FIRE RISK ASSESSMENT
CHIRTON HOUSE,
HEADLAM STREET, BYKER,
NEWCASTLE UPON TYNE NE6 2PF

31 OCTOBER 2019

STORM TEMPEST
PROPERTY CONSULTANCY

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Prepared for:
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1.0 INTRODUCTION

The Client	Byker Community Trust (BCT)
Instruction	This Fire Risk Assessment was undertaken in accordance with an instruction received from Mark Mulhern, Support Services Team Leader, Karbon Solution Ltd (KSL).
Responsible Person	Jill Haley, Chief Executive, BCT
The Property	Chirton House, Headlam Street, Byker, Newcastle upon Tyne NE6 2PF
The Surveyor	The Fire Risk Assessment was carried out by: Ian Robertson BA(Hons) MSc CMIOSH MIFireE.
Survey Date	31 October 2019
Scope and Purpose of the Fire Risk Assessment	The Regulatory Reform (Fire Safety) Order 2005 [RR(FS)O] applies to all non-domestic premises, including any voluntary sector and self-employed people with premises separate from their homes. A fire risk assessment is an organised and methodical look at your premises. The fire risk assessment procedure identifies the activities carried out at the premises and assesses the likelihood of a fire starting. The aim of a fire risk assessment is to: • Identify the hazards. • Reduce the risk of those hazards causing harm to as low as reasonably practicable. • Decide what physical fire precautions and management policies are necessary to ensure the safety of people in your premises if a fire does start. The fire risk assessment was carried out in accordance with the Department for Communities and Local Government (DCLG) 'sleeping accommodation' guidance document in addition to the 'Local Government Group - Fire safety in purpose-built blocks of flats'. This building has been audited to highlight to the Client, any non-

compliant issues with regard to relevant aspects of UK fire safety legislation and best practice. The principal documents relevant to residential buildings being:

- The Building Regulations 2012 Approved Document B – Fire Safety
- BS9999 2008 Code of practice for fire safety in the design, management and use of buildings
- BS9991 2011 Fire safety in the design, management and use of residential buildings – Code of practice
- Local Government Group - Fire safety in purpose-built blocks of flats (hereafter referred to as the LGG Guide)
- LACORS – Housing – Fire Safety – Guidance on fire safety provisions for certain types of existing housing
- NFCC Guide for 'Fire Safety in Specialised Housing'

The RR(FS)O does not stipulate the required review period for a particular building; we recommend a review of this type of building on an **annual** basis.

Limitations of the Fire Risk Assessment

The RR(FS)O places a burden of responsibility firmly on the head of a 'responsible person' with regard to the fire safety of the occupants of the premises to which they have been assigned. The responsible person is required to co-ordinate all fire safety related issues including the carrying out of a fire risk assessment and production of associated documentation. The responsible person may nominate a 'competent person' to assist in the implementation of any measures deemed necessary to ensure the fire safety of the occupants of the premises.

There are many factors that impact upon what may constitute adequate measures to assess the fire safety of the occupants. Storm Tempest Ltd are not the responsible person and are unable to determine, on behalf of the organisation, the steps it should or must take to comply with its duties under the RR(FS)O. The fire risk assessment will cover all of the areas within the property. We will also comment upon the external construction materials of the building and the areas surrounding the building.

This report is for the use of the party to whom it is addressed and should be used within the context of instruction under which it has been prepared.

A Type 3, Common Parts and flats (non-invasive), Fire Risk Assessment (as detailed in LGG Guidance Document Fire Safety in Purpose Built Blocks of Flats) has been conducted in relation to this property.

Prioritisation of Recommendations

To assist in the development of a strategy and action plan for addressing recommendations in the fire risk assessment report, a priority rating is attached to each recommendation. The following is an explanation of each rating:

High Priority: Immediate action required to prevent risk to the health and safety of relevant persons

Medium Priority: Planned action to improve fire safety within the premises

Low Priority: Features that comply with current regulations but which the responsible person may consider upgrading.

Identified costs of Recommendations

The report will give a budget costing for recommendations covered in the fire risk assessment for alterations or improvements to physical features to assist the client in developing an Action Plan and improvement programme.

2.0 THE BUILDING

2.1 The Building

The building consists of a three storey purpose built residential property housing 12 one and two bed apartments with 4 further externally accessed apartments to the ground floor. It also has a basement and is adjoining a row of link houses set at the east side at a right angle to Chirton House.

The building is a grade II* listed building with Historic England and is designed with an unusual layout and is semi-traditional in construction.

The main building is a two storey linear block with a basement which has two independent ground floor apartments not accessed from within the communal corridors and a further two accessed from outside but with rear doors into the east escape stair. At the west side is an adjoining three storey annex housing the lift and main stair.

Built with brick and block cavity external load-bearing walls and with decorative timber cladding and timber upper balconies the property has brick and timber stud internal walls with plasterboard and skim finish, timber double glazing and benefits from concrete floors and a timber frame, corrugated steel pitched roof.

The property has good security in place with controlled access and CCTV and also benefits from gas central heating.

The entrance is in the south west corner on Headlam Street and opens into an entrance lobby housing the mains electrical and distribution system within a protected enclosure and the main fire alarm panel. The lobby opens into the ground floor hall housing 3 apartments and the lift and giving access to the west stair within the annex.

The protected stair gives access to the first floor which consists of a single linear corridor giving access to 8 apartments above the externally accessed ground floor apartments (these have windows to the corridor which are secure and fire rated). The east end of

the corridor leads to a second protected stair that descends through the ground floor and a fire exit (where two external ground floor apartments have rear door access to the stair via a protected lobby) into the basement via a fire door which; due to a slope in the land, has an external exit at ground level.

The basement houses a number of rooms off a corridor including the plant room and main boilers, the main gas intake and meter, sprinkler system controls and a number of storage spaces in addition to the roller shuttered garage.

Both protected stairs benefit from AOV smoke ventilation while the property is fitted with both automatic fire detection and emergency lighting throughout.

The front doors to each apartment would appear to conform to BS8214 as fire doors (FD60S) and are fitted with intumescent strips and cold smoke seals.

The walls to the corridors and stairs and means of escape consist of brick and/or plasterboard with a plaster skim and paint finish (class 0) with carpets to the floors.

The individual apartments are protected by a domestic sprinkler system which would appear to conform to BS9251 and is subject to a maintenance scheme and servicing by competent engineers.

2.2 Fire Loss Experience	BCT have not made us aware of any fire related incidents at this housing scheme.

3.0 FIRE HAZARDS

3.1 Sources of Fuel The sources of fuel within the premises were assessed as follows:

- Electrical PVC insulation throughout.
- Mains Gas supply.
- Timber construction materials (in particular, within the roof space, fascia's and some external cladding).
- Refuse stored within the wheelie bins within the purpose built recess area to the rear of the property (away from the building).

Generally the means of escape routes within the building are good and are kept clear of combustible materials and obstructions.

It is accepted that there will be sources of fuel located within the individual apartments associated with domestic living such as; timber and foam furnishings, linen, bedding and household clothing and cooking oils and fats within the kitchens.

We have no evidence or information to indicate that the timber cladding extensively present on parts of the building's exterior walls has previously been treated with fire retardant material during construction however; it is unlikely that this would now remain as effective as when applied even if it was present. In relation to the cladding however; due to the building's height and layout and the internal arrangement of the means of escape and fire exits, it is not considered that the timber cladding would pose a significant risk in relation to the evacuation of the occupants with alternative means of escape available. There are also, no additional exposure risks within 1000mm of an external wall which would require additional protection for the external walls as included within the Building Regulations 2010.

The property gas meter is located within the basement and we have been informed by BCT that this is subject to an annual service by a competent gas safe engineer (CP12) with the annual

service recorded as 13/11/18.

3.2 Sources of Ignition

The sources of ignition within the property were assessed as follows:

- Electrical supply and distribution system.
- Electrical CCTV equipment within the Communications store room.
- Possible Arson attack, in particular, to the wheelie bins stored at the rear within the purpose built storage bays which are away from the main building and also to the basement area which is vulnerable due to the lack of security and roller shutter doors.

It is also accepted that there will be sources of ignition located within individual apartments associated with domestic living such as portable electrical goods, cooking and heating appliances, and the possibility of smoking materials and the use of candles.

We have been informed that the last time that the mains electrical supply and distribution system was subject to a five year fixed wiring inspection by a competent engineer is compliant and recorded within the records held by BCT as 14/04/15.

All electrical installations are required to be tested regularly to the standards defined by the IET Wiring Regulations (BS 7671). The mains electrical supply and distribution installation and wiring (common areas and rented dwellings) should be tested at least every five years by a registered NICEIC contractor to satisfy compliance with the requirements of the Electricity at Work Regulations 1989 in addition to the IET Wiring Regulations BS7671:2018 18th edition.

The communal areas (hall, stairs and landings) of the property are no smoking areas and are accompanied with the appropriate signage.

3.3 Sources of Oxygen	Natural airflow through doors and windows.
3.4 People at Risk	The premises have a maximum number of residents of 24 with an additional 8 in the ground floor apartments externally accessed. In addition, there is the potential for visitors, housing staff and trades persons to be present.

4.0 MEANS OF ESCAPE

4.1 Escape Routes

The premises consist of a main front entrance door accessed from Headlam Street leading directly into the entrance lobby and then into the hall, stairs and landing.

In a simple layout, all apartments lead directly onto the hall, stairs, or landing with protected stairs at both the east and west ends of the building.

Both stairs lead directly to a final exit which is operable by a single action mechanism.

All access/egress routes were clear at the time of the inspection and are within the recommended travel distances and dead end limitations for this type of premises as detailed with the Building Regulations Approved Document B and DCLG Fire Risk Assessment Guidance.

The fire assembly point is located at the front of the property on Headlam Street, a safe distance from the front doors.

4.2 Fire Doors

All fire doors situated upon Means of Escape and within the communal areas would appear to conform to BS8214 and meet the standard required as Fire resistant doors (FD30S & FD60S) complete with intumescent strips and cold smoke seals.

The doors to the residential apartments also all appear to conform to BS8214 as FD60S fire doors.

The fire doors fitted to some basement spaces in addition to the rear service riser are fitted with cold smoke seals in addition to intumescent strips although they do not house smoke detection. Under normal circumstances, the smoke seals should be removed or smoke detection installed however; as there are no ignition sources within these spaces (but for standard cables) and there is no combustible storage; this is considered acceptable however; this could change during subsequent fire risk assessments should

the risk increase.

4.3 Fire Compartmentation	The means of escape routes within the building are protected by fire resistant walls, ceilings, and doors, which provide 60 minute fire protection. These include solid brick walls with plaster finish and concrete floors with plaster skim coatings to the ceilings. No breaches of fire compartmentation were noted within the building as all previous compartmentation issues have been address however; the cupboard within the plant room has a very badly fitted fire door in which the frame will not provide a minimum of 30 minutes resistance. This door however, is not required as a fire door for life or property protection an therefore, although to fitting is poor, can remain as is.
4.4 Fire Alarm and Detection System	The building is fitted with an automatic fire detection and alarm system installed within the means of escape or communal areas of this property. In addition, automatic detection is fitted within the residential apartments. The fire alarm system is connected to a 24/7 monitored concierge service with direct voice activation to the residents. The alarm system would appear to conform to BS5839-1 and 6 and meet the requirements of a FD1/M system. The fire alarm system is subject to a compliant maintenance regime and there is an annual inspection by a competent engineer.
4.5 Emergency Lighting	There is a 3 hour non-maintained emergency lighting system installed within the means of escape that conforms to BS5266. The system is subject to monthly inspections and in addition, there is an annual discharge test and inspection by a competent engineer on the system last carried out on 14/06/2019.

4.6 Fire Fighting Equipment	The premises are not supplied with Portable firefighting equipment on site; which is appropriate for these properties however; a CO2 extinguisher is located within the basement plant room which was subject to an annual service by a competent engineer on 05/09/19 (Cormeton). The individual apartments are protected by a domestic sprinkler system which would appear to conform to BS9251:2014 and was installed and commissioned on 7/4/15 by Compo Fire Systems. The installation is subject to an annual maintenance scheme and servicing by competent engineers with the last service during taking place on 27/06/2019 by Cormeton. The AOV smoke extraction system is also subject to an annual service which was last recorded on 05/09/2019.
4.7 Signage	There are fire exit signs and directional signs throughout the property located where appropriate which conform to BS5499. A general fire action notice and no smoking notices are displayed within the hall.
4.8 Disabled Persons Egress	The property is suitable for disabled access with a level approach and a resident's lift.
4.9 Arson	The risk of an arson attack is considered low. The premises are located within a residential side street in a moderate risk area and the refuse containers are stored to the rear of the building away from the main building and there is good security in place.
4.10 Access for Fire appliances	Access to the buildings for fire appliances is acceptable but can be tight due to the cul-de-sac approach however; access is good to the front off the main street and in line with the requirements of Approved Document B. Access is also available to the rear of each building.

A fire Hydrant is located nearby in Headlam Street within 25 m of the building.

5.0 MANAGEMENT PROCEDURES

5.1 Fire Evacuation Procedures	The fire and evacuation procedure is for a full simultaneous evacuation policy for all residents in a fire situation. The fire assembly point located at the front of the building on Headlam Street a safe distance from the building.
5.2 Fire Log Book	There is a fire log book on site within the locked fire box which is located next to the fire panel.

Surveyor Ian Robertson BSc (Hons) MSc CMIOSH MIFireE

Signed

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On Behalf of Storm Tempest Ltd

Checked Dave Stilling BSc (Hons) MCIOB

Signed

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On Behalf of Storm Tempest Ltd

APPENDIX 1
FIRE RISK ASSESSMENT

FIRE RISK ASSESSMENT

		Potential consequences of fire		
Liklihood of fire occuring		***Slight Harm (1)***	***Moderate harm (2)***	***Extreme harm (3)***
	Low *(1)*	**Trivial Risk**	**Tolerable Risk**	**Moderate Risk**
	Medium *(2)*	**Tolerable Risk**	**Moderate Risk**	**Substantial Risk**
	High (3)	**Moderate Risk**	**Substantial Risk**	**Intolerable Risk**

Taking into account the fire prevention measures observed at the time of this risk assessment, it is considered that the hazard from fire (likelihood of fire) at these premises is:

Low [ ] **Medium** [x] **High** [ ]

Low: Unusually low likelihood of fire as a result of negligible potential sources of ignition.

Medium: Normal fire hazards (e.g. potential ignition sources) for this type of occupancy, with fire hazards generally subject to appropriate controls (other than minor shortcomings).

High: Lack of adequate controls applied to one or more significant fire hazards, such as to result in significant increase in likelihood of fire.

Taking into account the nature of the premises and the occupants, as well as the fire protection and procedural arrangements observed at the time of this fire risk assessment, it is considered that the consequences for life safety in the event of fire would be:

Slight harm [x] **Moderate harm** [ ] **Extreme harm** [ ]

In this context, a definition of the above terms is as follows:

Slight harm: Outbreak of fire unlikely to result in serious injury or death of any occupant (other than an occupant sleeping in a room in which a fire occurs).

Moderate harm: Outbreak of fire could foreseeably result in injury (including serious injury) of one or more occupants, but it is unlikely to involve multiple fatalities.

Extreme harm: Significant potential for serious injury or death of one or more occupants.

Accordingly, it is considered that the risk to life from fire at these premises is:

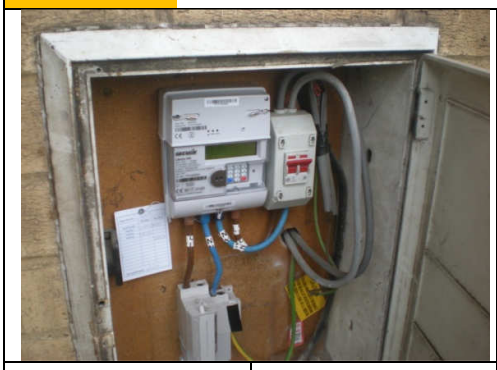
<u>Tolerable Risk</u>

(Note that, although the purpose of this section is to place the fire risk in context, the above approach to fire risk assessment is subjective and for guidance only. All hazards and deficiencies identified in this report should be addressed by implementing all recommendations contained in the following action plan. The fire risk assessment should be reviewed regularly.)

Risk level	Action and timescale
Trivial	No action is required and no detailed records need be kept.
Tolerable	No major additional fire precautions required. However, there might be a need or reasonably practicable improvements that involve minor or limited cost.
Moderate	It is essential that efforts are made to reduce the risk. Risk reduction measures, which should take cost into account, should be implemented within a defined time period. Where moderate risk is associated with consequences that constitute extreme harm, further assessment might be required to establish more precisely the likelihood of harm as a basis for determining the priority for improved control measures.
Substantial	Considerable resources might have to be allocated to reduce the risk. If the premises are unoccupied, it should not be occupied until the risk has been reduced. If the premises are occupied, urgent action should be taken.
Intolerable	Premises (or relevant area) should not be occupied until the risk is reduced.

APPENDIX 2
SCHEDULE OF OBSERVATIONS

Fire Hazards

MEDIUM	**1**	
		**Assessors Observations:** The last time the mains electrical system was subject to a 5 year fixed wiring inspection is recorded as 14/04/2019.
Date First Identified:	31/10/2019	**Recommended Action:** Ensure that the mains electrical system is subject to a 5 year fixed wiring inspection by a competent electrical engineer. All electrical installations are required to be tested regularly to the standards defined by the IET Wiring Regulations (BS 7671). The mains electrical supply and distribution installation and wiring (common areas and rented dwellings) should be tested at least every five years by a registered NICEIC contractor to satisfy compliance with the requirements of the Electricity at Work Regulations 1989 in addition to the IET Wiring Regulations BS7671:2018 18th edition.
Rectify Within: (months)	6	
Budget Cost:	No Cost	