

22.09.2024

Re: Design & Access Statement; 8 FULWOOD PLACE HOLBORN

The application is being submitted by the agent HSDesign

Project description:

FULL PLANNING APPLICATION

Dear Planning Team'

This Planning submission for the abovementioned development is to convert the existing Basement to Forth Floor into a mix of SME Offices/ Services Offices and residential usage. E to C3 Change of Use refers to converting a building from a E usage class, which includes offices and light industrial uses, to a C3 residential usage class. This transformation allows for a suitable mix of commercial usage and single aspect dwelling house, considering all aspects of the 'Pre-App' Advice.

- 1.1. Design approach to adhere to current planning policies and London Plan
- 1.2. Policy H2 of the Camden Local Plans 2017 indicates that the council will encourage the inclusion of Self-Contained homes in Non-residential development in all parts of the borough
- 1.3. There is a general shift in commercial usage especially centrally based office space. The proposed scheme adheres to utilizing spaces for residential usage, while retaining an element of commercial
- 1.4. The property has been vacant for a period of 2-3yrs prior to the applicants purchase. There has been a general shift from office usage patterns, in particular large scale individual office usage.
- 1.5. Location;**
 - 1.5.1. Positioned off the A40 [Holborn] with reduced footfall
 - 1.5.2. Existing Ground + 4 storey building
 - 1.5.3. The building is located on the west side of Fulwood Place which is a pedestrian lane linking Holborn to the south with Grays Inn Gardens and Law School to the north.
 - 1.5.4. The site lies within Bloomsbury Conservation Area adopted in 2008
 - 1.5.5. We understand that Fulwood Place falls within Sub Area 9 and is not a listed building or a building that makes a 'positive contribution' to the Conservation Area.
- 1.6. Previous Planning**
 - 1.6.1. 2010/2708/P - Erection of rear extensions at ground, first, second and third floor level, erection of glazed roof extension and refurbishment of existing front entrance including new glazed doors at existing office building (Class B1)
 - 1.6.2. According to Council records, there is a residential unit in Fairfax House, right opposite the applications site.
- 1.7. Design intent**
 - 1.7.1. The existing office space floor split equate to NIA of 2116 sq/ft and total GIA of 3313 sq/ft
 - 1.7.2. The proposed part residential and commercial scheme looks to utilize the floor area and minimize wasted circulation space, while improving the general amenities.
 - 1.7.3. Existing lift is decommissioned and will be replaced to service the 1nr 2-bed flat.
 - 1.7.4. Allow for double height flat to top floor area
 - 1.7.5. Allow for residential entrance lobby and separate office space with bin store and pigeon holes including bike store.
 - 1.7.6. No vehicle access to existing property
 - 1.7.7. No significant impact in the amenity of neighbouring properties is expected as a result of the extensions and conversion.
 - 1.7.8. Given that the rear building line of the application site is recessed with regards to its adjoining buildings, no substantial impact in terms of loss of light or outlook is expected on adjoining rear windows.

- 1.7.9. The impact of the proposal on the character of the building and the conservation area is to be limited in its impact. As part of the development, we will look to improve the front façade by way of changing the blue industrial glazing for flush frame uPVC sash windows in white to mirror the opposite property [brick, stone and white windows]

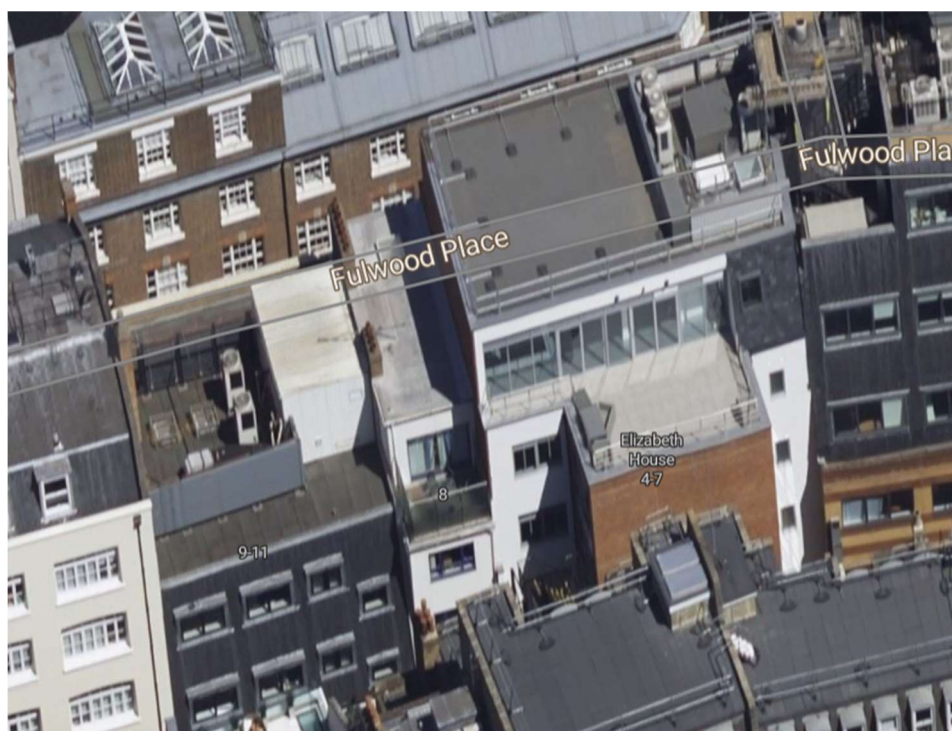
1.8. Planning Guides

- 1.8.1. CPG Design; January 2021 [Housing, Extensions, alterations and conservatories, conservations areas]
 1.8.2. London Plan 2019
 1.8.3. Replacement Unitary Development Plan 2006
 1.8.4. Bloomsbury Conservation Area Statement
 1.8.5. DP29, 254, 26 & 25
 1.8.6. CS14

DESIGN SPLIT

Floor	Type	Ref	Area [m2]	Amenity
Basement	SME	Office 1	18	shared WC
Basement	SME	Office 2	23	
Ground	Lobby	Resi & Comme -		Bin Store - 1,680 L 6nr Bike
First	SME	Office 3	11.6	shared WC
First	SME	Office 4	21	
Second	SME	Office 5	12	shared WC
Second	SME	Office 6	12	
Third & Forth	Residential	2bed - 3ppl	81	8.5m2 of private out door space
			178.6	usable area exc Circulation & Amenity space

The above split represents a well proportioned mixed used development which address the previous planning concerns. This includes retaining SME type shared/ hot desk type office spaces and 1nr residential.



Commercial listing

The development has been listed dated 22.07.2022 which has fallen through. The reason for the purchase of this development is to redevelop the site to provide a suitable split following the change in use habits towards large scale office units. The earliest date of the property listing December 2021, showing that the property had been vacant for a period of 3yrs prior to recent purchase.

Please note that all Sale Data is available from Stoneacre Commercial Estate Agents. This will includes sales data over the 24 month period and statements from the agents, marketing material and reasons for non-sales [Estate Agent Statement].



Regards,

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HSD

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Item	Planning Comments	Response	Action	Closed Out	
				Yes	No
1.1	the proposed ground floor studio would in all likelihood be refused	The Ground Floor Studio to be omitted in exchange of utilising the space for office/ residential amenity space [Bins, Bikes etc]	Revise Plans for GF to show amenity space due to lack of outlook and light for office or residential usage		
1.2	The Council will resist development of business premises and sites for non-business use unless it is demonstrated to the Council's satisfaction:	Client to provide all marketing material to demonstrate the viability for loss of commercial for residential.	Viability Assessment required by Professional agent who can demonstrate a. no longer suitable for its existing usage b. other configurations have been explored such as smaller business usage, temporary office or hot desks etc. c. Equates to 12months min The council favour Small Business so that needs to be factored in.		
1.3	Relevant policies throughout the Plan, particularly Protecting amenity, Design and Heritage, Sustainability and climate change and Transport	Provide in Design & Access on compliance	Utilising the Camden Planning Guidance on Design, Housing, Sustainability, Amenity, and Transport		
1.4	Policy H1 (Maximising Housing Supply) notes that provision of self contained housing is the priority land use of the local plan. It also states; where vacant or underused sites are suitable for housing in terms of accessibility and amenity, and free of physical and environmental constraints that would prevent residential use, we will expect them to be redeveloped for housing unless:	Focus on Self-Contained residential Units with accessibility.	See Plan		
1.5	Acknowledging the issues with the layout of the ground floor studio, the proposed units would meet the nationally described minimum space standards in terms of floor area as shown on the applicant's table above. The proposed upper floor units would be dual aspect with windows to both front and rear. There would be no outdoor amenity space to the units at lower floors, but the proposed duplex 2 bed flat at 3rd and 4th floor would benefit from the rear roof terrace.	Note the GF redesign but the main upper units comply with the general arrangements for residential units	adjustment to GF and upper floors		
1.6	It is acknowledged that the submitted details propose limited interventions to the external appearance of the host property. The main alterations would be at the main entrance to the ground floor frontage, however with retention of the ground floor as commercial space the design of the front entrance and lobby arrangement would need further consideration.	Work required to enhance the front façade as part of the design approach	Redesign		
1.7	Privacy, outlook, noise and impact on daylight and sunlight. The constraints of the surrounding properties, particularly at the rear (but also to the front) gives rise to concerns regarding amenity. The close proximity of neighbouring windows would appear to have negative impacts on privacy and outlook.	The 3rd and 4th floors will be used to house the single unit flat. As observed by the Planning Officer, the distance at top floors were sufficiently set-back to allow suitable outlook, privacy. The windows have been designed to adhere to the 45 degree rule and ensure safety of existing amenity	Redesign layout and reduce the amount of residential units. The stepped nature of the floor plate ensures outlook and privacy maintained		

Item	Planning Comments	Response	Action	Closed Out	
				Yes	No
1.8	Whilst on site, it was apparent that proposed future occupiers may have their privacy compromised by the proximity of existing windows. As discussed this is not so much of an issue where commercial windows face each other, however where residential uses are proposed to be introduced, this need to be fully considered. This would need to be demonstrated by providing scaled drawings showing lines of sight to and from any relevant windows.	Additional survey drawings required showing sight lights from the rear	Carry out proper survey of the property as original drawings were basic and not detailed. Additionally the design needs to capture the councils position on the windows, including there early request to consider a better commercial vs resi split. The idea is to utilise the natural stepping of the property to achieve the privacy and outlook required.		
1.9	Local Plan Policy T1 (Prioritising walking, cycling and public transport) expects cycle parking at developments to be provided in accordance with the standards set out in the London Plan. It is welcomed that cycle storage is shown on the plans provided, however as noted on site, is likely that the design layout would need to be adjusted. As discussed, vertical stands as shown are not preferred.	New stacked bike store not vertical stands to be proposed	See Plans		
1.10	Policy T2 (Parking and car-free development) would apply to any new residential units. This would be secured by S106 agreement should an application be successful.	Acceptable to sign a s106 agreement	Client to appoint a Solisitor for this item - s106 legal agreement. Transportation Statement to be prepared by specialist consultant		
1.11	Whilst not included in the submitted drawings, it was noted on site that the property benefits from flat roof and may be suitable for either solar panels or a biodiverse roof covering (or a combination of the two). Should these installation be proposed, details would need to be provided including roof plans, section drawings and installation and maintenance schedules as appropriate.	Green Roof Requirement. SAP Cals to show B Rating EPC	Appointment of an energy Assessor to demonstrate the sustainable uplift.		
1.12	With regards to refuse and recycling, you are advised to design in adequate facilities for recycling and the storage and disposal of waste.	Transport Report	Waste provisions allowed for and review of the highways requirements		
1.13	Additional requirement with developments over 11 meters.	This is an existing property which has the ability to be adapted for residential usage	Report provided on office and resi split		

ENERGY STATEMENT

The existing property is a rated D 78. The typical rating for existing stock is D 80. A full SAP documentation will be prepared for the new offices and 1nr flat to achieve min Rating C.

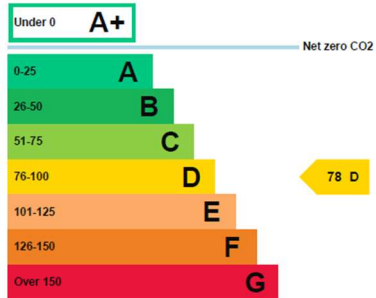
Below Rating 78D

Energy efficiency rating for this property

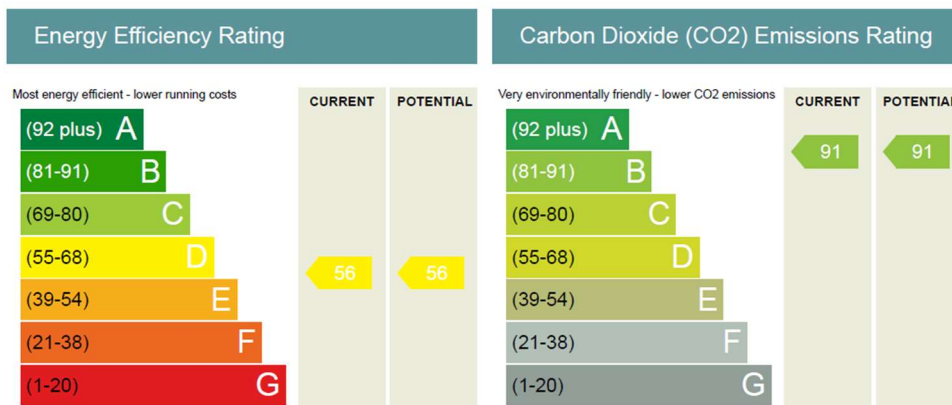
This property's current energy rating is D.

Properties are given a rating from A+ (most efficient) to G (least efficient).

Properties are also given a score. The larger the number, the more carbon dioxide (CO₂) your property is likely to emit.



Without improving the energy performance of the property the below snap shot shows the potential energy rating for the flat conversion. [Rating 56D]



The following will be considered; IMPROVEMENT

Walls –	0.28 W/m2K
Roof –	0.16 W/m2K
Glazing –	0.14 W/m2K
Heating –	Electrical Rads [Wet System] with tank
Main Heating Control –	Programmer & Thermostats
Lights –	Lighting Efficiency
Air Tightness -	5
Ventilation -	Natural Ventilation

NOTE- Flat ground floor will be rated 0 – U-Value as it will be considered a Party Structural Floor.

Using on Site Low Carbon Technology

TECHNOLOGY	FEASIBILITY	RANK
PV PANELS	The dwelling should have a sufficiently large roof areas able to accommodate the installation of solar photovoltaic panels.	1
AIR SOURCE HEAT PUMP	ASHP is an alternative renewable technology. This technology is suited to this Development as it meets the required reduction in carbon emissions. The only concern is the installation and need to install within flat roof areas, which require maintenance	2
SOLAR THERMAL	Solar thermal hot water systems are a proven and mature technology in the UK and well suited to year-round domestic demand for hot water. Systems are restricted to only meeting a proportion of domestic hot water demand (typically in the region of 60%). This does limit the technologies' ability to achieve high levels of emission reduction.	3
WIND TURBINES	The wind speed at the site is estimated at 4.6m/s at 10m above ground level through to 6.1m/s at 45m above ground level, which is relatively modest and not conducive to a very high energy yield. The area is also extra urban therefore it is not suitable to install such systems	4
BIOMASS HEATING	It may not be practical or technically feasible to install biomass wood pellet boilers or stoves with supplementary heating.	5
GROUND SOURCE	Not plausible for this development	6

The proposed development will incorporate the PV panels based on a 1.82kW solar System with a 5.76kWh battery storage.

System;

1. AIKO Solar Neostar 2S+ AIKO-A455-MAH54Db (455W) x 4nr panels

Installation Data	
Installed capacity of PV System – kW _p (STC)	1.82
Orientation of PV – degrees from South	10°
Inclination of system – degrees from horizontal	30°
Postcode region	1
Performance calculations	
kWh/kW _p (Kk) from table	974
Shade Factor (SF)	1
Estimated annual output (kW _p × Kk × SF)	1,770 kWh
Estimated PV self-consumption – PV Only	
Assumed occupancy archetype	Home all day
Assumed annual electricity consumption	3,000 kWh
Assumed annual electricity generation from existing solar PV system	<i>No existing solar</i>
Expected solar PV self-consumption (PV Only)	771 kWh
Grid electricity independence / Self-sufficiency (PV Only)	26%
Estimated PV self-consumption – with EESS	
Assumed usable capacity of electrical energy storage device, which is used for self-consumption	5.18 kWh
Expected solar PV self-consumption (with EESS)	1,608 kWh
Grid electricity independence / Self-sufficiency (with EESS)	54%

Part G Compliance Report

PROJECT DETAILS

Project Reference:

Client:

Property: Flat 1, FULWOOD PLACE
HOLBORN

Local Authority: Agent:

Assessor: HSD DEVELOPMENTS UK LTD

Software: G-Calc 2015 version 3.0.2

RESULT SUMMARY

By following the Government's national calculation methodology for assessing water efficiency in new dwellings this 2 bed dwelling, as designed, achieves a water consumption of 117.4 litres per person per day.

Compliance with Building Regulation 36(1) has been demonstrated.

Table 1: The Water Calculator for New Dwellings					
Installation Type	Unit of measure	Value	Use factor	Fixed use	litres/person/day
WC(single flush)	Flush volume (litres)	0	4.42	0.00	0
WC(dual flush)	Full flush vol.	0	1.46	0.00	0
	Part flush vol.	0	2.96	0.00	0
WC(multiple fittings)	Average effective Flush vol. (litres)	3.66	4.42	0.00	16.18
Taps(excl. Kitchen)	Flow rate (litres/min)	5	1.58	1.58	9.48
Bath (shower also present)	Capacity to overflow (litres)	180	0.11	0.00	19.8
Shower (bath also present)	Flow rate (litres/min)	10	4.37	0.00	43.7
Bath only	Capacity to overflow (litres)	0	0.50	0.00	0
Shower only	Flow rate (litres/minute)	0	5.6	0.00	0
Kitchen sink taps	Flow rate (litres/minute)	5.4	0.44	10.36	12.74
Washing Machine	litres/kg dry load	8.17	2.1	0.0	17.16
Dishwasher	litres/place setting	1.25	3.6	0.0	4.5
Waste disposal	litres/use	0	3.08	0.0	0
Water softener	litres/person/day	0	1.0	0.0	0
Total calculated use (litres/person/day)					123.56
Contribution from greywater (litres/person/day)					-
Contribution from rainwater (litres/person/day)					-
Normalisation factor					0.91
Total Water Consumption. Code for Sustainable Homes (litres/person/day)					112.4
External water use					5.0
Total Water Consumption. (36(1)) (litres/person/day)					117.4

Table 2: Consumption Calculator for multiple fittings for New Dwellings			
2.1: Taps (excluding kitchen sink taps)			
	Flow Rate (l/min)	Quantity (No.)	Total per fitting type
1 Wash Hand Basins	5	2	10
2			
3			
4			
Total (Sum of all Quantities)		2	
Total (Sum of all totals per fitting type)			10
Average Flow Rate (l/min)			5
Maximum Flow Rate (l/min)			5
Proportionate flow Rate (l/min)			3.5

Table 2: Consumption Calculator for multiple fittings for New Dwellings			
2.6: Showers			
Shower Type	Flow rate (l/min)	Quantity (No.)	Total per fitting type
1 Showers	10	2	20
2			
3			
4			
Total (Sum of all Quantities)		2	
Total (Sum of all totals per fitting type)			20
Average Flow rate (l/min)			10
Maximum Flow rate (l/min)			10
Proportionate flow rate (l/min)			7

Table 2: Consumption Calculator for multiple fittings for New Dwellings			
2.7: WC's			
WC Type	Effective flushing volume (litres)	Quantity (No.)	Total per fitting type
1 WC's	3.66	2	7.32
2			
3			
4			
Total (Sum of all Quantities)		2	
Total (Sum of all totals per fitting type)			7.32
Average effective flushing volume (litres)			3.66

Summary of fitting types "As Designed"			
Type	Description	Flow rates, volumes etc.	Qty
Taps	Wash Hand Basins	5 litres/min	2
Baths	Bath	180 litres to overflow	1
Dishwashers	Dishwasher	1.25 litres/place	1
Washing Machines	Washing Machine	8.17 litres/kg	1
Showers	Showers	10 litres/min	2
WC's	WC's	5 / 3 litres flush vols.	2
Kitchen/Utility taps	Kitchen	5.4 litres/min	1

The lower section of this table is to be filled in by the builder prior to completion. The descriptions, values and quantities should represent the 'as built' specification. Please note the values above represent design values and should not be exceeded without prior consultation with the agent/designer ().

Declaration of fitting types "As Built"			
Type	Make and Model	Flow rates, volumes etc.	Qty
Taps			
Baths			
Dishwashers			
Washing Machines			
Showers			
WC's			
Kitchen/Utility taps			

Project ref: - FLAT 1 – FULWOOD PLACE

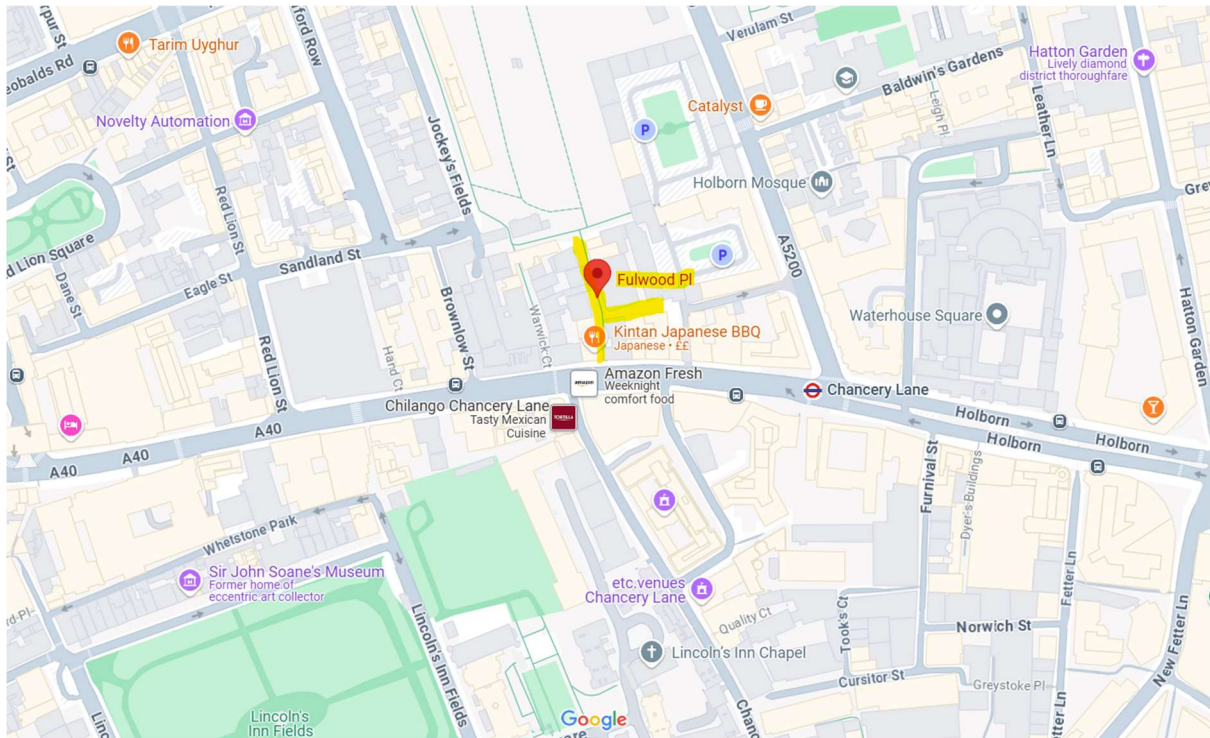
The above declaration of fittings, values and quantities is a true reflection of those installed on this project.

-----End of Report-----

HIGHWAY REPORT

EXISTING SITUATION & ACCESSIBILITY

1.1 The development is off High Holborn [A40] shown on figure 1;



1.2 Vehicular access to the site is currently provided via a footway and The immediate area comprises predominantly residential accommodation

1.3 Fulwood Place is located within the immediate vicinity of the site is a single carriageway road proceeding east to west along high Holborn [A40] between Holborn to Chancery Lane. The road is subject to a 30mph speed restriction.

1.4 Due to the nature of the area, the High Holborn is busy during working hours and weekends due to tourist activity, including residential usage.

1.5 Fulwood Place is a pedestrian road only with no parking facilities. Any new flats will be subject to a S106 for parking free development [excluding any existing parking permits for existing office spaces].

1.6 A person's willingness to walk is dependent on many factors including: access to a car, safety, road congestion, weather, gradients, parking, health, direction of route, and purpose of journey. It is generally accepted that for journeys of up to 2km walking is an appropriate mode to replace car trips and this is set out in The Chartered Institution of Highways and Transportation (CIHT) Guidelines ("Guidelines for Providing for Journeys on Foot" 2000) which suggests a maximum 'acceptable' walking distance for pedestrians without mobility impairment of 2km.

Table 2.1, below, contains suggested acceptable walking distances for pedestrians without mobility impairment for some common trip purposes.

Table 2.1 Suggested Acceptable Walking Distances			
Definition	Walking Distances (metres)		
	Town Centres	Commuting / Schools	Elsewhere
Desirable	200	500	400
Acceptable	400	1000	800
Preferred Maximum	800	2000	1200
Source: Providing for Journeys on Foot, IHT, 2000			

1.7 Based on the above table it is understood that 8 Fulwood place is within acceptable walking distance of the following amenities;

- Schools [private, secondary, Universities]
- Restaurants
- Post Offices/ Pharmacy
- Takeaway
- Local shops; retail & food shopping

1.8 It is generally accepted that 8km (or 5 miles) is an acceptable cycling distance, representing a journey time on average of 30 minutes ("TfL Analysis of Cycling Potential" 2010), although in London, longer journeys are commonplace.

Transport for London (TfL) provides cycle route guidance in the form of cycle maps for different areas. Local Cycling Guide 6 provides information on the cycle routes in the vicinity of the site. There are routes along High Holborn, which are identified by TfL as quieter routes that have been recommended by other cyclists and may connect with other signed routes.

BUS SERVICE

1.9 The closest bus stop to the site is bus stop UF located on Uxbridge Road, approximately 150m north-west of the site. Immediately adjacent bus stop UF is stop UJ which provides services in the opposite direction.

Bus routes identified –

- 59, 133, N8, N25 & N242 [High Holborn]
- 55, 243, N19, N38, N41 & N55 [Clerkenwell Road]

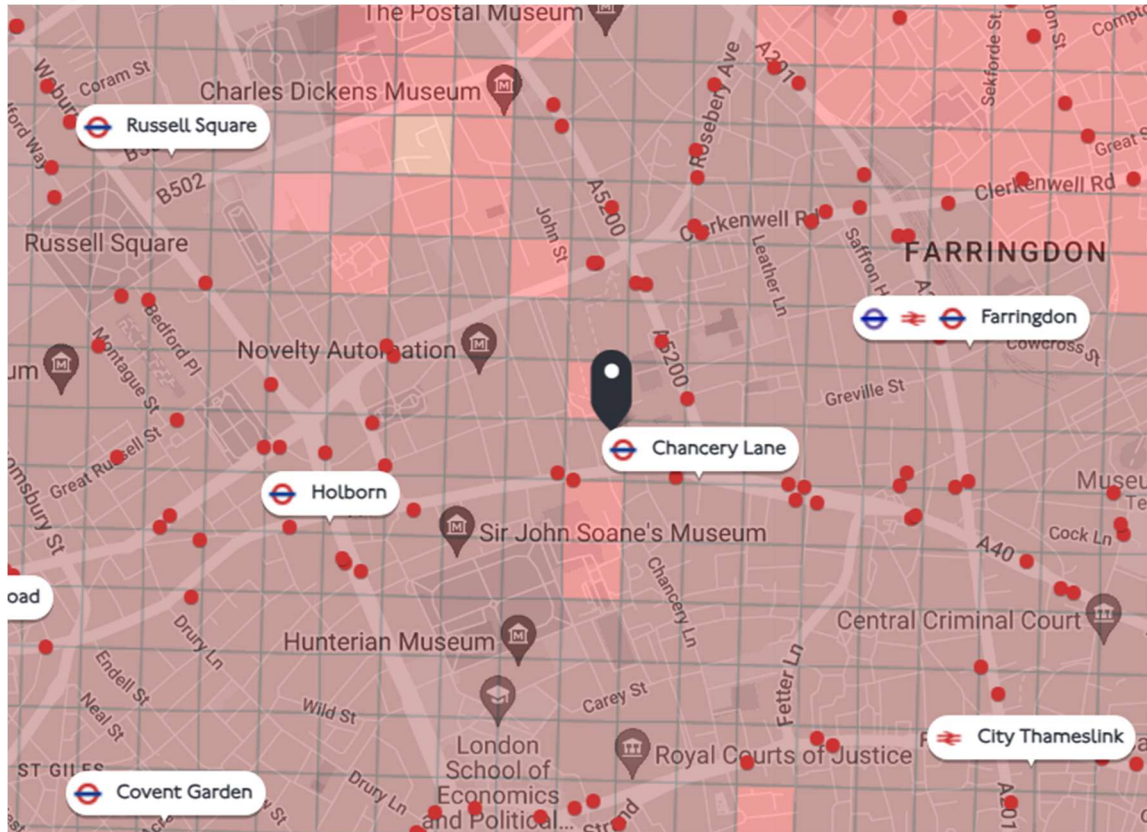
RAIL SERVICES

PTAL output for Base Year 6b

WCIV 6HG

Fulwood PL, London WCIV 6HG, UK

Easting: 530971, Northing: 181671



The site is accessible to National Rail, London Overground, Tube, DLR, Tram, Buses
Public Transport Accessibility Levels (PTALs) are a theoretical measure of the accessibility of a given point to the public transport network, taking into account walk access time and service availability. The method is essentially a way of measuring the density of the public transport network at a particular point.

PROPOSAL

Existing; complete property as 1nr office unit

Proposed; formation of shared workspaces/ SME Offices with 1nr Residential 2-bed unit.

Parking;

Current no Parking Provisions allowed for existing and proposed.

Bins Store

Allowance within the property GF area – mixed recycling and General Waste provisions for Offices and Residential Development

Bikes;

The existing development does not include bike provisions

The proposed development allows for 6nr bikes [4nr commercial and 2nr Residential]

Table 3.2 Minimum Cycle Parking Standards

Use Class	Description of use	Long-stay (e.g. for residents or employees)	Short-stay (e.g. for visitors or customers)
C3-C4	Dwellings (all)	1 space per studio, 1.5 spaces per 1-bedroom unit, 2 spaces per all other dwellings	1 space per 40 units

The servicing, refuse and recycling collection regime will be undertaken on street on High Holborn in the immediate vicinity of the site in accordance with existing arrangements for the area. This development proposal will not significantly change servicing or refuse requirements in the vicinity, nor will it have any material impact on the free flow of traffic on High Holborn.

Effects of the Development

This Section considers the effects of the development proposals with respect to:

- Trip Generation;
- Car Parking;
- Access; and
- Servicing and Refuse Collection

Trip Generation; this will not be impacted given the scale of the development to add only 1nr residential unit. The property has been vacant for a number of years due to the general lack of interest in large scale units, therefore the provision of SME Office spaces will bring this development back to normal usage levels.

Car Parking; not Required

Access; With regards to delivery numbers, research suggests that residential units generate circa 12-15 deliveries per 100 units per day, and therefore our view is that it is reasonable to suggest that the development will generate circa 2 deliveries per day. Deliveries would be undertaken by a variety of vehicles including Transit Vans and Box Vans.

Refuse; The servicing, refuse and recycling collection regime will be undertaken on street from High Holborn in accordance with existing arrangements for the area. The existing regime (i.e. in the vicinity of the site) operates satisfactorily and this development proposal will not significantly change servicing or refuse requirements, nor will it have any material impact on the free flow of traffic on High Holborn.

Conclusion

Based on the above, we therefore conclude that the development proposed is in accord with requirement of the NPPF 2019 (Point 109) which states that: *'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.'*

In light of the above, the proposed residential use of the site is an appropriate use of this site and will have no material impact on the surrounding transport network. Cycle parking will be provided in accordance with the Draft London Plan standards.

Given the scale and nature of the planning application proposal, the number of person movements likely to be generated by the proposed residential units will be low and will not have any material impact on the operation of the local highway or public transport network

FIRE SAFETY REPORT

1.0 Introduction

Under the emerging New London Plan Policy D11, developments should be accompanied by a Fire Statement. In this case, the main issue is access to the site for the Fire Brigade.

The development is situated off High Holborn along a narrow footpath, which leads to Gray's Inn Fields.

The project is a conversion of an existing commercial development with no unusual features or concerns. The development includes a single split level residential property to the upper floors and individual offices below. This report is to comply with the New London Plan Policy only.

The flat is dealt with in Volume 1 of Approved Document. The flats and Office unit are dealt with in Volume 2 of Approved Document. The Office unit is a 'small commercial' for the purposes of the fire regulations.

2.0 Applicable legislation and guidance

During the planning stage of a project there are a limited number of requirements specifically addressing fire strategy and safety. The Fire Authority have no statutory obligation and therefore do not advise on any building scheme of this size as part of the planning process. The Building Regulations process usually occurs after planning approval on commencement of development, and these Regulations require that reasonable provisions are in place to ensure the health and safety of occupants in and around the building and for the conservation of fuel in buildings. Building Regulations 2010 are the principal piece of legislation for fire safety relevant to the site at Fulwood Place, and it would be at a later, more detailed stage of design that the Fire Authority may be consulted by either local authority or Private Approved Inspectors as part of Building Control sign-off.

As part of the planning stage of design, an outline fire strategy is usually developed that describes how the building will satisfy the relevant fire safety requirements. It is not unusual at planning stage to have a number of options in place to allow for future flexibility as the design progresses into the detailed design stage. The main objectives of the outline fire strategy are to reduce the risk of significant design changes having to be made that could invalidate the planning approval (either requiring an amendment, or a new application) and to allow the project to be costed.

The Regulatory Reform (Fire Safety) Order 2005 does not apply to the dwelling houses at Woodside Avenue, therefore the only legislation relevant to fire safety is Building Regulations 2010. There are five functional requirements under Building Regulations that have to be complied with:

- Requirement B1 Means of warning and escape;
- Requirement B2 Internal fire spread (linings);
- Requirement B3 Internal fire spread (structure);
- Requirement B4 External fire spread; and
- Requirement B5 Access and facilities for the fire services.

The Government has produced a number of guidance documents to assist designers in meeting the relevant requirements of the Building Regulations; these 'Approved Documents' provide guidance on different aspects of the Regulations. Approved Document B (AD B) provides general design guidance on ways in which the functional fire safety requirements can be satisfied. There is no obligation to adopt any particular solution contained in an Approved Document, if the designer prefers to meet the relevant requirement in some other way. For Flat, there is more detailed guidance contained in BS 9991: 2015 *Fire safety in the design, management and use of residential buildings – Code of practice*. As with Approved Documents, BS 9991 also allows for alternative solutions to the recommendations contained within, provided that the designer demonstrates compliance with the relevant functional requirements of Building Regulations.

3.0 Building Construction & Materials - Requirements B2, B3 & B4

These requirements of the Building Regulations state:

- B2.** (1) *To inhibit the spread of fire within the building, the internal linings shall:*
(a) *adequately resist the spread of flame over their surfaces; and*
(b) *have, if ignited, a rate of heat release or a rate of fire growth, which is reasonable in the circumstances.*
(2) *In this paragraph 'internal linings' mean the materials or products used in lining any partition, wall, ceiling or other internal structure.*

All walls and ceilings will be lined with plasterboard and painted with emulsion paint. This is rated "Class 1" for surface spread of flame. Thermoplastic materials will not be used in windows, rooflights and lighting diffusers

- B3.** (1) *The building shall be designed and constructed so that, in the event of fire, its*

stability will be maintained for a reasonable period.

(2) A wall common to two or more buildings shall be designed and constructed so that it adequately resists the spread of fire between those buildings. For the purposes of this sub-paragraph a house in a terrace and a semi-detached house are each to be treated as a separate building.

(3) Where reasonably necessary to inhibit the spread of fire within the building, measures shall be taken, to an extent appropriate to the size and intended use of the building, comprising either or both of the following:

(a) sub-division of the building with fire-resisting construction;

(b) installation of suitable automatic fire suppression systems.

(4) The building shall be designed and constructed so that the unseen spread of fire and smoke within concealed spaces in its structure and fabric is inhibited.

All the proposed dwellings will have 60 minute fire resisting separating walls.

Offices; the existing construction of the property is Masonry solid wall including the party wall with Beam & Block floors all with min 30min fire resistance.

Flats, these will be twin-wall plasterboard partitions with mineral wool insulation quilt to meet the fire and noise regulations. British Gypsum Quiet IL system or similar. These will separate each flat and common area into independent fire zones, and will separate the flats from the main entrance via a fire protected staircase & lobby. Construction will be existing beam & block floors and masonry external walls, all inherently fire resisting. New stud work construction to includes fire rated.

B4. *(1) The external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and position of the building.*

(2) The roof of the building shall adequately resist the spread of fire over the roof and from one building to another, having regard to the use and position of the building.

4.0 Means of Warning and Escape - Requirement B1

The requirement B1 of the Building Regulations states:

B1. *The building shall be designed and constructed so that there are appropriate provisions for the early warning of fire, and appropriate means of escape in case of fire from the building to a place of safety outside the building capable of being safely and effectively used at all material times.*

Criteria for means of escape B1.v The basic principles for the design of means of escape are:

- a. that there should be alternative means of escape from most situations;*
- b. where direct escape to a place of safety is not possible, it should be possible to reach a place of relative safety, such as a protected stairway, which is on a route to an exit, within a reasonable travel distance.*

The general requirements for rooms above 4.5m is to have access via a protected staircase to the front door. The access to the commercial at basement levels has a 60min fire rated door. The staircase is split between the residential and office spaces. Flats served by one common stair" which discharges directly to the public street on Star Road and has a fire brigade openable vent at the top. This is separated from all flats by lobbies ventilated by automatic opening vents operated by smoke detectors. All flat entrance doors are within 7.5m of the stairwell. All flats have an internal fire protected corridor less than 9m long.

Fire detection and fire alarm systems:

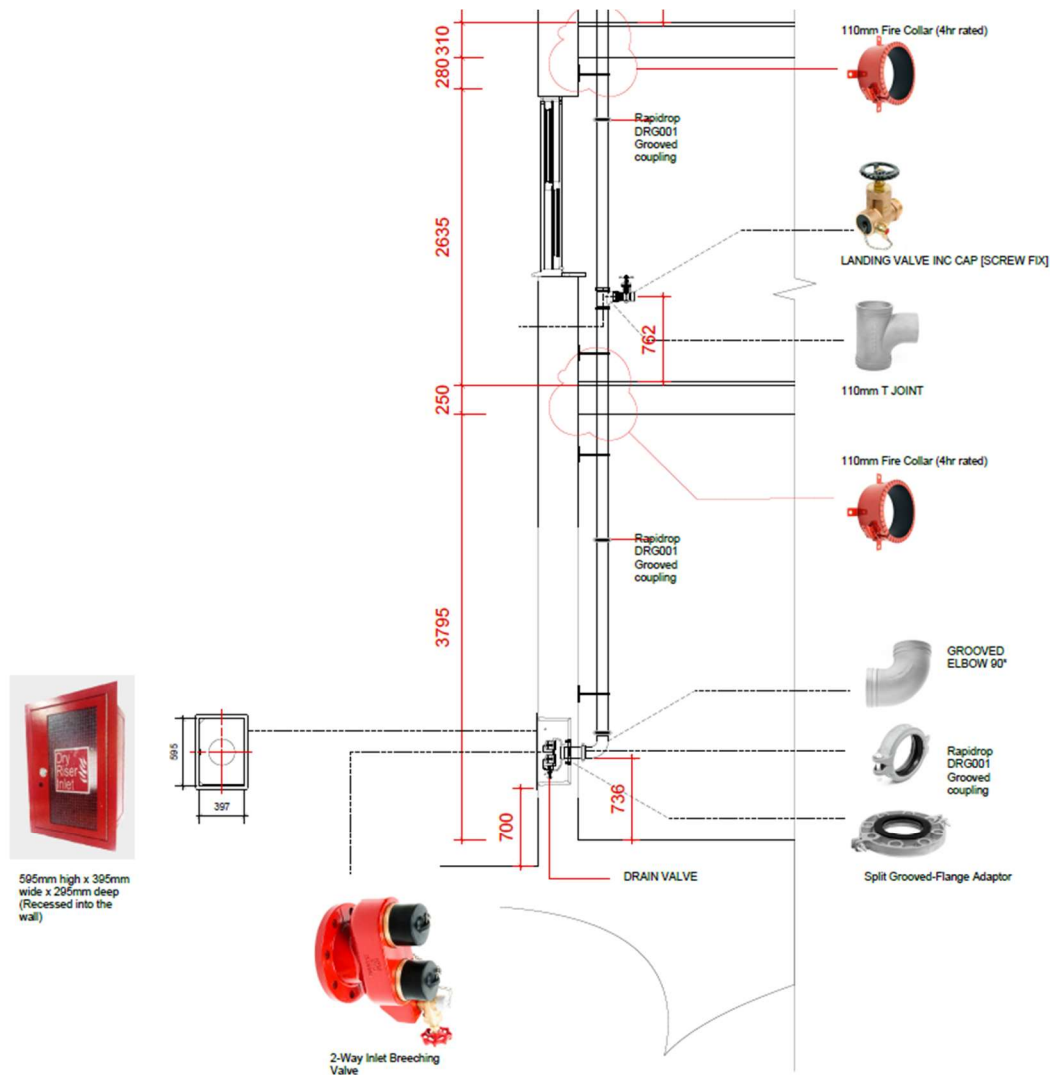
The flat and commercials will be provided with a fire detection and fire alarm system in accordance with the relevant recommendations of BS 5839-6:2004 to at least a Grade D Category LD3 standard. The smoke and heat alarms should be mains-operated and conform to BS EN 14604: 2005, Smoke alarm devices or BS 5446-2:2003, Fire detection and fire alarm devices for dwellinghouses, Part 2 Specification for heat alarms, respectively. They should have a standby power supply, such as a battery (either rechargeable or non-rechargeable) or capacitor. More information on power supplies is given in clause 15 of BS 5839-6:2004. Smoke & heat detectors are to be placed in all habitable rooms, and there should be a compatible interlinked heat detector or heat alarm in the kitchen.

5.0 Access and facilities for the fire service - Requirement B5

The requirement B5 of the Building Regulations states:

- *The building shall be designed and constructed so as to provide reasonable facilities to assist fire-fighters in the protection of life*

All though a Fire appliance vehicles will not be able to drive up close to both buildings, the provision of a 'Dry-Riser' so that the pump appliance is within 45m of all points within the buildings.



This Development comprises Flats & Offices; All follow normal practice for their type and will fully comply with the fire regulations as explained in Approved Document B of the Building Regulations, as outlined above.