle hardstanding locations to each stair core have been shown red in the figure below. Distances from the hard standing locations and the entrance into each block have also been shown in the figure below.

Figure 10.1 – Fire vehicle access to Morland House

10.3.4 The furthest point in the furthest flat is measured up to 75m from the expected fire vehicle location.

10.3.5 Based on the guidance set out in ADB, if the design for Morland House was submitted for Building Regulation approval today, it is likely that the provision of dry risers within each stair core would be recommended to satisfy the functional requirements.

10.3.6 Access to Morland House provides adequate turning facilities for fire vehicles.

10.4 Fire service route

10.4.1 Access routes to Morland House via Silchester Road is considered suitable based on the large distance separations between kerbs (up to 7m) on approach to the west block.

10.4.2 St Marks Close (the private Fire Brigade access road) has varying kerb to kerb distances. In some parts, the kerb to kerb separation is measured at 3.7m, marginally falling in line with the minimum recommendations of the guidance.

10.4.3 During Trigon's visit to the site, it was noted that subcontractors were parking up on the kerbs along St Marks Close (the private Fire Brigade access road), hindering the likelihood of fire vehicle access to east block.

10.4.4 Should the proposed works intend to improve the fire service access routes to all stair cores, then the recommendations as set out in Table 13.1 of ADB (also summarised in Table 1 of this report) should be considered.

10.5 External hydrants

10.5.1 It is Trigon's understanding that at least one hydrant is available within 50m of each stair core. A markup has been provided in Appendix A.2 (Fire Brigade Access and Facilities [4 of 5]) identifying the existing hydrant locations surrounding the site. Though, it is unclear whether or not these hydrants have been commissioned and are in full operation.

10.5.2 Based on the above it is considered that the external hydrant provisions to Morland House meet the recommendations of the current ADB.

10.6 Premise information boxes (PIBs)

10.6.1 PIBs for Morland House were not visible during the Trigons site visit.

10.7 Basement

10.7.1 No existing basement level.

10.8 Trigon comments

10.8.1 There is no requirement under the Building Regulations 2010 or the FSO to make improvements to the access and facilities for the fire and rescue service. The existing Feasibility Study Report produced by IFC set out a number of recommendations for 'B5-Access and Facilities for the Fire and Rescue Service' upon review of the proposed refurbishment works, listed below:

- Though IFC address that the hose laying distances from the expected fire appliance hardstanding location to 'significantly exceed the recommended limit' of the guidance. They consider it to have a lesser impact in Morland House than it would typically have in a block of flats where the shared escape routes enclosed. This is based on there being open deck access to each flat, and the fire brigade being able to pull the hose up from the ground floor using rope. However, they do note that if the client wishes to take a proactive approach during the refurbishment works, a dry riser to each block to improve facilities for the fire service should be considered.

10.8.2 Should the proposed works intend to bring Morland House in line with the current design standard, then it is Trigon opinion that the design should include the following provisions:

- Dry risers within each stair, with main outlets provided at each floor level. Inlets provided at ground level, typically adjacent to the entrance into the stair.
- Suitable fire vehicle access to each stair core. With dry riser inlets within 18m of the expected fire vehicles hardstanding location.
- Unobstructed access routes that meet the recommendations of ADB's Table 13.1.
- PIBs provided to each stair core at ground floor level.
- Access to the private road, Talbot Grove House, limited to fire brigade access and permit holders only.
- Wayfinding signage.

11. Talbot Walk

11.1 Description

11.1.1 Talbot Walk is an existing five storey (ground, plus first to fourth floor levels) residential block with a top storey height less than 18m above ground floor level, providing access to a mixed range duplex flats/maisonettes that have been designed to scissor either over or under other dwellings.

11.1.2 It is understood that the building was originally constructed in the 1960s.

11.1.3 The building adopts a defend in place evacuation strategy whereby in the event of fire, only the flat of fire origin will be notified by the alarm. Unless otherwise notified by the attending fire and rescue service, the remainder of the building will be expected to continue as normal and will not be alerted that there is a fire in another part of the building.

11.1.4 It is understood that the relevant legislation at the time of construction was CP3: Chapter IV: Part 1 (1962) 'Precautions Against Fire – Fire precautions in flats and maisonettes over 80ft in height' which was later superseded in 1971 by CP3: Chapter IV: Part 1 (1971) 'Precautions Against Fire Part 1 Flats and maisonettes (in blocks over 2 storeys)'.

11.1.5 Two spiral stair cases have been provided for means of escape purposes, located at each end of the block.

11.1.6 Some flats are accessed via a solid balcony deck at first floor level, whereas the remaining flats are accessed from an enclosed corridor at third floor level.

11.1.7 The stairs are constructed of reinforced concrete and are open-sided to fresh air, providing permanent ventilation to the stair.

11.1.8 The external cladding is solid brick construction. Materials within the build-up of the external walls are currently unknown.

11.2 Fire mains

11.2.1 No dry riser systems have been installed.

11.2.2 In accordance with the guidance at the time of construction (CP3), there was no recommendation for a dry riser to be provided as the building did not comprise a storey higher than 18m above ground floor level.

11.2.3 Where dry risers were not provided, the following recommendations were given in CP3:

- If the building had all floor levels under 9m above ground level, access roads should be provided so that fire appliances may approach within 45m of any point within any flat (measured along the expected hose lie).
- Where such buildings have floors higher than 9m but not higher than 18m from ground level on any side and are not fitted with wet or dry risers, access roads should be provided for turntable ladders or hydraulic platforms as the case may be, along the face of a perimeter wall or walls of the building from which there is access into the interior of the building.

11.2.4 Based on the above, it was deemed acceptable to construct Talbot Walk without a dry riser, provided access to the building was considered suitable for turntable ladders or hydraulic platforms.

11.2.5 Current guidance in ADB would recommend that block of flats should provide either; access for a pumping appliance to within 45m of all points inside each flat, or a fire main (dry riser).

11.3 Fire vehicle access

11.3.1 As noted, the Talbot Walk development has not been provided with a dry riser.

11.3.2 In accordance with ADB where dry risers are not provided, access for a pumping appliance should be provided within 45m of all points inside each flat, measured along the route of the hose.

11.3.3 The expected fire vehicle hardstanding locations to each stair core have been shown red in the figure below. Distances from the hard-standing locations and the entrance into each stair core have also been shown in the figure below.

Figure 11.1 – Fire vehicle access to Talbot Walk

11.3.4 The furthest point in the furthest flat has been measured to be up to 79m from the expected fire vehicle location.

11.3.5 Based on the guidance set out in ADB, if the design for Talbot Walk was submitted for Building Regulation approval today, it is likely that the provision of a dry riser would be recommended to satisfy the functional requirements. It is therefore recommended that in

the event that significant works are carried out at the block, consideration should be given to installing a dry riser(s).

11.3.6 Access to Talbot Walk provides adequate turning facilities for fire vehicles.

11.4 Fire service route

11.4.1 CP3 at the time of construction recommended that any access roads or ways have a minimum width of 3.6 m and be capable of carrying a pumping appliance with a laden weight of 10.1605 tonnes (approximately 10 tons). Any necessary bends in roads should be able to accommodate an appliance having a minimum turning circle of 17 m diameter. Minimum clearance height should be 3.6 m and any gates should have a width of 3m in the clear and be openable from either side.

11.4.2 Only minor alterations exist between the guidance given in CP3 and the current guidance given in ADB (see also Table 1 above) for fire service access routes.

11.4.3 Based on the large distance separations between kerbs (up to 7m) on approach to Talbot Walk, it is expected that suitable access with adequate turning facilities have been provided.

11.5 External hydrants

11.5.1 CP3 recommended at the time of construction that "fire hydrants should be provided within the confines of the site if necessary, in consultation with the local fire and water authorities". Whereas current guidance in ADB recommends at least one hydrant to be located within 90m of the entrance to the building.

11.5.2 A markup has been provided in Appendix A.2 (Fire Brigade Access and Facilities [4 of 5]) identifying the existing hydrant locations surrounding the site. Though, it is unclear whether or not these hydrants have been commissioned and are in full operation.

11.5.3 It is Trigon's understanding that at least one hydrant is available within 49m of each stair core.

11.5.4 Based on the above it is considered that the external hydrant provisions for Talbot Walk meet the recommendations of CP3 at the time of construction and the recommendations of the current ADB.

11.6 Premise information boxes (PIBs)

11.6.1 Talbot Walk has been provided with a single PIB adjacent to the east stair.

11.7 Basement

11.7.1 The main basement area is located under Camelford Walk, Camelford Court and Talbot Walk and is used as a storage area which is managed by others (Safestore Self Storage).

11.7.2 The stairs that serve the residential portions do not continue down to the basement levels.

11.7.3 Fire service access to the basement is to be reviewed.

11.8 Trigon comments

11.8.1 The fire service access and facilities at Talbot Walk appears to have met with the recommendations of the guidance act the time of construction.

11.8.2 Since the construction of the building, various guidance documents have superseded the design standard at the time of construction and therefore the design of Talbot House may not necessarily meet the recommendations of current guidance.

11.8.3 There is no requirement under the Building Regulations 2010 or the FSO to make improvements to the access and facilities for the fire and rescue service. However, as part of the proposed works to Talbot Walk that intend to refurbish and improve the current conditions, the following provisions will be provided as part of the fire safety strategy (REF: TRG-200300-RT-01-I04, dated: 2-Nov-22):

- Dry risers within each stair, with main outlets provided at each floor level. Inlets provided at ground level, typically adjacent to the entrance into the stair.
- Suitable fire vehicle access to each stair core. With dry riser inlets within 18m of the expected fire vehicles hardstanding location.
- PIBs provided to each stair core at ground floor level.
- Wayfinding signage.

12. Camborne Mews

12.1 Description

12.1.1 Camborne Mews comprises six existing residential blocks of flats originally constructed in the 1980s.

12.1.2 The block of flats are expected to adopt a defend in place evacuation strategy.

12.1.3 It is understood that the relevant legislation at the time of construction for the design and construction of blocks of flats was CP3: Chapter IV: Part 1 (1971) 'Precautions Against Fire Part 1 Flats and maisonettes (in blocks over 2 storeys)' which superseded the 1962 edition.

12.1.4 The blocks of flats have been constructed as small single-stair buildings with two flats per floor, accessed from a protected lobby at each floor level.

12.1.5 The block of flats are understood to be constructed of reinforced concrete construction, with a solid brick cladding system. Materials within the build-up of the external walls are currently unknown.

12.1.6 None of the blocks have a top storey height greater than 18m above ground floor level.

12.2 Fire mains

12.2.1 No dry risers system have been installed.

12.2.2 In accordance with the guidance at the time of construction (CP3), there was no recommendation for a dry riser to be provided as the building did not comprise a storey higher than 18m above ground floor level.

12.2.3 Where dry risers were not provided, the following recommendations were given in CP3:

- If the building had all floor levels under 9m above ground level, access roads should be provided so that fire appliances may approach within 45m of any point within any flat (measured along the expected hose lie).
- Where such buildings have floors higher than 9m but not higher than 18m from ground level on any side and are not fitted with wet or dry risers, access roads should be provided for turntable ladders or hydraulic platforms as the case may be, along the face of a perimeter wall or walls of the building from which there is access into the interior of the building.

12.2.4 Based on the above, it was deemed acceptable to construct the six blocks of flats without a dry riser, provided access to the building was considered suitable for turntable ladders or hydraulic platforms.

12.2.5 Current guidance in ADB would recommend that block of flats should provide either; access for a pumping appliance to within 45m of all points inside each flat, or a fire main (dry riser).

12.3 Fire vehicle access

12.3.1 As noted, none of the blocks of flats have been provided with a dry riser.

12.3.2 In accordance with ADB where dry risers are not provided, access for a pumping appliance should be provided within 45m of all points inside each flat, measured along the route of the hose.

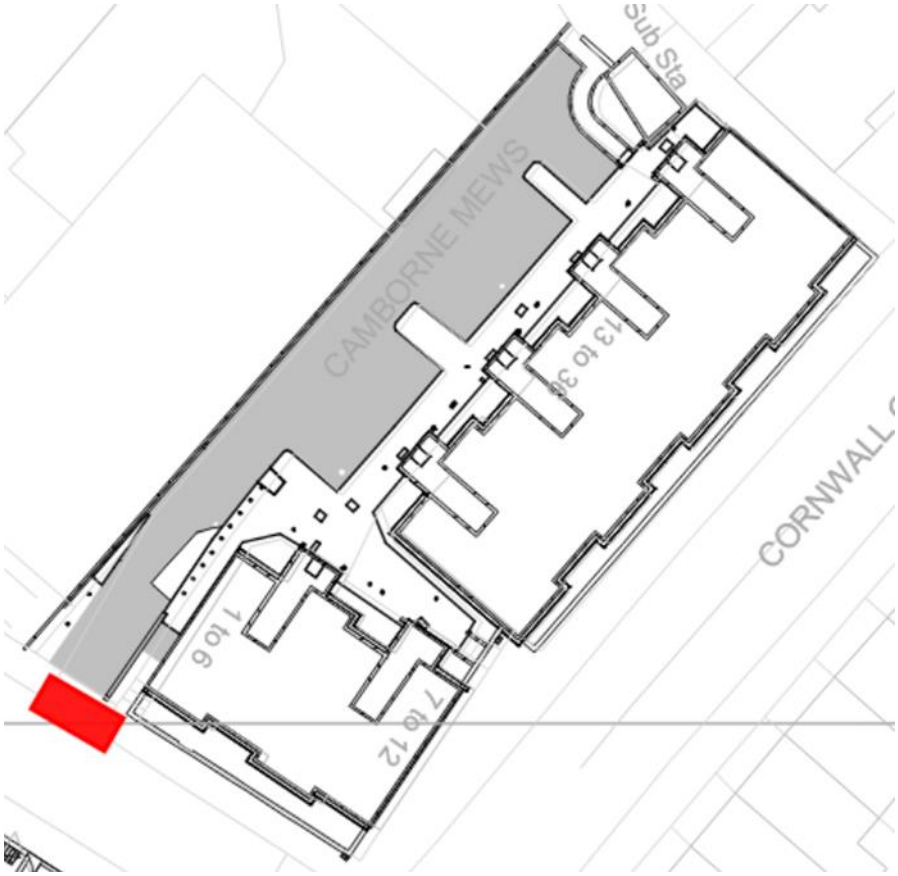
12.3.3 Access to Camborne Mews is provided from St Marks Road.

12.3.4 Vehicle access is provided within 68m of the furthest point in the furthest flat.

12.3.5 Based on the guidance set out in ADB, if the design for blocks of flats were submitted for Building Regulation approval today, it is likely that the provision of a dry riser would be recommended to satisfy the functional requirements. It is therefore recommended that in the event that significant works are carried out at the block, consideration should be given to installing a dry riser(s).

12.3.6 Approach to the block of flats associated with Camborne Mews is provided via the rear car park. access to the car park is narrow and does not comply with the recommendations set out in Table 13.1 of ADB and therefore the hose laying distances to the furthest points have been measured from the expected hard standing location on St Marks Road (shown red in the figure below).

Figure 12.1 – Fire vehicle access to Camborne Mews



12.4 Fire service route

12.4.1 Access to each block is provided from the gated car park. However the car park is not considered a fire service access road as it does not meet the recommendations below.

Therefore the expected fire vehicles hard standing is located on St Marks Road, on entrance to the car park.

12.4.2 CP3 at the time of construction recommended that any access roads or ways have a minimum width of 3.6 m and be capable of carrying a pumping appliance with a laden weight of 10.1605 tonnes (approximately 10 tons). Any necessary bends in roads should be able to accommodate an appliance having a minimum turning circle of 17 m diameter. Minimum clearance height should be 3.6 m and any gates should have a width of 3m in the clear and be openable from either side.

12.4.3 Only minor alterations exist between the guidance given in CP3 and the current guidance given in ADB (see also Table 1 above) for fire service access routes.

12.4.4 Based on the large distance separations between kerbs (up to 7m) on approach to and on Camborne Mews, it is expected that suitable access to these buildings has been provided with adequate turning facilities.

12.4.5 Further enhancement to reduce the distances between the fire vehicles expected hard standing location and the entrance to each block would include the following:

- Access into the car park to meet the recommendations set out in ADB's Table 13.1.
- Adequate turning facilities provided within the car park to ensure a fire vehicle can gain access to within 18m of the entrance to each block.

12.5 External hydrants

12.5.1 CP3 recommended at the time of construction that "fire hydrants should be provided within the confines of the site if necessary, in consultation with the local fire and water authorities". Whereas current guidance in ADB recommends at least one hydrant to be located within 90m of the entrance to the building.

12.5.2 It is Trigon's understanding that at least one hydrant is available within 90m of each block.

12.5.3 Based on the above it is considered that the external hydrant provisions for the buildings associated with Camborne Mews meets the recommendations of CP3 at the time of construction and the recommendations of the current ADB.

12.6 Premise information boxes (PIBs)

12.6.1 PIBs were not visible during Trigons site visit.

12.7 Trigon comments

12.7.1 The fire service access and facilities at Camborne Mews appears to have with the recommendations of the guidance at the time of construction.

12.7.2 Since the construction of these blocks, various guidance documents have superseded the design standards at the time of construction and therefore the design of these buildings may not necessarily meet the recommendations of current guidance.

12.7.3 There is no requirement under the Building Regulations 2010 or the FSO to make improvements to the access and facilities for the fire and rescue service. However, should any future works intend to bring Camborne Mews in line with the current design standard, then the design would likely include the following provisions:

- Dry risers within each stair/block, with main outlets provided at each floor level. Inlets provided at ground level, typically adjacent to the entrance into the stair.
- Suitable fire vehicle access to each stair core. With dry riser inlets within 18m of the expected fire vehicles hardstanding location.
- PIBs provided for operation information to the attending firefighters.
- Wayfinding signage.

13. Hurstway Walk, Testerton Walk, Barandon Walk

13.1 Description

13.1.1 Hurstway Walk, Testerton Walk and Barondon Walk (also referred to as the walkways) is a residential development comprising six internal access decks (Deck -2, Deck -1, Deck, Deck +1, Deck +2, and Deck +3). The top accessible storey of the blocks is Deck +3 (internal top-level of duplex apartments) which is 7.8m above the Deck Level but 11.6m above the adjacent ground level. The top accessible storey of the common area is Deck +2 which is 5.2m above the Deck Level but 8.9m above the adjacent ground level.

13.1.2 It is understood that the development was originally constructed in the 1960s, with further works undertaken in the 1980s that introduced a roof cover above the common areas.

13.1.3 The building adopts a defend in place evacuation strategy whereby in the event of fire, only the flat of fire origin will be notified by the alarm.

13.1.4 It is understood that the relevant legislation at the time of construction was CP3: Chapter IV: Part 1 (1962) 'Precautions Against Fire – Fire precautions in flats and maisonettes over 80ft in height' which was later superseded in 1971 by CP3: Chapter IV: Part 1 (1971) 'Precautions Against Fire Part 1 Flats and maisonettes (in blocks over 2 storeys)'.

13.1.5 The blocks have no storey more than 18m above ground floor level, therefore guidance would not recommend the provision of firefighting shafts.

13.2 Fire mains

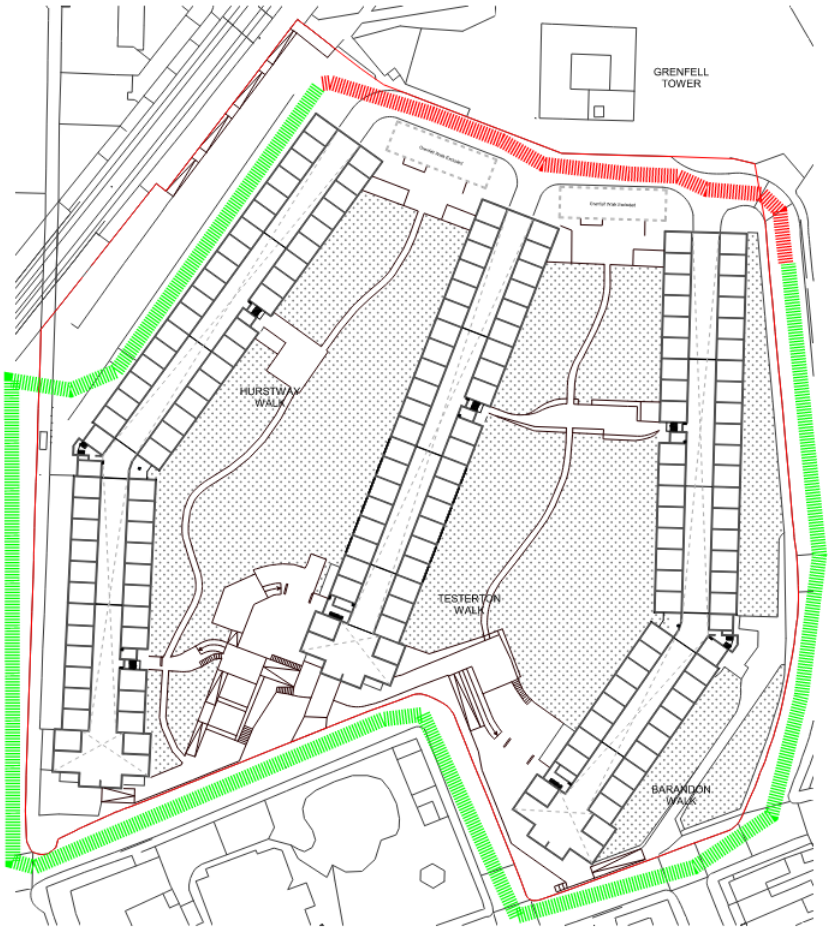
13.2.1 The existing blocks are provided with a dry fire mains system. The dry risers are associated with each of the common stairs within each block of flats. The dry fire mains inlet valves are provided inside each of the blocks and located at Deck -2 level. Adjacent to each the dry riser inlet is an outlet from a fire hydrant. Fire mains outlets are currently provided adjacent to the main stairs which are currently unenclosed from the main common area.

13.2.2 It is understood that neither the hydrant system nor the dry riser have been suitably maintained. The hydrant supply has been cut off. In addition, access for the fire service is no longer available to Deck 2 level. It is therefore proposed to provide a new system for firefighting within each of the blocks.

13.3 Fire vehicle access

13.3.1 The proposed access routes for fire service vehicles are as illustrated in the figure below. The route shown in red is through the site enclosure of Grenfell Tower therefore, it should be ensured that this route is always accessible and managed such that fire service vehicles are able to pass through to access the site. This should be discussed and agreed with the management of the Grenfell Tower site. Should future work be carried out at the Grenfell Tower site, this should be coordinated with the fire strategy for the development.

Figure 13.1 – Fire vehicle access to the walkways



13.3.2 The furthest point in the furthest flat has been measured to be up to 80m, along the route of the hose from the expected fire vehicle location.

13.3.3 Based on the guidance set out in ADB, if the design for the Walkways was submitted for Building Regulation approval today, it is likely that the provision of a dry riser would be recommended to satisfy the functional requirements. It is therefore recommended that a dry riser is provided in each stair core as part of the proposed works for Camelford Walk.

13.4 Fire service route

13.4.1 CP3 at the time of construction recommended that any access roads or ways have a minimum width of 3.6 m and be capable of carrying a pumping appliance with a laden weight of 10.1605 tonnes (approximately 10 tons). Any necessary bends in roads should be able to accommodate an appliance having a minimum turning circle of 17 m diameter. Minimum clearance height should be 3.6 m and any gates should have a width of 3m in the clear and be openable from either side.

13.4.2 Only minor alterations exist between the guidance given in CP3 and the current guidance given in ADB (see also Table 1 above) for fire service access routes.

13.4.3 The fire service access route remains under review. Any fire service access route should be provided to fall in accordance with the recommendations set out in ADB's Table 13.1.

13.5 External hydrants

13.5.1 It is Trigon's understanding that at least one hydrant is available within 80m of each stair core.

13.5.2 Based on the above it is considered that the external hydrant provisions for the walkways development meet the recommendations of the current ADB.

13.6 Premise information boxes (PIBs)

13.6.1 PIBs have been provided at two points. It is recommended that PIB are provided adjacent to each stair core at fire brigade access level.

13.7 Basement

13.7.1 Within Hurstway Walk and Testerton Walk, there is an existing service road through the centre accessed from the north of the site with garages accessed off the road. At Barandon Walk the former garages have been converted into office use and the service road is now a pedestrian route through.

13.8 Trigon comments

13.8.1 There is no requirement under the Building Regulations 2010 or the FSO to make improvements to the access and facilities for the fire and rescue service. However, as part of the proposed works to the Walkways that intend to refurbish and improve the current conditions, the following provisions will be provided as part of the fire safety strategy (REF: TRG-200084-RT-01-I03, dated: 19-May-22):

- Dry risers within each stair, with main outlets provided at each floor level. Inlets provided at ground level, typically adjacent to the entrance into the stair.
- Suitable fire vehicle access to each stair core, within 18m of the expected fire vehicles hard standing locations.
- Residential sprinkler protection throughout (allowing maximum hose lay distance to be extended from 45m to 60m)
- Unobstructed access routes that meet the recommendations of ADB's Table 13.1.
- PIBs provided to each stair core at ground floor level.
- Wayfinding signage.

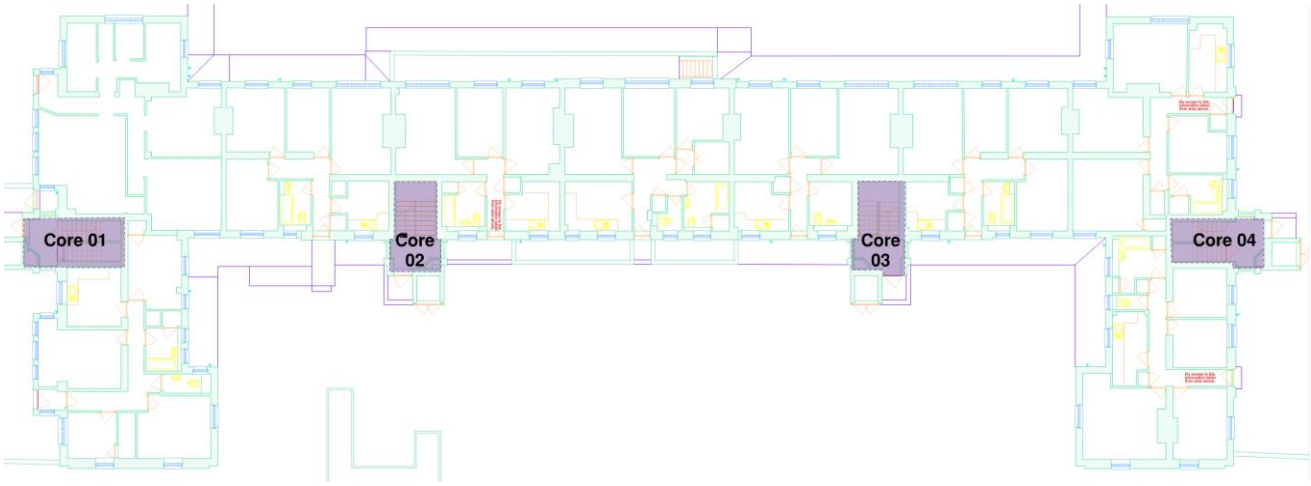
14. Bramley House

14.1 Description

14.1.1 Bramley House is a block of flats without an existing fire safety strategy.

14.1.2 The building comprises four residential blocks of flats, three of which consist of ground, plus four floor levels above (Cores 01, 03, and 04), and the other that consists of the same number of floors above ground, plus access to a basement level (Core 02).

Figure 14.1 – Bramley House, with Four cores illustrated



14.1.3 It is currently assumed that each block of flats adopts a defend in place evacuation strategy.

14.1.4 It is also assumed that the top storey height for each block of flats is less than 18m above ground floor level and therefore does not require the provision of a firefighting shaft.

14.1.5 Each block is served by a single stair core, with single level flats accessed via external balcony decks at each floor level.

14.1.6 The external cladding and other materials used within the build-up of the external walls are currently unknown.

14.2 Fire mains

14.2.1 From the plans available it is assumed that dry riser systems have not been installed.

14.2.2 A dry riser may not have been considered necessary to meet the recommendations of guidance at the time of construction. However, current guidance would recommend that block of flats should provide either; access for a pumping appliance to within 45m of all points inside each flat, or a fire main (dry riser).

14.3 Fire vehicle access

14.3.1 In accordance with ADB where dry risers are not provided, access for a pumping appliance should be provided within 45m of all points inside each flat, measured along the route of the hose.

14.3.2 Access to Bramley House is available from Blechynden Street and Silchester Road. The expected fire vehicle hard standing locations have been shown red in the figure below.

14.3.3 Access to Cores 02 and 04 is available from the gated courtyard/car park.

Figure 14.2 – Fire vehicle access to Bramley House

14.3.4 Based on the guidance set out in ADB, if the design for Bramley House was submitted for Building Regulation approval today, it is likely that the provision of dry risers within each stair core would be recommended to satisfy the functional requirements. It is therefore recommended that in the event that significant works are carried out at the block, consideration should be given to installing dry risers.

14.3.5 Fire vehicle access is available to the roads around the building (Bramley Road, Blechynden Street and Silchester Road) but not to within 18m of all stairs as there is not currently vehicular access to the courtyard at the rear of the building.

14.4 Fire service route

14.4.1 Access to the building is provided at ground floor level. Access to Core 01 and Core 04 is available from Blechynden Street and Silchester Road, respectively. Access to Cores 02 and 03 is available from the courtyard to the rear.

14.4.2 The gated entrance to the courtyard has a fob entry system including an intercom and a firefighting override switch.

14.4.3 Based on the large distance separations between kerbs (up to 7m) on approach to Bramley House, it is expected that suitable access along the roads is provided to Cores 01 and 04 but the distance to Cores 02 and 03 appear to be approximately 30m.

14.5 External hydrants

14.5.1 At least one hydrant is available within 90m of Bramley House. Based on the above it is considered that the hydrant provisions meet the recommendations ADB.

14.6 Premise information boxes (PIBs)

14.6.1 A PIB was provided within the courtyard of Bramley House and is visible on approaching the rear of the building.

14.7 Basement

14.7.1 Core 02 provides access to two units at basement level. Further confirmation should be provided to confirm what these two units are used for.

14.7.2 The two units at basement level also have access to the lightwell that consists of a stair to the ground floor level.

14.8 Trigon comments

14.8.1 There is no requirement under the Building Regulations 2010 or the FSO to make improvements to the access and facilities for the fire and rescue service.

14.8.2 Should works be undertaken to bring the Bramley House in line with the current design standard, then it is Trigons opinion that the design should include the following provisions:

- Dry risers within each stair, with main outlets provided at each floor level. Inlets provided at ground level, typically adjacent to the entrance into the stair but preferably within 18m of the expected fire vehicles hardstanding location.
- Unobstructed access routes that meet the recommendations of ADB's Table 13.1.
- PIBs provided to each stair core at ground floor level.
- Wayfinding signage.

15. Next steps

15.1.1 The following sets out the main areas that have been identified for further review, discussion and development in conjunction with the wider design team and other relevant stakeholders:

- Information to be provided for Bramley House to complete Section 14 of this report.
- Fire service access to the various basement levels is to be reviewed. This should be arranged with 'Safestore Self Storage'.
- Existing fire hydrants should be tested to ensure they are delivering water at a suitable pressure and flow.
- Recommendations within this report should be actioned by the relevant parties.

16. Conclusions

16.1.1 This report sets out how the existing fire service access and facility provisions compare to the recommendations of standard guidance, and whether they meet the recommendations of standard guidance.

16.1.2 This report and associated drawings set out the recommendations of guidance applicable to the site such that where works are carried out it is ensured that suitable access can be maintained during and after construction works.

16.1.3 This report is not expected to demonstrate compliance with functional requirements of the Building Regulations 2010 with regards to the provision to meet Building Regulation B5, and therefore should not form part of any Building Regulation application.

A.1. References

The following documents have been referred to in this report.

A.1.1 British Standard Code of Practice – CP 3 Chapter iv Part 1 (1962) Precautions against fire - Fire precautions in flats and maisonettes over 80ft in height. The Council for Codes of Practice British Standards Institution, 1962.

A.1.2 British Standard Code of Practice – CP 3 Chapter iv Part 1 (1971) Precautions against fire - flats and maisonettes (in blocks over two storeys). The Council for Codes of Practice British Standards Institution, 1971.

A.1.3 Building Regulations 2010, Her Majesty's Stationery Office (HMSO), England and Wales. September 2010.

A.1.4 Regulatory Reform (Fire Safety) Order 2005, SI 2005 No. 1541, Published by The Stationery Office Limited.

A.1.5 Fire Safety Risk Assessment guides published by H M Government 2006.

A.1.6 Approved Document B: Fire Safety – Volume 2: Buildings other than dwellings, 2019 edition. The Stationery Office Limited. 2019.

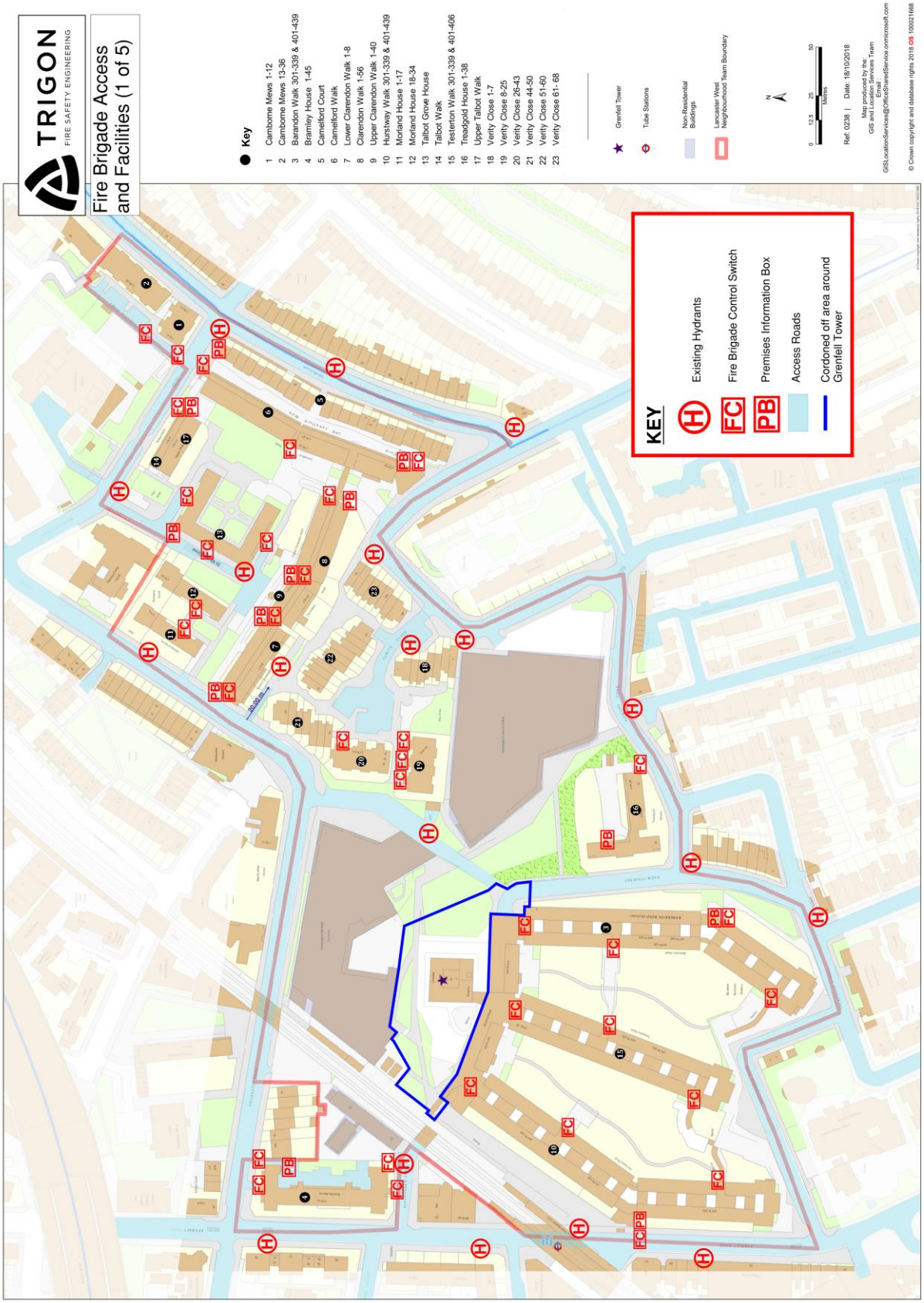
A.1.7 BS 9999: Fire safety in the design, management and use of buildings - Code of practice. British Standard Institution (BSI) Global, 2017.

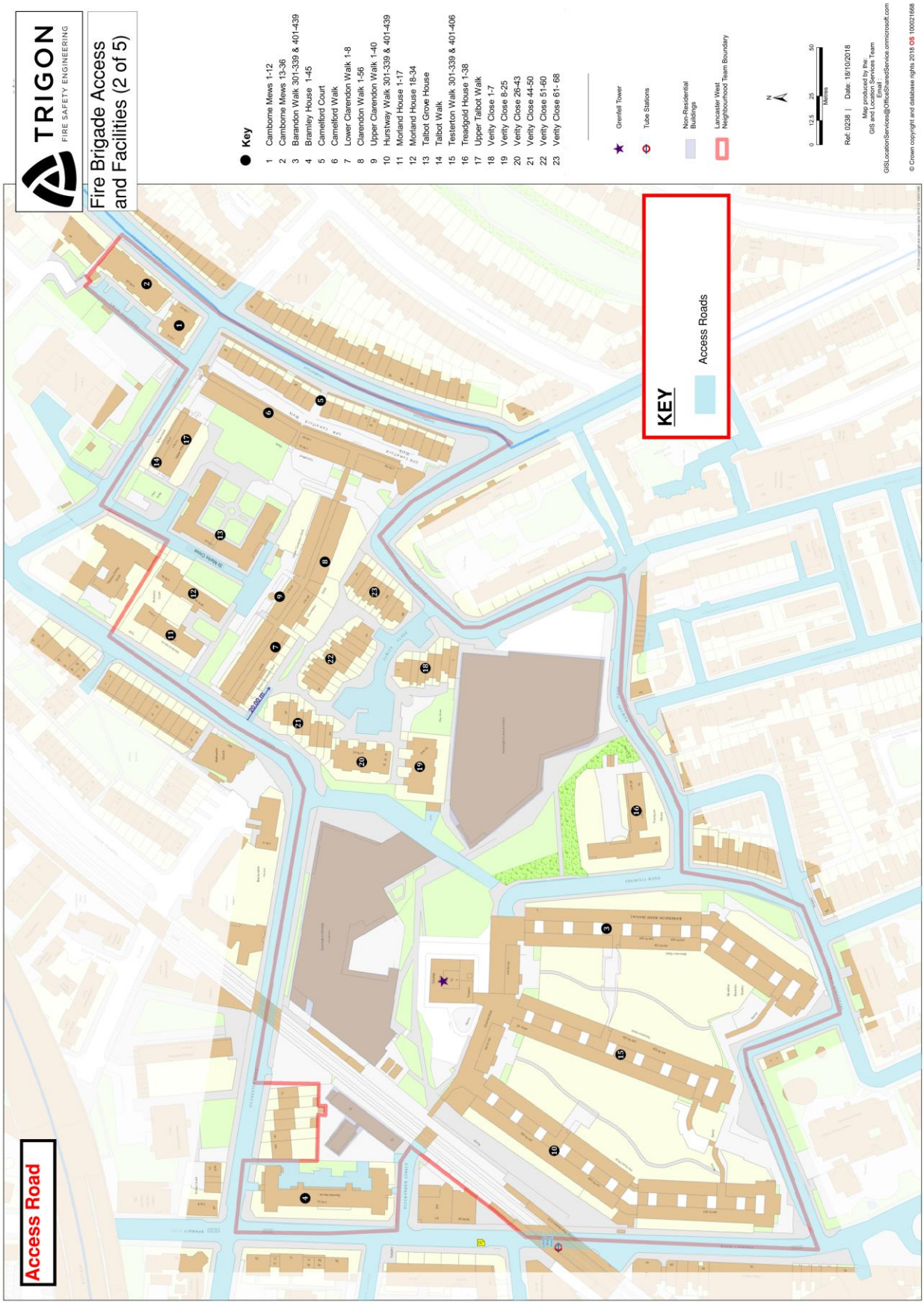
A.1.8 BS 9991: Fire safety in the design, management and use of residential buildings - Code of practice. British Standard Institution (BSI) Global, 2015.

A.1.9 London Fire Brigade, "GN29: Fire Safety Guidance Note - Access for Fire Appliances", London Fire Brigade, London, 2007.

A.1.10 BS 3251: 1976, Speciation. Indicator plates for fire hydrants and emergency water supplies. The British Standard Institution (BSI), 1976.

A.2. Marked-Up Site Plans: Fire Brigade Access and Facilities




TRIGON
FIRE SAFETY ENGINEERING
Fire Brigade Access and Facilities (2 of 5)
Key
1 Camborne Mews 1-12
2 Camborne Mews 13-36
3 Barandon Walk 301-339 & 401-439
4 Bramley House 1-45
5 Camelford Court
6 Camelford Walk
7 Lower Clarendon Walk 1-8
8 Clarendon Walk 1-56
9 Upper Clarendon Walk 1-40
10 Hurstway Walk 301-339 & 401-439
11 Morland House 1-17
12 Morland House 18-34
13 Talbot Grove House
14 Talbot Walk
15 Testerton Walk 301-339 & 401-406
16 Treadgold House 1-38
17 Upper Talbot Walk
18 Verity Close 1-7
19 Verity Close 8-25
20 Verity Close 26-43
21 Verity Close 44-50
22 Verity Close 51-60
23 Verity Close 61- 68
Grenfell Tower
Tube Stations
Non-Residential Buildings
Lancaster West Neighbourhood Team Boundary
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Map produced by the:
GIS and Location Services Team
GISLocationServices@OfficeSharedService.onmicrosoft.com
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Access Roads
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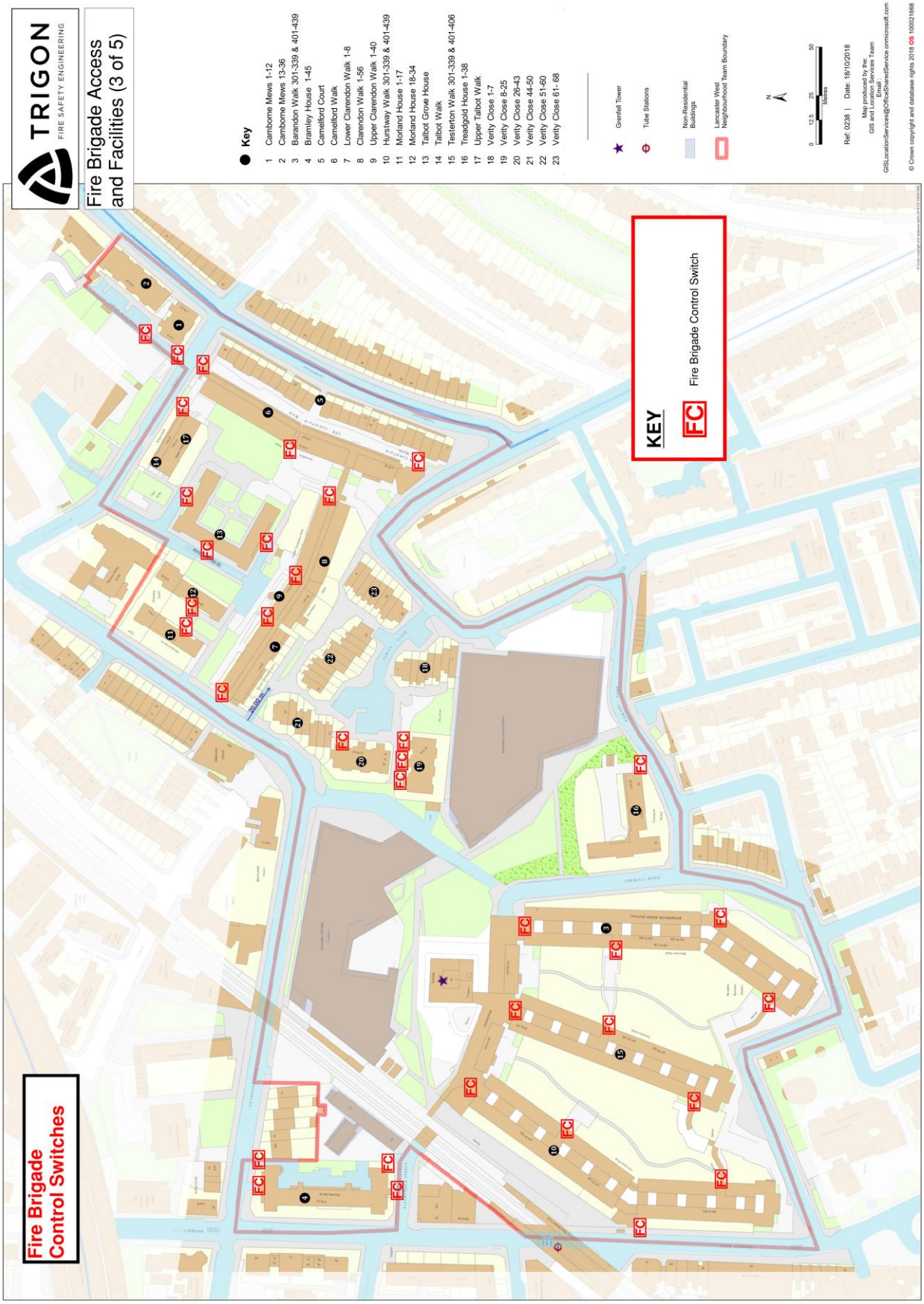
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22 Verity Close 51-60
23 Verity Close 61- 68
Grenfell Tower
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Non-Residential Buildings
Lancaster West Neighbourhood Team Boundary
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GISLocationServices@OfficeSharedService.onmicrosoft.com
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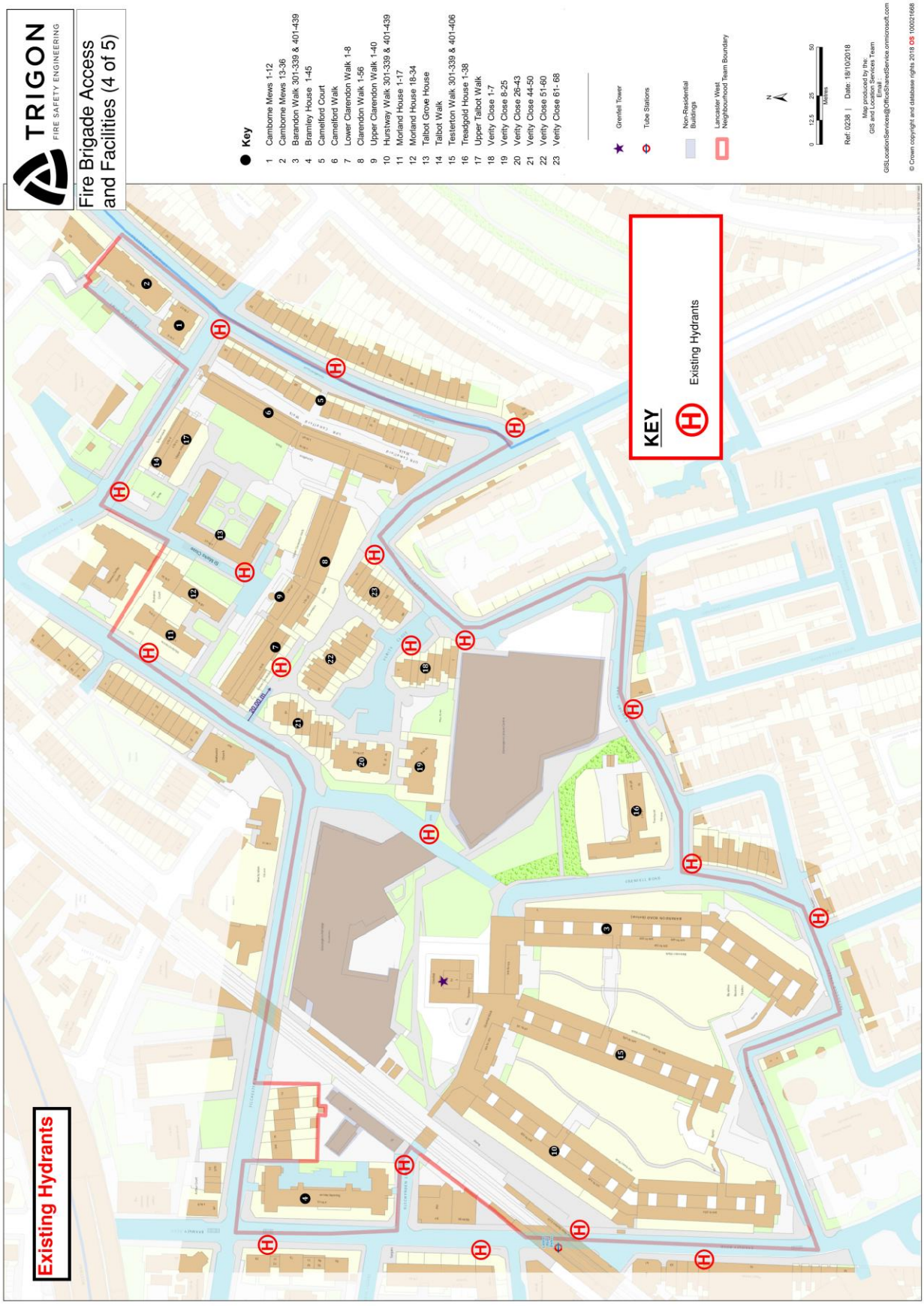
Fire Brigade Control Switch
Fire Brigade Control Switches


TRIGON
FIRE SAFETY ENGINEERING
Fire Brigade Access and Facilities (4 of 5)
Existing Hydrants
KEY
Existing Hydrants
Key
1 Camborne Mews 1-12
2 Camborne Mews 13-36
3 Barandon Walk 301-339 & 401-439
4 Bramley House 1-45
5 Camelford Court
6 Camelford Walk
7 Lower Clarendon Walk 1-8
8 Clarendon Walk 1-56
9 Upper Clarendon Walk 1-40
10 Hurstway Walk 301-339 & 401-439
11 Morland House 1-17
12 Morland House 18-34
13 Talbot Grove House
14 Talbot Walk
15 Testerton Walk 301-339 & 401-406
16 Treadgold House 1-38
17 Upper Talbot Walk
18 Verity Close 1-7
19 Verity Close 8-25
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21 Verity Close 44-50
22 Verity Close 51-60
23 Verity Close 61- 68
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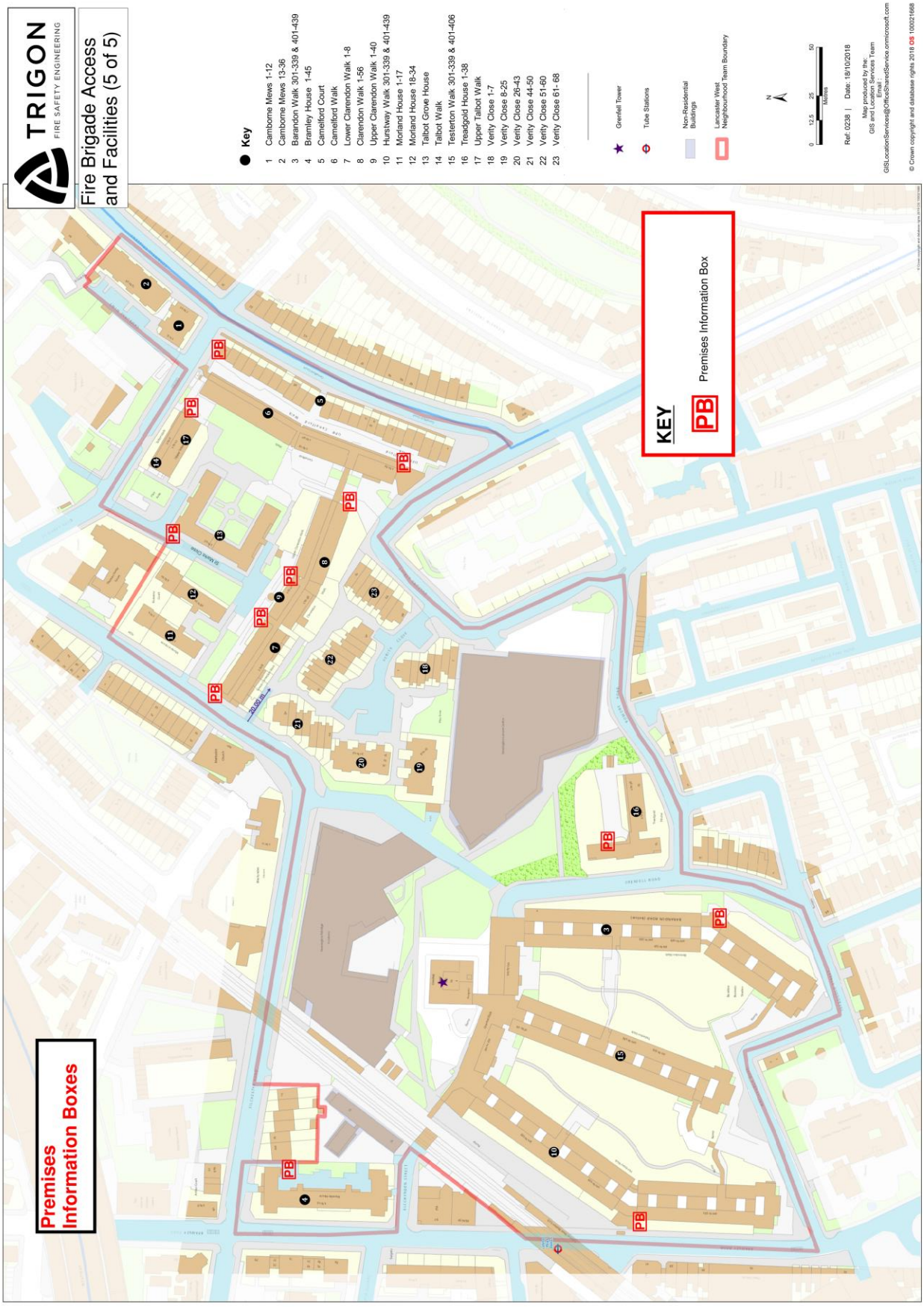

TRIGON
FIRE SAFETY ENGINEERING
Fire Brigade Access and Facilities (5 of 5)
Key
1 Camborne Mews 1-12
2 Camborne Mews 13-36
3 Barandon Walk 301-339 & 401-439
4 Bramley House 1-45
5 Camelford Court
6 Camelford Walk
7 Lower Clarendon Walk 1-8
8 Clarendon Walk 1-56
9 Upper Clarendon Walk 1-40
10 Hurstway Walk 301-339 & 401-439
11 Morland House 1-17
12 Morland House 18-34
13 Talbot Grove House
14 Talbot Walk
15 Testerton Walk 301-339 & 401-406
16 Treadgold House 1-38
17 Upper Talbot Walk
18 Verity Close 1-7
19 Verity Close 8-25
20 Verity Close 26-43
21 Verity Close 44-50
22 Verity Close 51-60
23 Verity Close 61- 68
Grenfell Tower
Tube Stations
Non-Residential Buildings
Lancaster West Neighbourhood Team Boundary
N
0 12.5 25 50
Metres
Ref: 0238 | Date: 18/10/2018
Map produced by the:
GIS and Location Services Team
Email:
GISLocationServices@OfficeSharedService.onmicrosoft.com
© Crown copyright and database rights 2018 OS 100021668
KEY
PB
Premises Information Box
Premises Information Boxes

A.3. Autodesk Plangrid Report

PlanGrid Tasks Report - Site - Nov 18 2022

Prepared by Francis Lee

Nov 18, 2022

Description

Issued by francis@trigonfire.com

Contents

#2 Premises Information Box

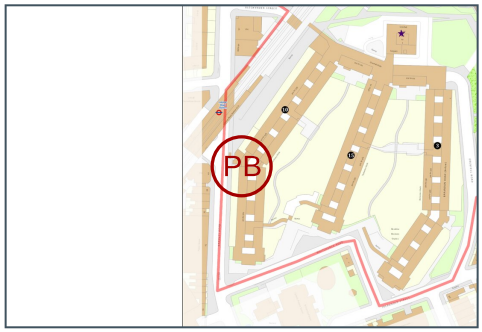
Status
Open

Type
Issue

Created
Jun 28, 2022 9:45 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 9:46 AM

Sheet
Site



Photos

20220628_104602_photo
David Bostelmann
Jun 28, 2022 9:46 AM

#3 General

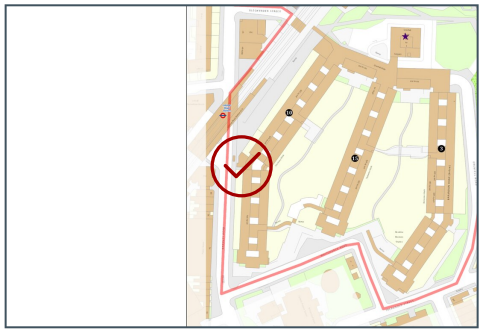
Status
Open

Type
Issue

Created
Jun 28, 2022 9:46 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 9:46 AM

Sheet
Site



Photos

20220628_104634_photo
David Bostelmann
Jun 28, 2022 9:46 AM

20220628_104624_photo
David Bostelmann
Jun 28, 2022 9:46 AM

#4 Hydrant

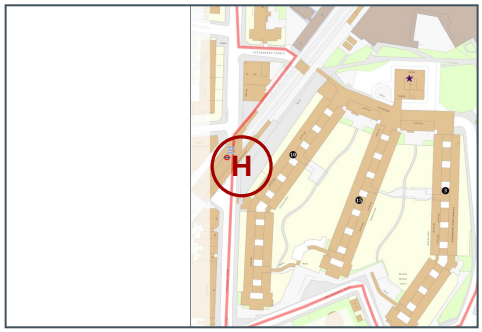
Status
Open

Type
Issue

Created
Jun 28, 2022 9:47 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 9:47 AM

Sheet
Site



Photos

20220628_104730_photo
David Bostelmann
Jun 28, 2022 9:47 AM

#5 Access Issues

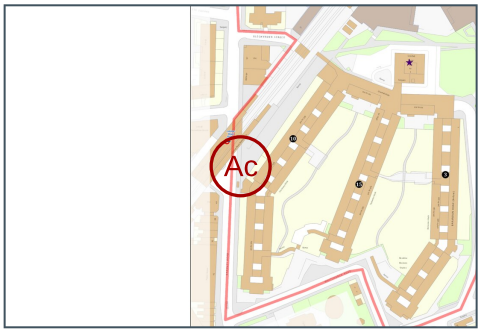
Status
Open

Type
Issue

Created
Jun 28, 2022 9:47 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 9:48 AM

Sheet
Site



Photos

20220628_104808_photo
David Bostelmann
Jun 28, 2022 9:48 AM

20220628_104750_photo
David Bostelmann
Jun 28, 2022 9:47 AM

#6 General

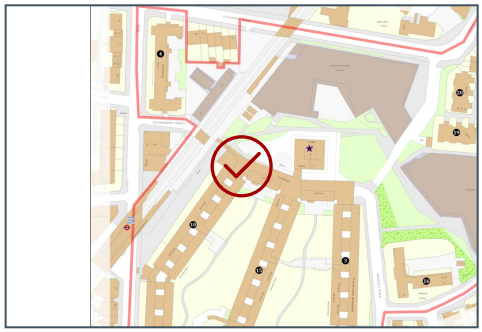
Status
Open

Type
Issue

Created
Jun 28, 2022 9:50 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 9:50 AM

Sheet
Site



Photos

20220628_105029_photo
David Bostelmann
Jun 28, 2022 9:50 AM

#7 Dry Riser Inlet

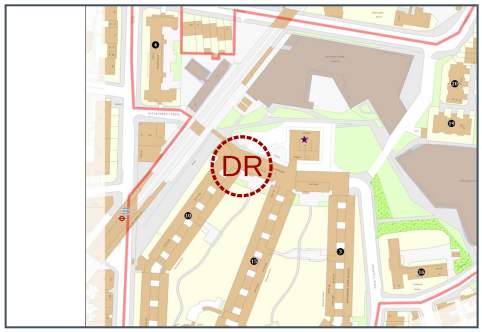
Status
In Review

Type
Issue

Created
Jun 28, 2022 9:50 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 9:51 AM

Sheet
Site



Photos

20220628_105114_photo
David Bostelmann
Jun 28, 2022 9:51 AM

#8 General

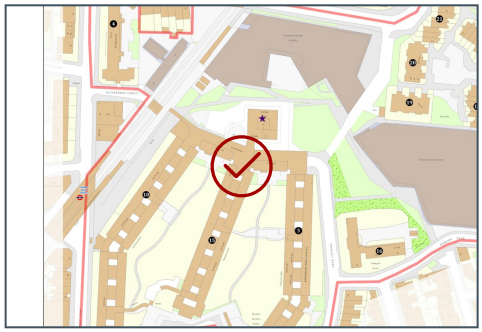
Status
Open

Type
Issue

Created
Jun 28, 2022 9:51 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 9:52 AM

Sheet
Site



Photos

20220628_105208_photo
David Bostelmann
Jun 28, 2022 9:52 AM

#9 Dry Riser Inlet

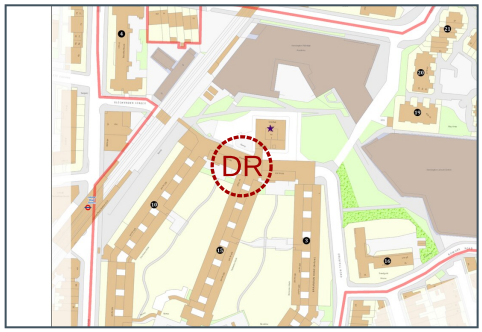
Status
In Review

Type
Issue

Created
Jun 28, 2022 9:52 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 9:52 AM

Sheet
Site



Photos

20220628_105230_photo
David Bostelmann
Jun 28, 2022 9:52 AM

#10 Dry Riser Inlet

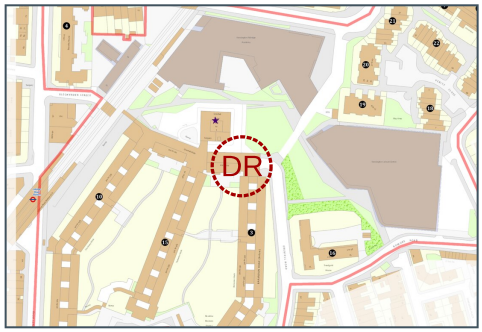
Status
In Review

Type
Issue

Created
Jun 28, 2022 9:53 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 9:53 AM

Sheet
Site



Photos

20220628_105320_photo
David Bostelmann
Jun 28, 2022 9:53 AM

#11 General

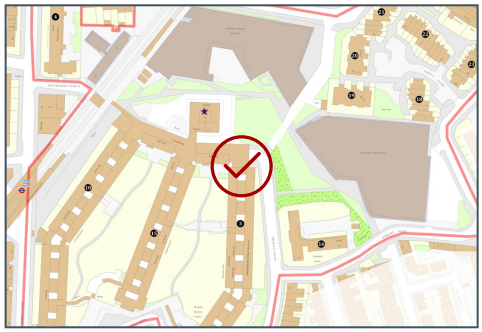
Status
Open

Type
Issue

Created
Jun 28, 2022 9:53 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 9:53 AM

Sheet
Site



Photos

20220628_105351_photo
David Bostelmann
Jun 28, 2022 9:53 AM

#12 General

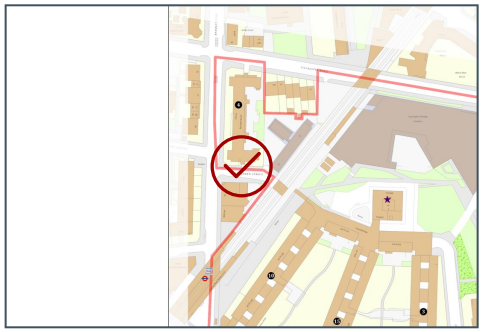
Status
Open

Type
Issue

Created
Jun 28, 2022 10:01 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:02 AM

Sheet
Site



Photos

20220628_110223_photo
David Bostelmann
Jun 28, 2022 10:02 AM

20220628_110207_photo
David Bostelmann
Jun 28, 2022 10:02 AM

#13 Hydrant

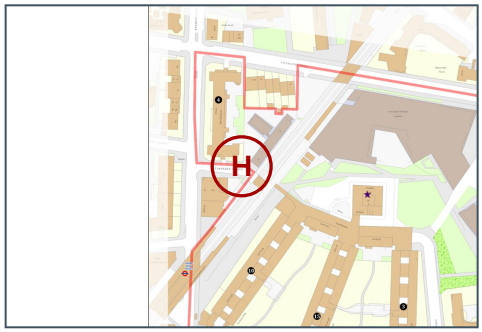
Status
Open

Type
Issue

Created
Jun 28, 2022 10:02 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:03 AM

Sheet
Site



Photos

20220628_110259_photo
David Bostelmann
Jun 28, 2022 10:02 AM

20220628_110246_photo
David Bostelmann
Jun 28, 2022 10:02 AM

#14 General

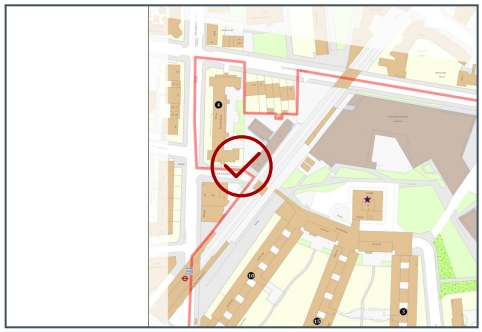
Status
Open

Type
Issue

Created
Jun 28, 2022 10:03 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:03 AM

Sheet
Site



Photos

20220628_110328_photo
David Bostelmann
Jun 28, 2022 10:03 AM

#15 Premises Information Box

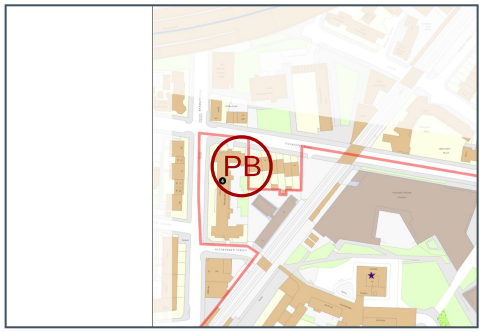
Status
Open

Type
Issue

Created
Jun 28, 2022 10:03 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:03 AM

Sheet
Site



Photos

20220628_110346_photo
David Bostelmann
Jun 28, 2022 10:03 AM

#16 Access Issues

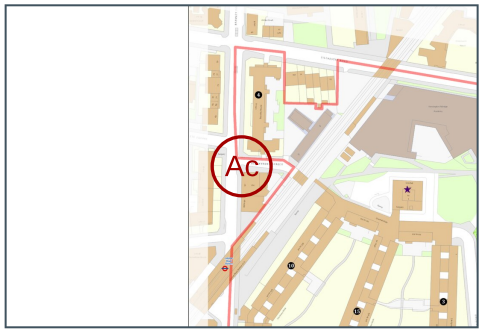
Status
Open

Type
Issue

Created
Jun 28, 2022 10:04 AM
david@trigonfire.com

Last Updated
Nov 18, 2022 4:44 PM

Sheet
Site



Photos

20220628_110458_photo
David Bostelmann
Jun 28, 2022 10:04 AM

#17 General

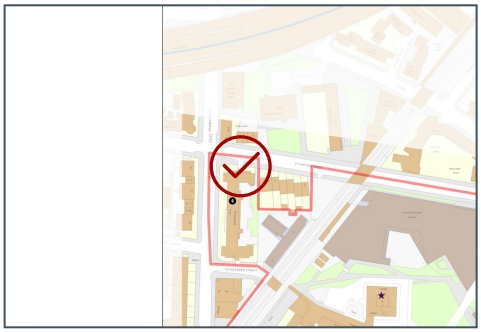
Status
Open

Type
Issue

Created
Jun 28, 2022 10:06 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:06 AM

Sheet
Site



Photos

20220628_110633_photo
David Bostelmann
Jun 28, 2022 10:06 AM

#18 General

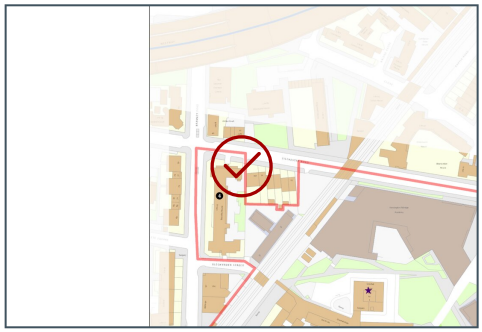
Status
Open

Type
Issue

Created
Jun 28, 2022 10:06 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:07 AM

Sheet
Site



Photos

20220628_110709_photo
David Bostelmann
Jun 28, 2022 10:07 AM

#19 Hydrant

Status
Open

Type
Issue

Description
FH

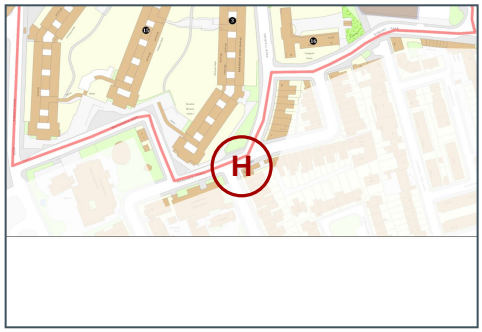
Assignees
francis@trigonfire.com
david@trigonfire.com

Watchers
francis@trigonfire.com
david@trigonfire.com

Created
Jun 28, 2022 10:07 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:10 AM

Sheet
Site



Photos

20220628_110735_photo
Francis Lee
Jun 28, 2022 10:07 AM

#20 Hydrant

Status
Open

Type
Issue

Description
FH

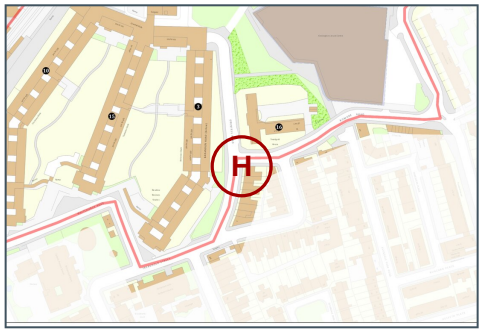
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:09 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:10 AM

Sheet
Site



Photos

20220628_111008_photo
Francis Lee
Jun 28, 2022 10:10 AM

#21 Hydrant

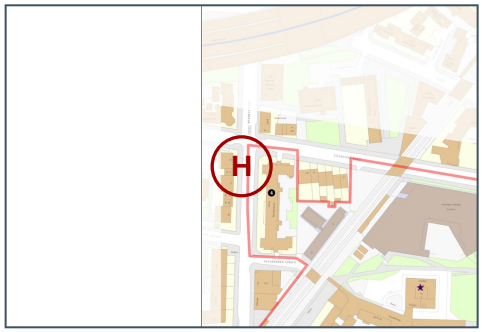
Status
Open

Type
Issue

Created
Jun 28, 2022 10:10 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:10 AM

Sheet
Site



Photos

20220628_111037_photo
David Bostelmann
Jun 28, 2022 10:10 AM

#22 Hydrant

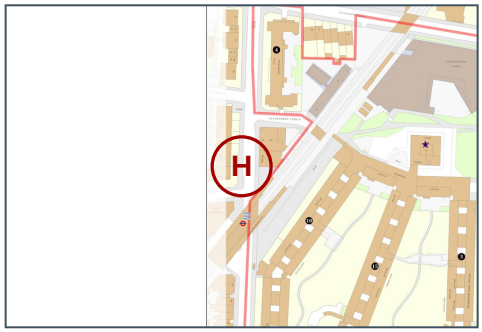
Status
Open

Type
Issue

Created
Jun 28, 2022 10:11 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:13 AM

Sheet
Site



Photos

20220628_111201_photo
David Bostelmann
Jun 28, 2022 10:12 AM

#23 Hydrant

Status
Open

Type
Issue

Description
FH

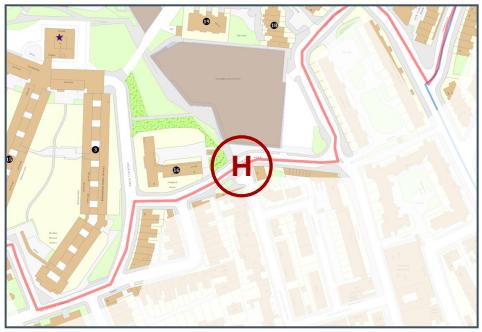
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:12 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:13 AM

Sheet
Site



Photos

20220628_111255_photo
Francis Lee
Jun 28, 2022 10:12 AM

#24 Hydrant

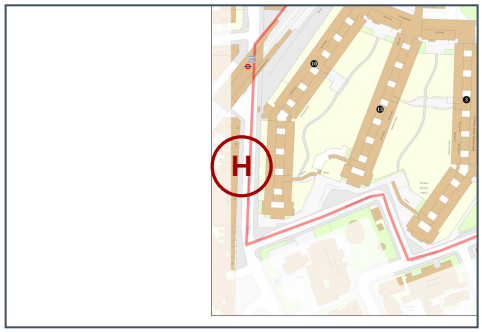
Status
Open

Type
Issue

Created
Jun 28, 2022 10:14 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:14 AM

Sheet
Site



Photos

20220628_111421_photo
David Bostelmann
Jun 28, 2022 10:14 AM

#25 Hydrant

Status
Open

Type
Issue

Description
FH

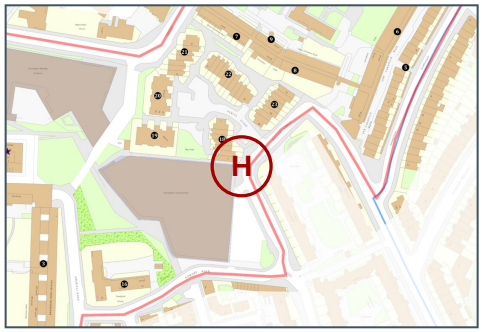
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:16 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:16 AM

Sheet
Site



Photos

20220628_111642_photo
Francis Lee
Jun 28, 2022 10:16 AM

#26 Hydrant

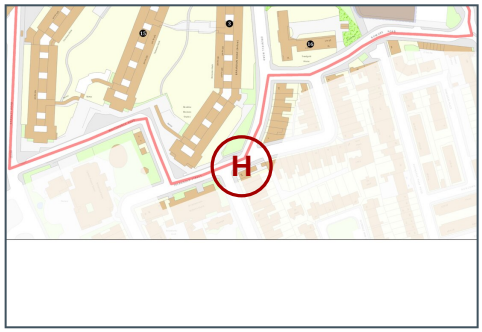
Status
Open

Type
Issue

Created
Jun 28, 2022 10:17 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:17 AM

Sheet
Site



Photos

20220628_111747_photo
David Bostelmann
Jun 28, 2022 10:17 AM

#27 Hydrant

Status
Open

Type
Issue

Description
FH

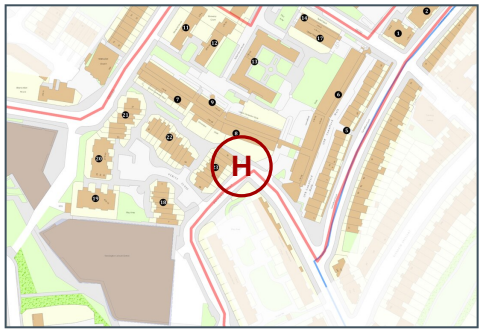
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:18 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:28 AM

Sheet
Site



Photos

20220628_111835_photo
Francis Lee
Jun 28, 2022 10:18 AM

#28 Hydrant

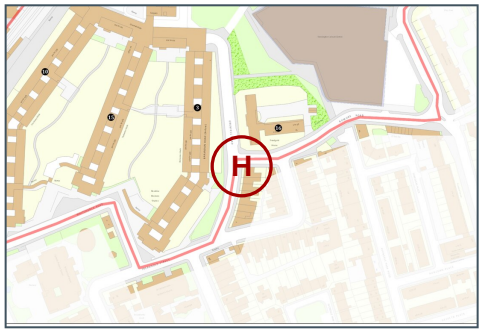
Status
Open

Type
Issue

Created
Jun 28, 2022 10:18 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:19 AM

Sheet
Site



Photos

20220628_111906_photo
David Bostelmann
Jun 28, 2022 10:19 AM

#29 Access Issues

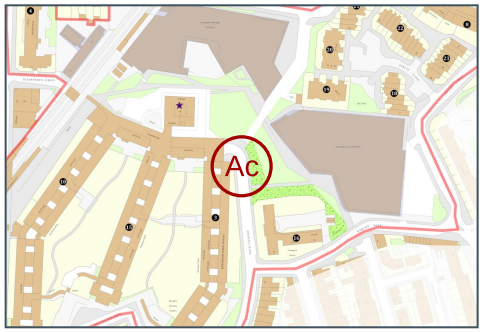
Status
Open

Type
Issue

Created
Jun 28, 2022 10:19 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:26 AM

Sheet
Site



Photos

20220628_112653_photo
David Bostelmann
Jun 28, 2022 10:26 AM

#30 Premises Information Box

Status
Open

Type
Issue

Description
PIB

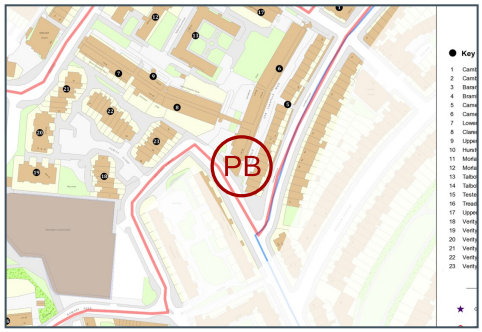
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:20 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:20 AM

Sheet
Site



Photos

20220628_112023_photo
Francis Lee
Jun 28, 2022 10:20 AM

#31 General

Status
Open

Type
Issue

Description
Fire Control Switch

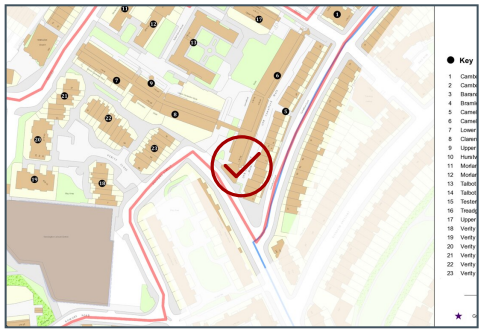
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:21 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:21 AM

Sheet
Site



Photos

20220628_112120_photo
Francis Lee
Jun 28, 2022 10:21 AM

#32 General

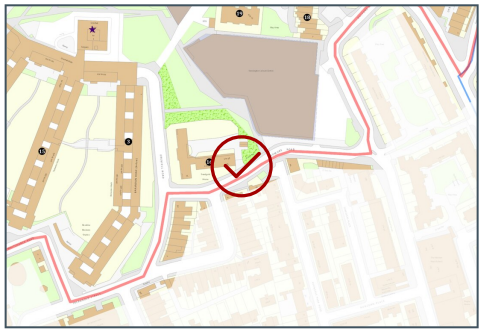
Status
Open

Type
Issue

Created
Jun 28, 2022 10:21 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:24 AM

Sheet
Site



Photos

20220628_112356_photo
David Bostelmann
Jun 28, 2022 10:23 AM

20220628_112122_photo
David Bostelmann
Jun 28, 2022 10:21 AM

#33 Premises Information Box

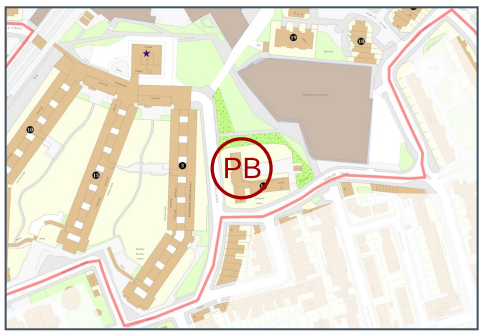
Status
Open

Type
Issue

Created
Jun 28, 2022 10:22 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:22 AM

Sheet
Site



#34 Stair

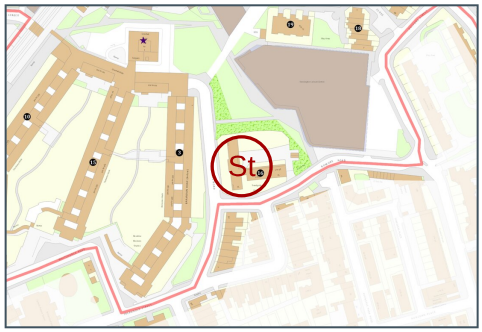
Status
Open

Type
Issue

Created
Jun 28, 2022 10:22 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:23 AM

Sheet
Site



Photos

20220628_112319_photo
David Bostelmann
Jun 28, 2022 10:23 AM

20220628_112311_photo
David Bostelmann
Jun 28, 2022 10:23 AM

20220628_112256_photo
David Bostelmann
Jun 28, 2022 10:22 AM

#35 Hydrant

Status
Open

Type
Issue

Description
FH

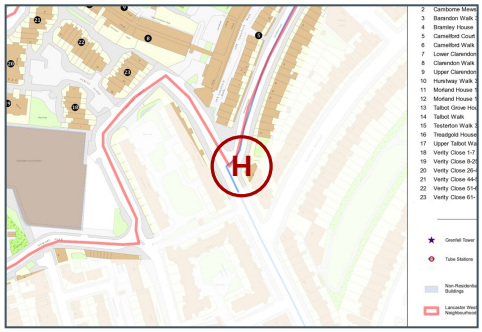
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:22 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:32 AM

Sheet
Site



Photos

20220628_113009_photo
Francis Lee
Jun 28, 2022 10:30 AM

#36 Hydrant

Status
Open

Type
Issue

Description
FH

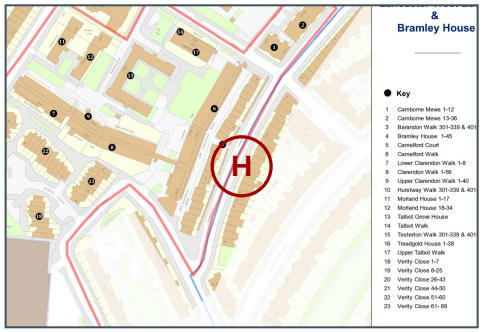
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:24 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:29 AM

Sheet
Site



Photos

20220628_112910_photo
Francis Lee
Jun 28, 2022 10:29 AM

#37 Access Issues

Status
Open

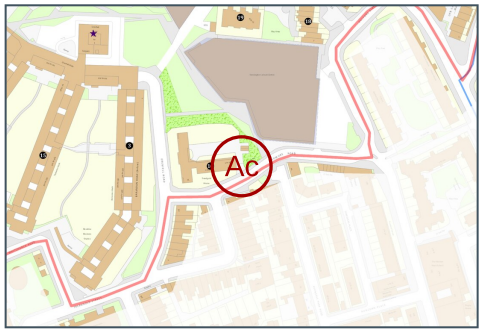
Type
Issue

Description
3.1m wide.

Created
Jun 28, 2022 10:25 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:25 AM

Sheet
Site



Photos

20220628_112542_photo
David Bostelmann
Jun 28, 2022 10:25 AM

#38 Access Issues

Status
Open

Type
Issue

Description
FB access

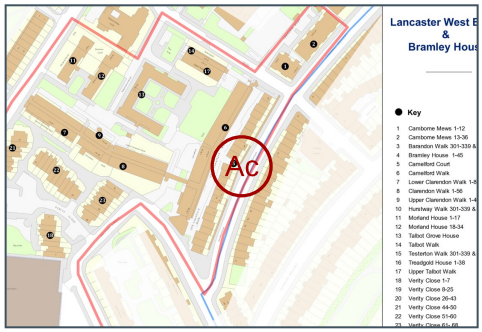
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:25 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:26 AM

Sheet
Site



Photos

20220628_112529_photo
Francis Lee
Jun 28, 2022 10:25 AM

#39 Access Issues

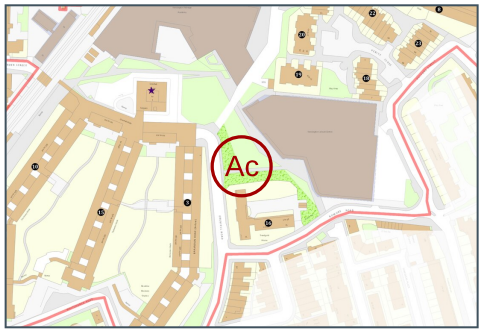
Status
Open

Type
Issue

Created
Jun 28, 2022 10:27 AM
david@trigonfire.com

Last Updated
Nov 18, 2022 4:45 PM

Sheet
Site



Photos

20220628_112736_photo
David Bostelmann
Jun 28, 2022 10:27 AM

#40 Hydrant

Status
Open

Type
Issue

Description
FH

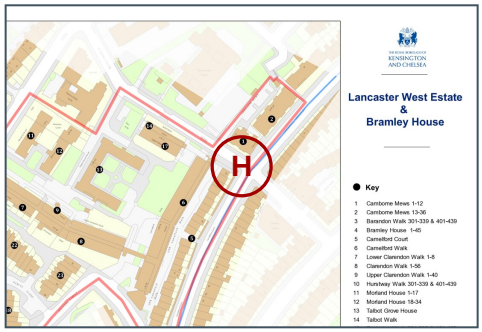
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:27 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:28 AM

Sheet
Site



Photos

20220628_112824_photo
Francis Lee
Jun 28, 2022 10:28 AM

#41 Hydrant

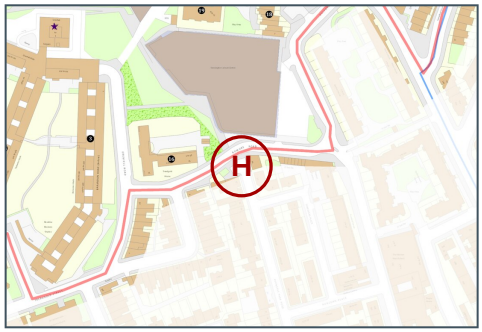
Status
Open

Type
Issue

Created
Jun 28, 2022 10:28 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:29 AM

Sheet
Site



Photos

20220628_112907_photo
David Bostelmann
Jun 28, 2022 10:29 AM

#42 Hydrant

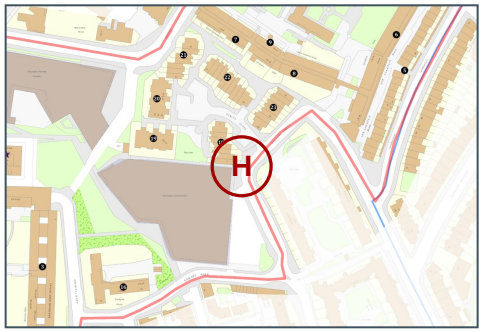
Status
Open

Type
Issue

Created
Jun 28, 2022 10:31 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:31 AM

Sheet
Site



Photos

20220628_113150_photo
David Bostelmann
Jun 28, 2022 10:31 AM

#43 Access Issues

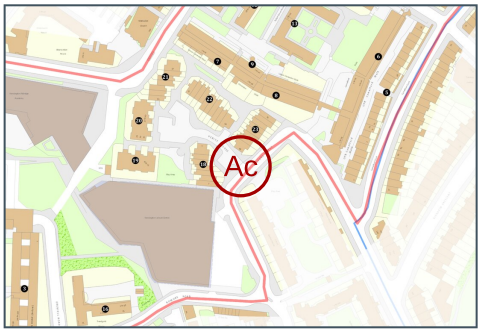
Status
Open

Type
Issue

Created
Jun 28, 2022 10:32 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 11:15 AM

Sheet
Site



Photos

20220628_113235_photo
David Bostelmann
Jun 28, 2022 10:32 AM

#44 Premises Information Box

Status
Open

Type
Issue

Description
PIB

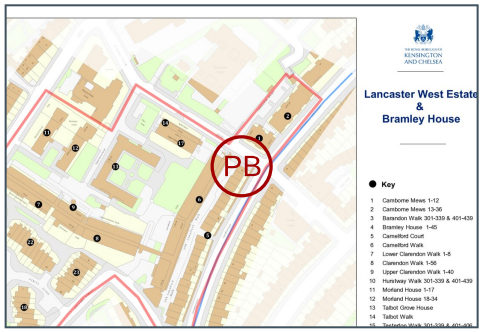
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:32 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:32 AM

Sheet
Site



Photos

20220628_113223_photo
Francis Lee
Jun 28, 2022 10:32 AM

#45 Hydrant

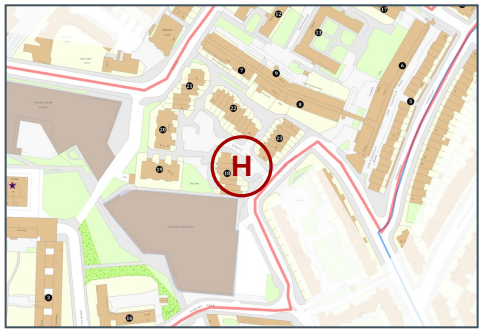
Status
Open

Type
Issue

Created
Jun 28, 2022 10:32 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:33 AM

Sheet
Site



Photos

20220628_113308_photo
David Bostelmann
Jun 28, 2022 10:33 AM

#46 General

Status
Open

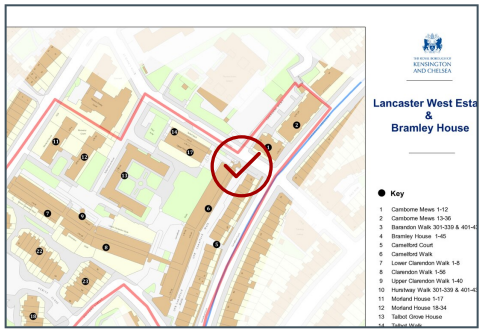
Type
Issue

Description
Fire Control Switch

Created
Jun 28, 2022 10:32 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:33 AM

Sheet
Site



Photos

20220628_113318_photo
Francis Lee
Jun 28, 2022 10:33 AM

#47 Access Issues

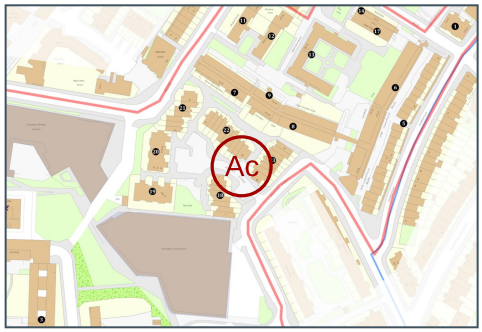
Status
Open

Type
Issue

Created
Jun 28, 2022 10:33 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:33 AM

Sheet
Site



Photos

20220628_113343_photo
David Bostelmann
Jun 28, 2022 10:33 AM

#49 General

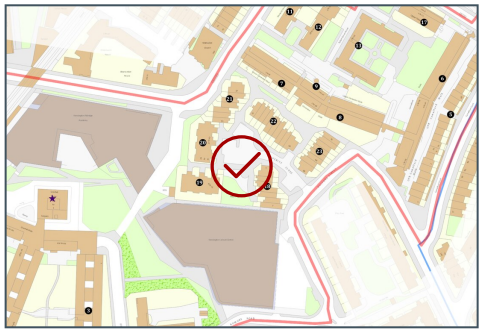
Status
Open

Type
Issue

Created
Jun 28, 2022 10:34 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:34 AM

Sheet
Site



Photos

20220628_113421_photo
David Bostelmann
Jun 28, 2022 10:34 AM

#50 Access Issues

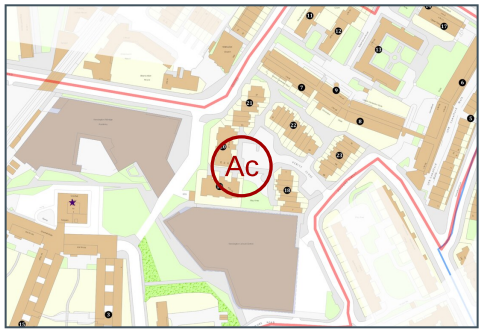
Status
Open

Type
Issue

Created
Jun 28, 2022 10:35 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:35 AM

Sheet
Site



Photos

20220628_113524_photo
David Bostelmann
Jun 28, 2022 10:35 AM

#51 Stair

Status
In Review

Type
Issue

Created
Jun 28, 2022 10:35 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:39 AM

Sheet
Site

Photos

20220628_113542_photo
David Bostelmann
Jun 28, 2022 10:35 AM

#52 Stair

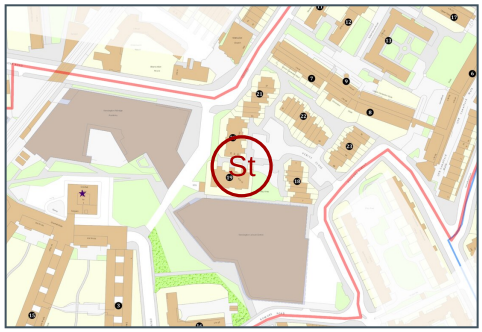
Status
Open

Type
Issue

Created
Jun 28, 2022 10:35 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:36 AM

Sheet
Site



Photos

20220628_113558_photo
David Bostelmann
Jun 28, 2022 10:35 AM

#53 Stair

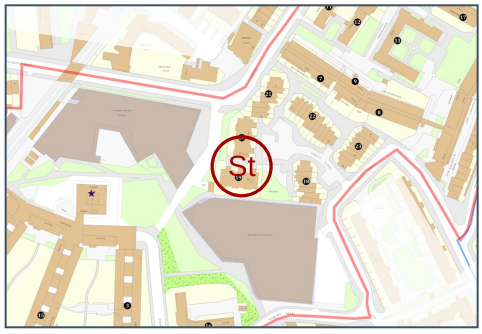
Status
Open

Type
Issue

Created
Jun 28, 2022 10:36 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:36 AM

Sheet
Site



#54 Stair

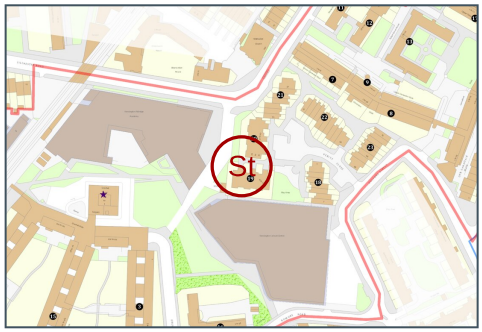
Status
Open

Type
Issue

Created
Jun 28, 2022 10:36 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:36 AM

Sheet
Site



Photos

20220628_113641_photo
David Bostelmann
Jun 28, 2022 10:36 AM

#55 General

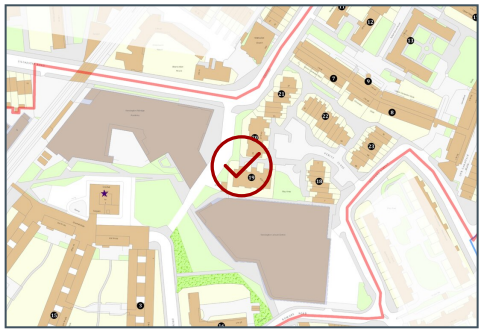
Status
Open

Type
Issue

Created
Jun 28, 2022 10:36 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:37 AM

Sheet
Site



Photos

20220628_113656_photo
David Bostelmann
Jun 28, 2022 10:36 AM

#56 Hydrant

Status
Open

Type
Issue

Description
FH

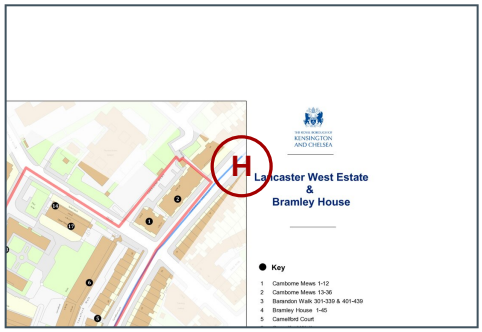
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:36 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:37 AM

Sheet
Site



Photos

20220628_113715_photo
Francis Lee
Jun 28, 2022 10:37 AM

20220628_113704_photo
Francis Lee
Jun 28, 2022 10:37 AM

#58 General

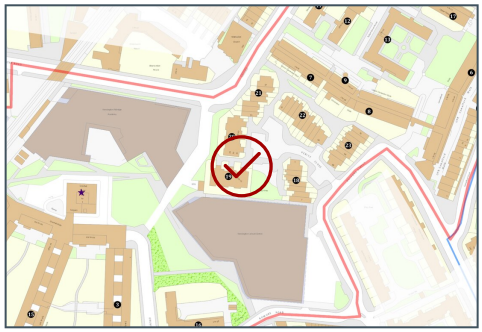
Status
Open

Type
Issue

Created
Jun 28, 2022 10:37 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:38 AM

Sheet
Site



Photos

20220628_113802_photo
David Bostelmann
Jun 28, 2022 10:38 AM

#59 Stair

Status
Open

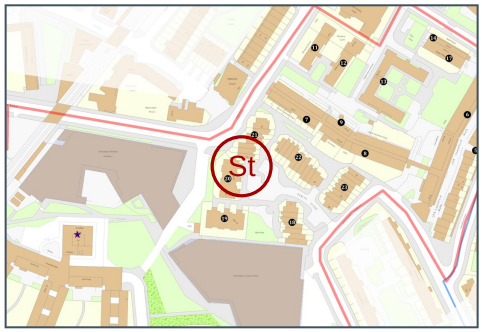
Type
Issue

Description

Created
Jun 28, 2022 10:38 AM
david@trigonfire.com

Last Updated
Nov 18, 2022 4:46 PM

Sheet
Site



Photos

20220628_113850_photo
David Bostelmann
Jun 28, 2022 10:38 AM

#60 Stair

Status
In Review

Type
Issue

Created
Jun 28, 2022 10:39 AM
david@trigonfire.com

Last Updated
Nov 18, 2022 4:46 PM

Sheet
Site

Photos

20220628_113922_photo
David Bostelmann
Jun 28, 2022 10:39 AM

#61 General

Status
Open

Type
Issue

Description
Fire control switch

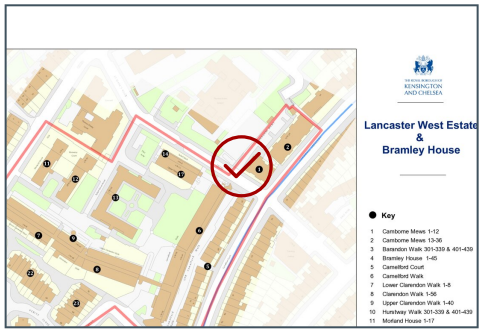
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:39 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:40 AM

Sheet
Site



Photos

20220628_114030_photo
Francis Lee
Jun 28, 2022 10:40 AM

20220628_114020_photo
Francis Lee
Jun 28, 2022 10:40 AM

#62 Access Issues

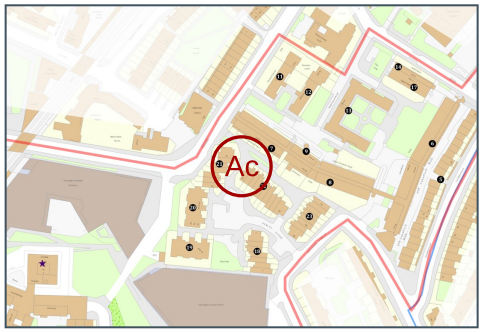
Status
Open

Type
Issue

Created
Jun 28, 2022 10:40 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:40 AM

Sheet
Site



Photos

20220628_114041_photo
David Bostelmann
Jun 28, 2022 10:40 AM

#63 General

Status
Open

Type
Issue

Description
Fire control switch

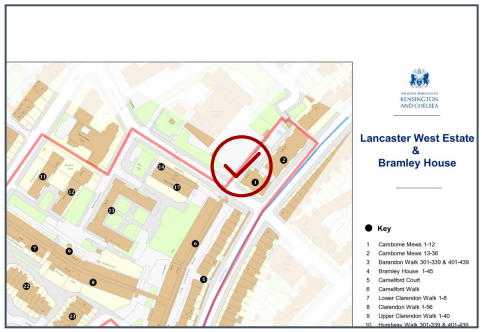
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:40 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:41 AM

Sheet
Site



Photos

20220628_114125_photo
Francis Lee
Jun 28, 2022 10:41 AM

20220628_114117_photo
Francis Lee
Jun 28, 2022 10:41 AM

#64 Access Issues

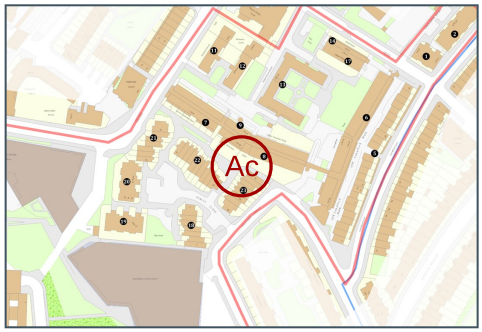
Status
Open

Type
Issue

Created
Jun 28, 2022 10:42 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:42 AM

Sheet
Site



Photos

20220628_114232_photo
David Bostelmann
Jun 28, 2022 10:42 AM

#65 Hydrant

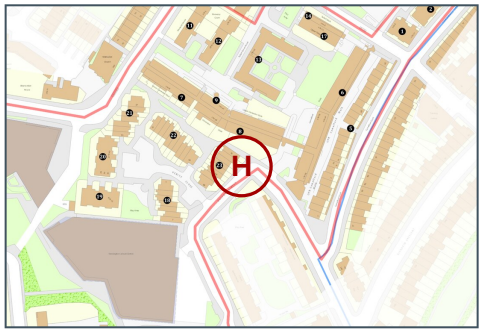
Status
Open

Type
Issue

Created
Jun 28, 2022 10:42 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:43 AM

Sheet
Site



Photos

20220628_114317_photo
David Bostelmann
Jun 28, 2022 10:43 AM

#66 Premises Information Box

Status
Open

Type
Issue

Description
PIB

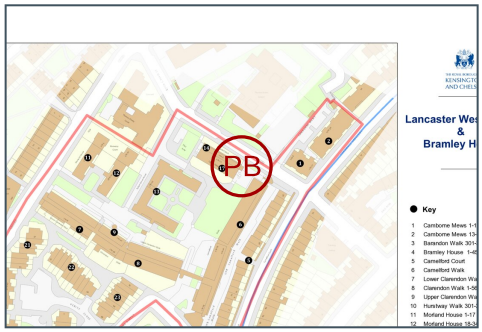
Assignees
francis@trigonfire.com
david@trigonfire.com

Watchers
francis@trigonfire.com
david@trigonfire.com

Created
Jun 28, 2022 10:42 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:43 AM

Sheet
Site



Photos

20220628_114319_photo
Francis Lee
Jun 28, 2022 10:43 AM

#67 General

Status
Open

Type
Issue

Description
Fire control switch

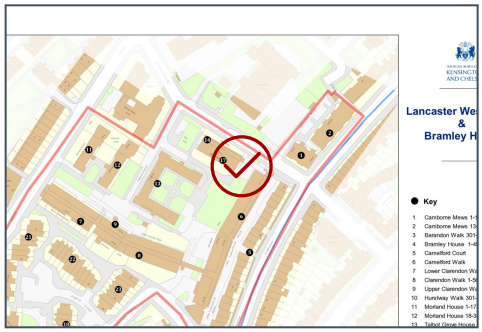
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:43 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:44 AM

Sheet
Site



Photos

20220628_114406_photo
Francis Lee
Jun 28, 2022 10:44 AM

#68 Access Issues

Status
Open

Type
Issue

Description
Access to camelford court

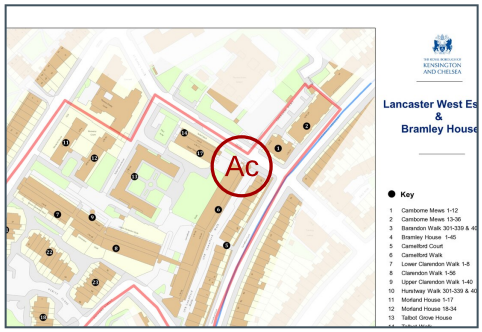
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:45 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:46 AM

Sheet
Site



Photos

20220628_114538_photo
Francis Lee
Jun 28, 2022 10:45 AM

#69 Hydrant

Status
Open

Type
Issue

Description
FH

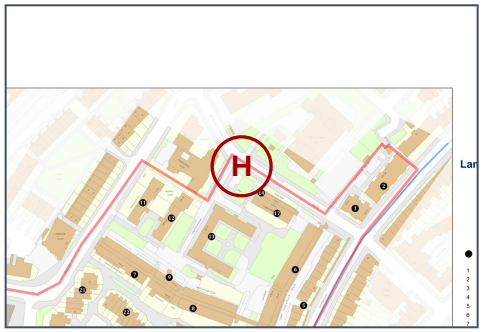
Assignees
francis@trigonfire.com
david@trigonfire.com

Watchers
francis@trigonfire.com
david@trigonfire.com

Created
Jun 28, 2022 10:47 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:47 AM

Sheet
Site



Photos

20220628_114730_photo
Francis Lee
Jun 28, 2022 10:47 AM

#70 Access Issues

Status
Open

Type
Issue

Description
No PIB or controls

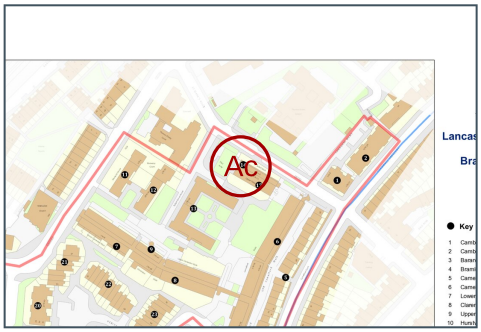
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:52 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:53 AM

Sheet
Site



Photos

20220628_115318_photo
Francis Lee
Jun 28, 2022 10:53 AM

#71 Access Issues

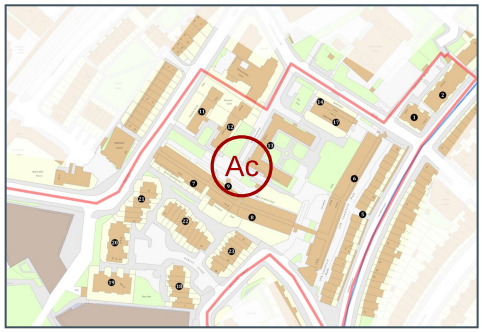
Status
Open

Type
Issue

Created
Jun 28, 2022 10:53 AM
david@trigonfire.com

Last Updated
Nov 18, 2022 4:48 PM

Sheet
Site



Photos

20220628_115333_photo
David Bostelmann
Jun 28, 2022 10:53 AM

#72 Hydrant

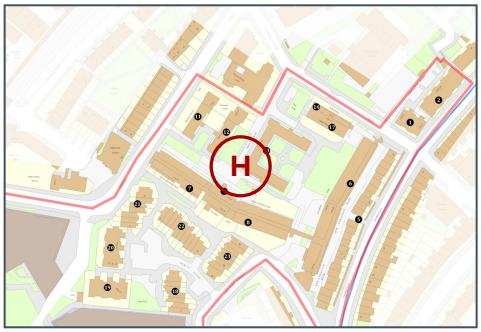
Status
Open

Type
Issue

Created
Jun 28, 2022 10:54 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:54 AM

Sheet
Site



Photos

20220628_115428_photo
David Bostelmann
Jun 28, 2022 10:54 AM

#73 General

Status
Open

Type
Issue

Description
Fire control switch

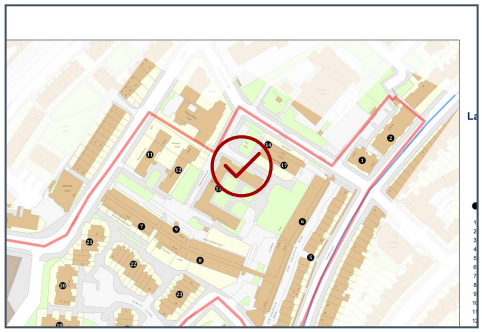
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:54 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:54 AM

Sheet
Site



Photos

20220628_115427_photo
Francis Lee
Jun 28, 2022 10:54 AM

#75 Stair

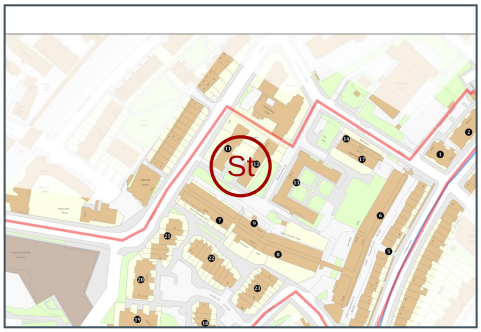
Status
Open

Type
Issue

Created
Jun 28, 2022 10:55 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:55 AM

Sheet
Site



Photos

20220628_115539_photo
David Bostelmann
Jun 28, 2022 10:55 AM

#77 Stair

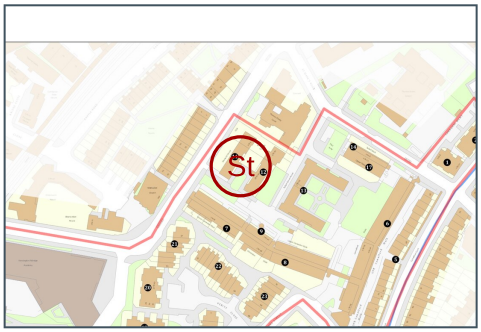
Status
Open

Type
Issue

Created
Jun 28, 2022 10:55 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:56 AM

Sheet
Site



Photos

20220628_115611_photo
David Bostelmann
Jun 28, 2022 10:56 AM

20220628_115556_photo
David Bostelmann
Jun 28, 2022 10:55 AM

#78 Access Issues

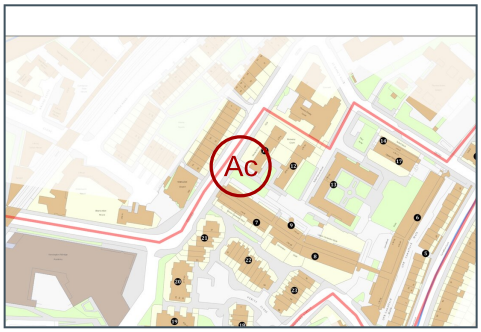
Status
Open

Type
Issue

Created
Jun 28, 2022 10:56 AM
david@trigonfire.com

Last Updated
Nov 18, 2022 4:49 PM

Sheet
Site



Photos

20220628_115642_photo
David Bostelmann
Jun 28, 2022 10:56 AM

#79 Premises Information Box

Status
Open

Type
Issue

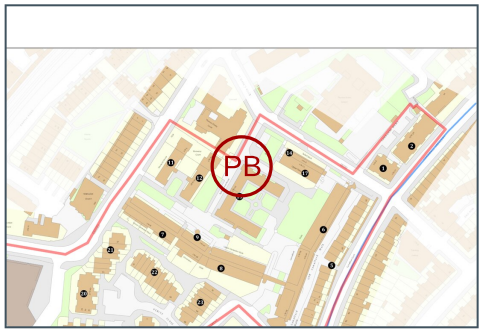
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:56 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:57 AM

Sheet
Site



Photos

20220628_115656_photo
Francis Lee
Jun 28, 2022 10:56 AM

#80 General

Status
Open

Type
Issue

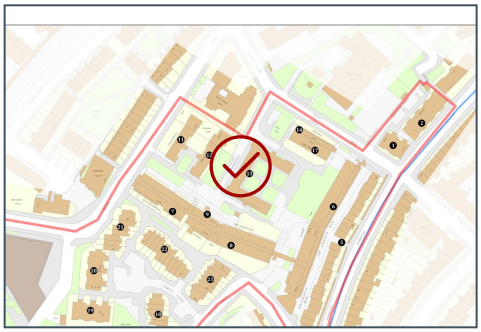
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

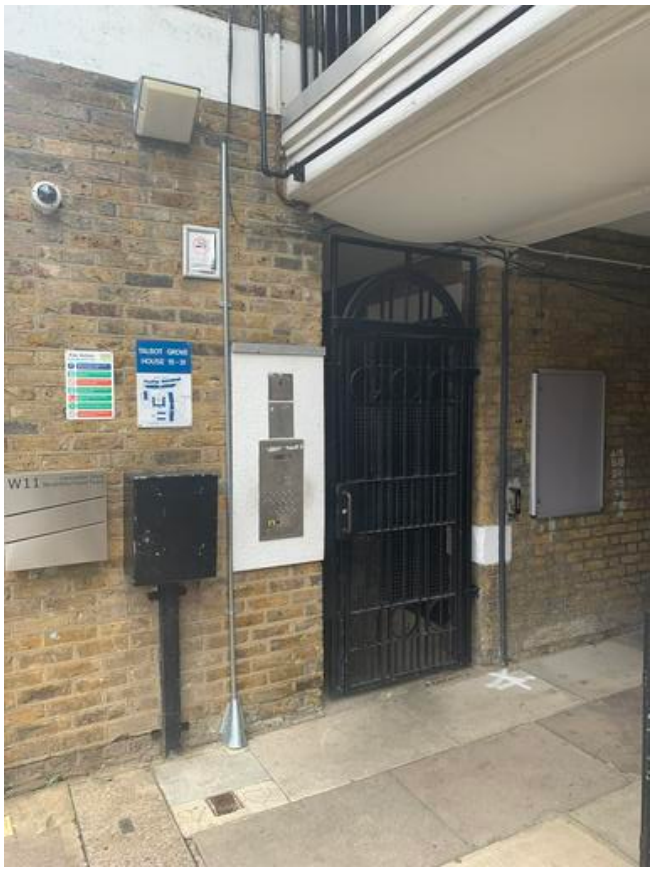
Created
Jun 28, 2022 10:57 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:57 AM

Sheet
Site



Photos



20220628_115739_photo
Francis Lee
Jun 28, 2022 10:57 AM

#81 Hydrant

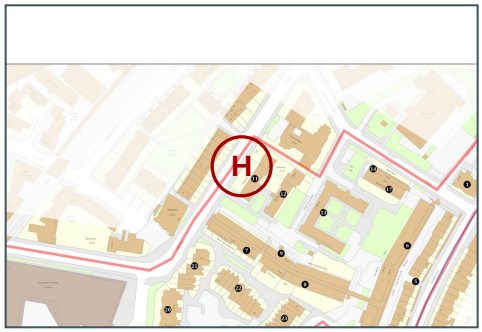
Status
Open

Type
Issue

Created
Jun 28, 2022 10:58 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:58 AM

Sheet
Site



Photos

20220628_115816_photo
David Bostelmann
Jun 28, 2022 10:58 AM

#82 General

Status
Open

Type
Issue

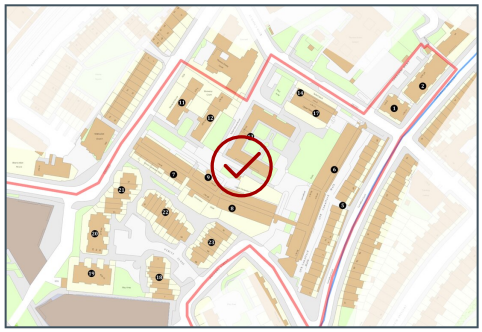
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 10:58 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 10:58 AM

Sheet
Site



Photos

20220628_115852_photo
Francis Lee
Jun 28, 2022 10:58 AM

20220628_115834_photo
Francis Lee
Jun 28, 2022 10:58 AM

#83 Hydrant

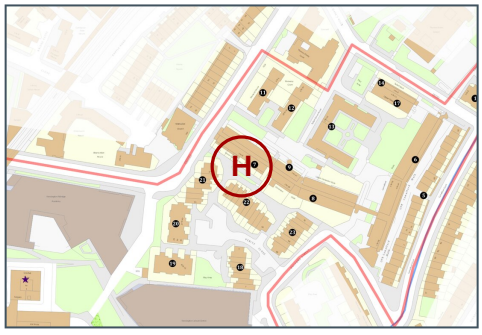
Status
Open

Type
Issue

Created
Jun 28, 2022 10:58 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:58 AM

Sheet
Site



#84 General

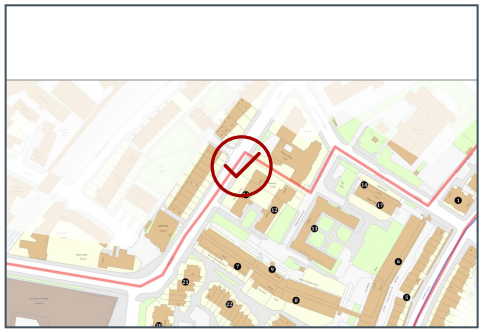
Status
Open

Type
Issue

Created
Jun 28, 2022 10:59 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 10:59 AM

Sheet
Site



Photos

20220628_115930_photo
David Bostelmann
Jun 28, 2022 10:59 AM

#85 General

Status
Open

Type
Issue

Assignees
francis@trigonfire.com
david@trigonfire.com

Watchers
francis@trigonfire.com
david@trigonfire.com

Created
Jun 28, 2022 11:00 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 11:00 AM

Sheet
Site

Photos

20220628_120018_photo
Francis Lee
Jun 28, 2022 11:00 AM

#86 Access Issues

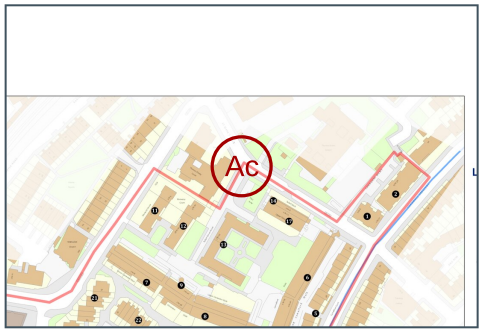
Status
Open

Type
Issue

Created
Jun 28, 2022 11:00 AM
david@trigonfire.com

Last Updated
Nov 18, 2022 4:49 PM

Sheet
Site



Photos

20220628_120200_photo
David Bostelmann
Jun 28, 2022 11:02 AM

20220628_120151_photo
David Bostelmann
Jun 28, 2022 11:01 AM

#87 Premises Information Box

Status
Open

Type
Issue

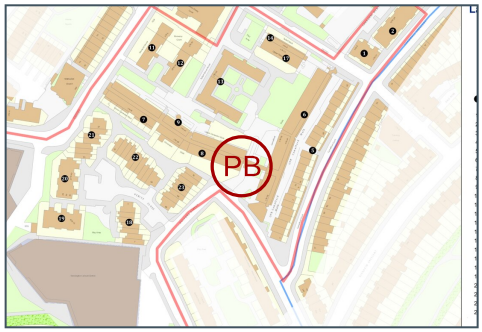
Assignees
francis@trigonfire.com
david@trigonfire.com

Watchers
francis@trigonfire.com
david@trigonfire.com

Created
Jun 28, 2022 11:02 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 11:02 AM

Sheet
Site



Photos

20220628_120234_photo
Francis Lee
Jun 28, 2022 11:02 AM

#88 Hydrant

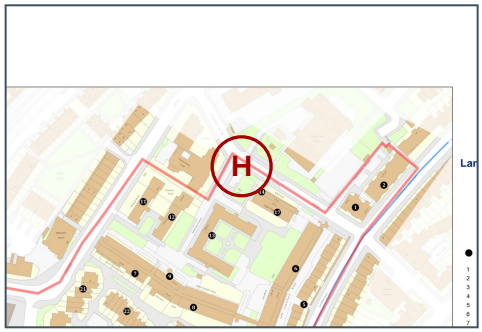
Status
Open

Type
Issue

Created
Jun 28, 2022 11:02 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 11:03 AM

Sheet
Site



Photos

20220628_120245_photo
David Bostelmann
Jun 28, 2022 11:02 AM

#89 General

Status
Open

Type
Issue

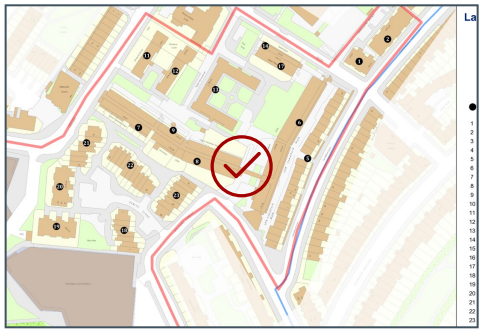
Assignees
francis@trigonfire.com
david@trigonfire.com

Watchers
francis@trigonfire.com
david@trigonfire.com

Created
Jun 28, 2022 11:03 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 11:03 AM

Sheet
Site



Photos

20220628_120343_photo
Francis Lee
Jun 28, 2022 11:03 AM

#90 Access Issues

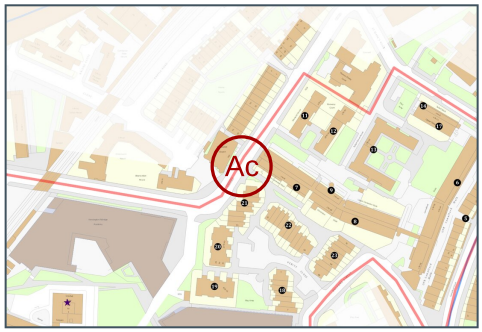
Status
Open

Type
Issue

Created
Jun 28, 2022 11:05 AM
david@trigonfire.com

Last Updated
Nov 18, 2022 4:49 PM

Sheet
Site



Photos

20220628_120542_photo
David Bostelmann
Jun 28, 2022 11:05 AM

#91 Premises Information Box

Status
Open

Type
Issue

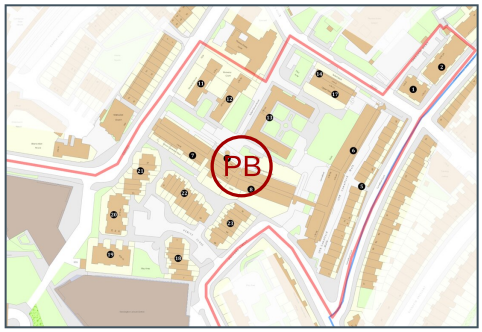
Assignees
francis@trigonfire.com
david@trigonfire.com

Watchers
francis@trigonfire.com
david@trigonfire.com

Created
Jun 28, 2022 11:05 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 11:05 AM

Sheet
Site



Photos

20220628_120540_photo
Francis Lee
Jun 28, 2022 11:05 AM

20220628_120529_photo
Francis Lee
Jun 28, 2022 11:05 AM

#96 Access Issues

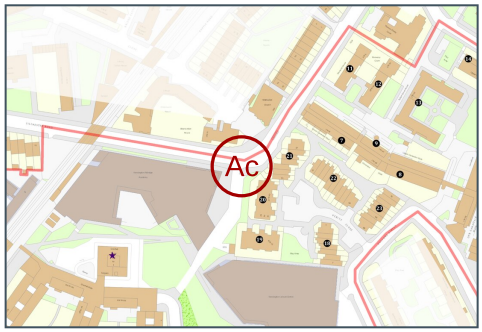
Status
Open

Type
Issue

Created
Jun 28, 2022 11:09 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 11:09 AM

Sheet
Site



Photos

20220628_120936_photo
David Bostelmann
Jun 28, 2022 11:09 AM

#97 Premises Information Box

Status
Open

Type
Issue

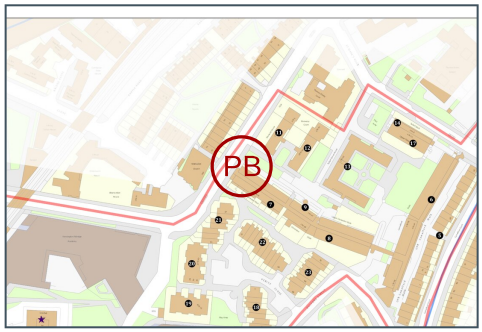
Assignees
francis@trigonfire.com
david@trigonfire.com

Watchers
francis@trigonfire.com
david@trigonfire.com

Created
Jun 28, 2022 11:10 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 11:11 AM

Sheet
Site



Photos

20220628_121055_photo
Francis Lee
Jun 28, 2022 11:10 AM

20220628_121043_photo
Francis Lee
Jun 28, 2022 11:10 AM

#98 Hydrant

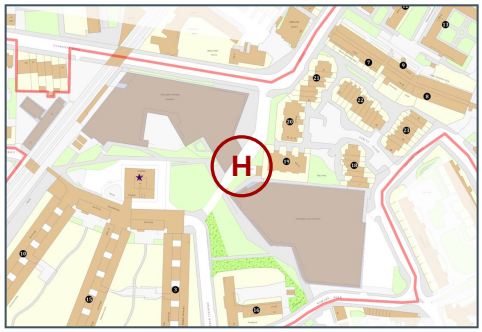
Status
Open

Type
Issue

Created
Jun 28, 2022 11:10 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 11:11 AM

Sheet
Site



Photos

20220628_121124_photo
David Bostelmann
Jun 28, 2022 11:11 AM

#99 General

Status
Open

Type
Issue

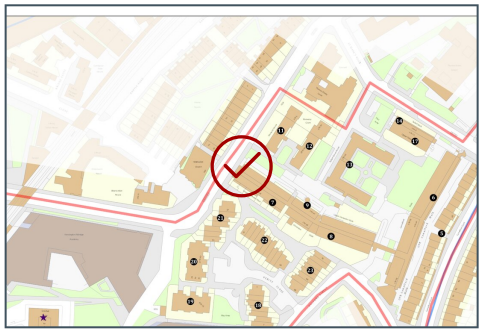
Assignees
david@trigonfire.com
francis@trigonfire.com

Watchers
david@trigonfire.com
francis@trigonfire.com

Created
Jun 28, 2022 11:11 AM
francis@trigonfire.com

Last Updated
Jun 28, 2022 11:11 AM

Sheet
Site



Photos

20220628_121113_photo
Francis Lee
Jun 28, 2022 11:11 AM

#100 Access Issues

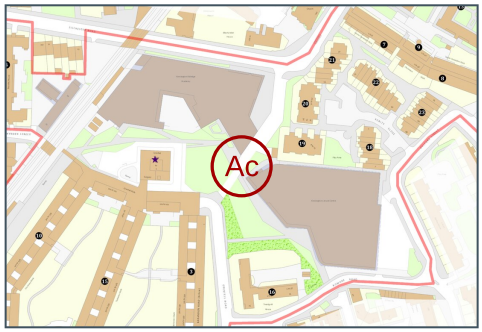
Status
Open

Type
Issue

Created
Jun 28, 2022 11:11 AM
david@trigonfire.com

Last Updated
Jun 28, 2022 11:13 AM

Sheet
Site



Photos

20220628_121329_photo
David Bostelmann
Jun 28, 2022 11:13 AM