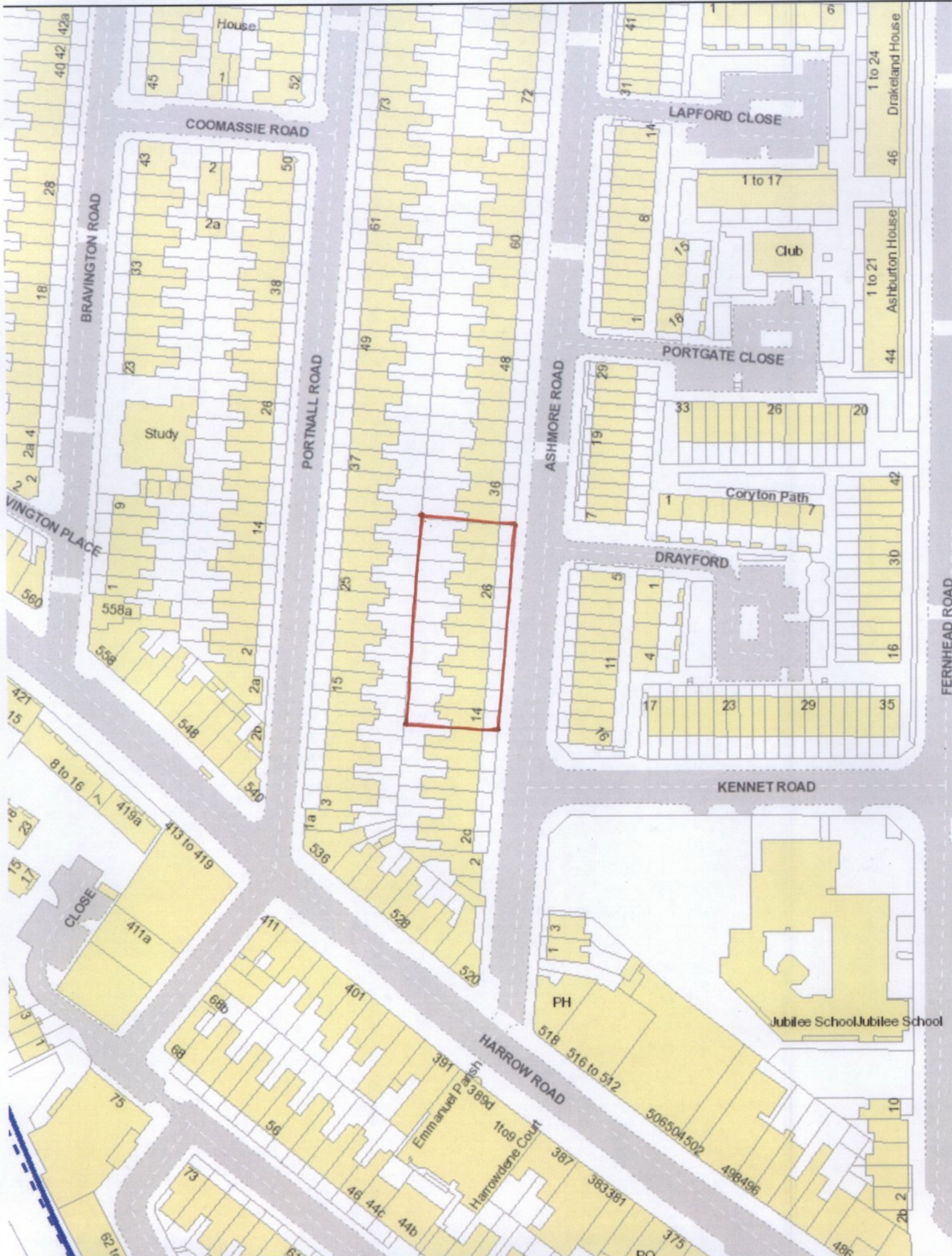


<b>CITY OF WESTMINSTER</b>			
<b>PLANNING APPLICATIONS COMMITTEE</b>	<b>Date</b> 4 November 2014	<b>Classification</b> For General Release	
<b>Report of</b> Operational Director Development Planning		<b>Wards involved</b> Harrow Road	
<b>Subject of Report</b>	<b>14-32 Ashmore Road, London, W9 3DF</b>		
<b>Proposal</b>	Application 1: The installation of external wall insulation to the rear of Nos. 14-32 Ashmore Road. Application 2: External alterations to Nos. 14-32 Ashmore Road comprising the installation of new aluminium sash windows and installation of external wall insulation to rear elevation.		
<b>Agent</b>	ECD Architects		
<b>On behalf of</b>	Octavia Housing		
<b>Registered Number</b>	Application 1: 14/07770/FULL Application 2: 14/07765/FULL	<b>TP / PP No</b>	TP/6654
<b>Date of Application</b>	01.08.2014	<b>Date amended/ completed</b>	21.08.2014
<b>Category of Application</b>	Minor		
<b>Historic Building Grade</b>	Unlisted		
<b>Conservation Area</b>	Outside Conservation Area		
<b>Development Plan Context</b> - London Plan July 2011 - Westminster's City Plan: Strategic Policies 2013 - Unitary Development Plan (UDP) January 2007	Outside London Plan Central Activities Zone  Outside Central Activities Zone		
<b>Stress Area</b>	Outside Stress Area		
<b>Current Licensing Position</b>	Not Applicable		

## 1. RECOMMENDATION

Application 1 (14/07770/FULL) - Grant conditional permission.

Application 2 (14/07765/FULL) - Refuse permission - design grounds.





14-32 ASHMORE ROAD, W9

## 2. SUMMARY

Nos. 14-32 Ashmore Road are a group of 10 properties which lie on the western side of the street at its southern end and form part of one of the original Victorian terraces. They have all been subdivided into flats. The site lies outside a conservation area.

There are two applications for consideration: one (14/07770/FULL) relates solely to the installation of external wall insulation to the rear of Nos.14-32 Ashmore Road; the other (14/07765/FULL) is for the installation of external wall insulation to the rear, but also for the replacement of the existing windows on the rear with double glazed aluminium sash windows.

The key issues are:

- The impact on the character and appearance of this unlisted Victorian terrace and upon the surrounding townscape.

In the particular circumstances of 14-32 Ashmore Road, it is considered that the introduction of external wall insulation has struck an acceptable balance between improving the energy performance of the building and protecting the townscape and as such is considered acceptable.

However, the application which also includes the replacement aluminium windows is not considered acceptable as the windows would cause harm to the character and appearance of the buildings.

## 3. CONSULTATIONS

### NORTH PADDINGTON SOCIETY

No response received.

### ADJOINING OWNERS/OCCUPIERS AND OTHER REPRESENTATIONS

No. Consulted: 68; Total No. of Replies: 3.

(Two responses in favour of the applications; one objection).

The objector is concerned that the proposal will dramatically change the appearance of the rear elevation, that the rendered finish will require continuous maintenance to look good and that alternative methods of wall insulation should be considered.

The two responses in support are from the City Council's Premises Management department and the Energy Efficiency Commissioning Officer.

ADVERTISEMENT/SITE NOTICE: Yes.

## 4. BACKGROUND INFORMATION

### 4.1 The Application Site

Ashmore Road is a long north-south aligned street in the north west part of Westminster which stretches from Harrow Road at its southern end to Kilburn Lane at its northern end. Prior to the middle of the 19th century this area was open countryside, but a rapid period of urban expansion took place in the last quarter of the 19th century and at this time the street and most of the buildings along it were constructed. The majority of buildings along Ashmore Road are the original late Victorian houses and while they all conform to a broadly consistent scale, it is clear that they were built as separate street blocks, probably with different builders and developers and as a consequence there is a subtle variation in style and architectural embellishment along the street. The only large section of Ashmore Road where the original Victorian housing has not survived is along the south eastern end frontage, between Shirland

Road and Harrow Road, where the former dwellings were cleared away in the 1970s/80s and replaced by a new residential estate.

When originally built the properties along Ashmore Road were all single dwellings, but the majority, if not all, have now been subdivided into flats.

All of Ashmore Road lies outside a conservation area.

Nos. 14-32 Ashmore Road are a group of 10 properties which lie on the western side of the street at its southern end and form part of one of the original Victorian terraces. They have all been subdivided into flats.

## **4.2 Relevant Planning History**

There is no relevant planning history connected with 14-32 Ashmore Road, however, there was a series of applications relating to replacement windows in nearby properties which are considered to be of relevance.

In August 2011, Sub-Committee considered an item which included 16 planning applications to install and/or retain replacement uPVC windows in Victorian properties in Saltram Crescent, Fernhead Road, Bradiston Road, Portnall Road, Shirland Road, Macroom Road and Ashmore Road and resolved to refuse permission due to the detrimental impact on the appearance of the Victorian terrace properties and the local townscape. An appeal against the City Council's decision was made but was dismissed by the Planning Inspectorate. In dismissing the appeal the Inspector made the following remarks, which are considered to be relevant to this particular case:

“ Although not within a designated conservation area these are attractive properties predominantly retaining original architectural detailing. Whilst there are variations in design between individual terraces and streets, the area has a generally consistent character and appearance, a key contributor to which is the common feature of timber sliding sash windows throughout the area...”

“...the replacements [windows] are markedly different in appearance to the original windows, not only in the nature and texture of the uPVC material itself, but also in the proportions and the detailing...”

“...it was clear that the rear elevations of these terraced properties generally feature prominently in the private residential views from the backs of surrounding properties. Where uPVC windows and doors are already in place they are harmful to both the individual character and appearance of their host dwellings and the general visual quality of the urban form as seen from neighbouring dwellings. The further installations proposed would add to that harm.”

“Overall, I conclude that the installations already carried out are harmful to the character and appearance of the appeal properties and the surrounding area and that the proposals for further installations would add to that harm. In this respect they conflict with requirements of the development plan policies stated in the Council's decision notice. Those requirements, which are consistent with the importance given to high quality design in the Framework [NPPF], include that development should improve the quality of adjacent spaces around buildings, and thus alterations to buildings should reflect the style and details of, and should use materials consistent with, the original building. In particular, notwithstanding that the appeal properties are not within a conservation area, the supporting text to Saved Policy DES 5 of the Council's Unitary Development Plan 2007 makes it clear that the use of uPVC in replacement windows will not normally be acceptable in areas where existing buildings contribute to the townscape value of an existing building.”

"...I do not accept that the uPVC windows satisfactorily replicate the originals. I note they are double glazed but so are many of the timber replacement windows in the area which display a greater degree of likeness to the originals and do not unacceptably harm the appearance of the buildings or the streetscape..."

A full copy of this appeal statement is provided in the background papers.

## 5. THE PROPOSAL

There are two applications for consideration: one (14/07770/FULL) relates solely to the installation of external wall insulation to the rear of Nos. 14-32 Ashmore Road; the other (14/07765/FULL) is for the installation of external wall insulation to the rear, but also for the replacement of the existing windows on the rear with double glazed aluminium sash windows.

The properties are owned by Octavia Housing who provide social housing and care services. They are seeking to upgrade their housing stock in terms of energy performance, but in devising their proposals have also taken into account the potential impact on tenant bills, practicality of installation and impact on ventilation and damp. Their conclusions, which have led to the current applications, are that due to space constraints, reducing 'cold bridges' and practicality of installation, they believe that solid wall insulation be carried out externally where practical. For these properties, they appreciated that aesthetic considerations ruled out external wall insulation to the front facades, but believed it to be the best solution for the rear elevations. The second component of one of the applications is the installation of replacement double glazed aluminium windows and the applicant suggests it would be their preference to undertake both aspects concurrently, because, apart from an obvious cost saving, they consider that the external wall insulation (if approved and installed) will be likely to be damaged by window replacement and repairs if undertaken at a later date, and secondly that higher insulated windows will decrease the amount of internal condensation forming and so improve air quality.

The current rear elevations are typical for properties of this age and in this area. They are simple stock brick faced facades, typically comprising a three storey main building and a lower three storey rear wing. As is often the case many of the service pipes (e.g. soil pipes and rainwater pipes), boiler flues and ventilation grilles are all located on these rear facades.

The proposed external wall insulation would be applied to the existing brickwork and would be 110mm thick. All of the extraneous fixtures applied to the facades e.g. pipes, would need to be removed and then re-installed after the insulation has been applied. The windows and door reveals will also need to be insulated, but the insulation in these areas will be thinner (approx. 50mm thick). To avoid 'cold bridging' the walls and roofs of attached sheds will also need to be insulated. The applicant has provided typical junction details to show how the insulation would be detailed at various points on the elevation. The finish of the render will be an off-white textured surface.

The main visual differences to the rear facades caused by the insulation will be the surface finish, an increase in the depth of the window and door reveals and a small overall enlargement of the bulk.

With respect to the application which also includes the replacement windows, this is identical in terms of its proposal for the external insulation. With respect to the windows this would involve removing all of the existing windows to the rear of the buildings and replacing these with aluminium sash windows. The detailed section sizes have not been provided but they will open like a vertically sliding sash and they will be finished in white. At present most, although not all of the existing windows are timber sash windows.

In addition to these two applications, it should be noted that Octavia Housing have also submitted 64 additional applications relating to 40 other properties in Ashmore Road. All of

these applications are either applying just for external wall insulation to the rear or for the insulation and the replacement windows. The consultation period for these other applications is still running but the Committee's decision in respect of the current two applications will provide in principle guidance to officers in determining these other applications.

## **6. DETAILED CONSIDERATIONS**

### **6.1 Land Use**

There are no land use issues which arise from these applications.

### **6.2 Townscape and Design**

#### **14-32 Ashmore Road**

Nos. 14-32 Ashmore Road are a group of 10 Victorian terraced properties on the west side of the street, at its southern end. They are three storey buildings and their front façade, like all of the Victorian buildings along Ashmore Road, feature the main architectural embellishment. They have prominent flights of steps which lead up to a raised ground floor; the paired door surrounds have decorative plasterwork to them; there is a two storey rendered bay window to each building, again with decorative detailing. The majority of the facade is faced in stock brick, with decorative bands of brickwork and a brick cornice. To the rear each property has a lower three storey rear wing and these wings are again paired to provide a regular rhythm of projecting wings along the length of the terrace. The rear façades are far less ornate and are simple stock brick facades with segmental brick arches to the windows. The window openings have rendered reveals and stone sills and for the most part the windows are single glazed timber sash windows. There are some replacement windows in the terrace and some small modern casement windows have been added at a later date, probably when the buildings were subdivided into flats.

Both applications propose the installation of external wall insulation to the rear facades, including the projecting rear wings. The purpose of the installation is to improve the energy efficiency of the buildings, while at the same time reducing heating costs and improving residents comfort.

The overwhelming character and appearance of the application buildings and of the wider area is brick built Victorian housing. These buildings display a high degree of uniformity within their individual terraces and it is considered that the consistent scale, architectural detailing and materials all contribute to the overall visual quality of the townscape.

The introduction of the external wall insulation to the rear of this block of 10 properties, will have a dramatic effect on the appearance of the rear façade. It is considered that the change in material, the deepening of the window reveals and the general enlargement of the buildings will diminish the character and appearance of the terrace.

The proposal therefore would result in varying and not necessarily compatible outcomes: i.e. it would improve the energy performance of the buildings and improve the quality of housing for its residents, probably resulting in a reduction in their fuel bills, while at the same time it is considered to cause harm to the townscape.

It could be argued that the proposal fails to accord with the Council's design policies. For example, Policy DES 1 of our UDP requires development proposals to demonstrate how they have taken into account 'architectural quality, local character and distinctiveness' and 'townscape features within the site and features which border the site'. Similarly, Policy DES 5 indicates that permission will be granted for development where 'its design reflects the style and details of the existing building' and 'if the use of external materials is consistent with that

of the existing building'. It is suggested that the proposed external wall insulation does not accord with these policy requirements.

However, Policy S28 of our City Plan seeks to ensure that development will 'reduce energy use and emissions that contribute to climate change during the life cycle of the development'. Also, the National Planning Policy Framework (NPPF) contains as one of its core principles that planning should 'support the transition to a low carbon future in a changing climate...including conversion of existing buildings...'.

The NPPF goes on to state that 'Local planning authorities should not refuse planning permission for buildings or infrastructure which promote high levels of sustainability because of concerns about incompatibility with an existing townscape, if those concerns have been mitigated by good design (unless the concern relates to a designated heritage asset and the impact would cause material harm to the asset or its setting which is not outweighed by the proposal's economic, social and environmental benefits).'

Finally, the NPPF states that 'the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset.'

The Ashmore Road properties are regarded as non-designated heritage assets and it is considered that the current proposals require the balanced judgement that is advocated by the NPPF.

The proposal is seeking to improve the energy performance of the building, but the applicant has acknowledged that the front facades of these properties, because of their attractive detailing, which contribute positively to the character and appearance of the area, are not suited to external wall insulation. Thus, the design has sought to balance improving the energy performance, while maintaining the buildings' best architectural features. A further mitigating factor in the current proposal is that the rear façade of this group of 10 properties cannot be viewed from public viewpoints in the surrounding streets. Thus, the only views of the altered façade will be from private viewpoints in the adjacent properties in Ashmore Road and from the properties on Portnall Road which back onto the site. That the alterations can only be seen in private residential views, is not a reason for the proposal to be acceptable, as indicated by the Inspector's decision relating to uPVC windows (referred to in the Planning History section and reproduced in the background papers), however, it is a factor in assessing the degree of harm. Furthermore, as the proposed alterations take place to a group of 10 properties, while there will be a change in appearance, this change is at least a uniform change and thus a consistency in appearance, albeit different, is achieved.

In these circumstances, it is considered that an acceptable balance has been struck between improving the energy performance of the building and protecting the townscape and, as such, the introduction of external wall insulation to these 10 properties is considered acceptable.

One of the applications also includes the replacement of all of the existing windows to the rear with double glazed aluminium windows. This combined set of works is preferred by the applicant as it improves the energy performance of both the walls and the windows and also the external wall insulation is likely to be damaged by window replacement and repairs if they were undertaken at a later date. Also the higher insulated windows would decrease the amount of internal condensation forming and thus improve air quality.

The presence of timber sash windows is prevalent within the area and contributes positively to its character. This point was also identified by the Inspector in the uPVC windows appeal decision. Although the current proposal is for aluminium windows as opposed to uPVC, it is



considered that many of the same issues are raised to this previous set of applications and the subsequent appeal.

The City Council's UDP specifically states in the policy application to Policy DES 5 that replacement windows should be designed to complement the architectural style and detailing of the existing building; where existing windows contribute to the townscape value of a building, they should be retained and if they must be replaced, the new windows should be exact copies of the originals. It also states that the use of uPVC or aluminium windows will not normally be acceptable.

With the advances in quality of double glazed timber windows, it is considered that a proposal for double glazed windows would be acceptable, but that these windows should be in timber to match the prevailing window type in the area. This would be considered to represent an acceptable balance between the energy performance of the windows and their aesthetic appearance.

The applicant, at pre-application stage, was encouraged to pursue a proposal for double glazed timber windows, but it is understood they have not chosen to do this largely on the basis of cost and maintenance issues.

It is therefore recommended that the application which includes replacing the windows with aluminium windows is refused because they harm the character and appearance of the buildings.

#### **Other Properties in Ashmore Road**

As mentioned at the end of Section 5 of this report, there are, in addition to these two applications, a further 64 applications that have been made for 40 other properties in Ashmore Road. All of these applications have been made by Octavia Housing and all are for external wall insulation applied to the rear façade; and a second application which also includes the replacement aluminium windows.

Thus, these other applications raise many of the same issues as the current applications and in the case of the applications which include the replacement aluminium windows it is anticipated that the same recommendation to refuse these applications will be made.

However, with respect to the applications for external wall insulation only, there are some further issues which arise because of the exposed location of the properties or the extent of insulation proposed. In some cases the rear of the properties are in clear view from public vantage points and in these circumstances the visual impact of the proposal is considered to be significantly greater than is the case for 14-32 Ashmore Road. Also, many of the applications are for single properties within terraces, thus there will be situations where a very irregular appearance to the rear facades will be created, both in private and public views.

It is therefore likely that the following criteria will be applied to this other large group of applications:

- a) the installation of external wall insulation to the rear elevation will be acceptable, only where the rear elevation is not visible from street views;
- b) the installation of external wall insulation to the rear will not be acceptable for individual buildings, but in most cases will be acceptable for groups of two or more.

#### **6.3 Residential Amenity**

There are no residential amenity issues that arise from the proposals.

#### **6.4 Transportation / Parking**

There are no transportation or parking issues that arise from the proposals.

#### **6.5 Equalities and Diversities**

There are no equalities or diversities issues that arise from the proposals.

#### **6.6 Economic Considerations**

There are no economic issues that arise from the proposals, other than the likely reduction in fuel costs which the proposals would result in.

#### **6.7 Other Westminster Policy / UDP Considerations**

There are no other policy issues that arise from the proposals.

#### **6.8 London Plan**

There are no strategic issues that arise from the proposals.

#### **6.9 Central Government Advice / NPPF**

The main NPPF references raised by these applications have been covered in the Townscape and Design section.

#### **6.10 Planning Obligations**

These are not relevant for developments of this scale.

#### **6.11 Environmental Assessment including Sustainability and Biodiversity Issues**

According to the applicant's supporting statement the energy efficiency improvements to the external wall will increase the thermal performance to around  $0.29 \text{ W/m}^2\text{K}$  (above the minimum Building Regulations standard of  $0.30 \text{ W/m}^2\text{K}$ ). They also claim that overcladding not only protects the building fabric from future decay, it also preserves the thermal mass on the inside of the envelope where it can moderate internal temperatures. With respect to the insulation product itself, they claim 'the specified insulation is a stone wool product, one of the most abundant materials on earth. It has half the embodied energy of petro-chemical derived equivalent insulations... and unlike polystyrenes, polyurethanes or phenolic foam boards, is inherently fireproof and dimensionally stable. The assembly is vapour permeable and will eliminate the risk of internal condensation. Another significant benefit for residents is that the stone wool insulation has excellent acoustic properties, further enhancing dwelling comfort for residents.'

#### **6.12 Other Matters**

There are no other matters raised by these proposals.

#### **6.13 Conclusions**

In the particular circumstances of 14-32 Ashmore Road, it is considered that the introduction of external wall insulation has struck an acceptable balance between improving the energy performance of the building and protecting the townscape and as such is considered acceptable (Application 1).

However, the application which also includes the replacement aluminium windows is not considered acceptable as the windows would cause harm to the character and appearance of the buildings (Application 2).

## BACKGROUND PAPERS

1. Application forms.
2. Appeal Decision dated 24 October 2012.
3. Online response from occupier of 29a Portnall Road dated 3 September 2014.
4. E-mail from Energy Efficiency Commissioning Officer dated 16 September 2014.
5. E-mail from Acting Assistant Service Manager, Residential Environmental Health dated 19 September 2014.

IF YOU HAVE ANY QUERIES ABOUT THIS REPORT OR WISH TO INSPECT ANY OF THE BACKGROUND PAPERS PLEASE CONTACT TOM BURKE ON 020 7641 2357 OR BY E-MAIL – [tburke@westminster.gov.uk](mailto:tburke@westminster.gov.uk)

**DRAFT DECISION LETTER**

**Address:** 14-32 Ashmore Road, London, W9 3DF

**Proposal:** The installation of external wall insulation to the rear of Nos. 14-32 Ashmore Road.

**Plan Nos:** 5438-1000; 5438-1100; 5438-1111; 5438-1150; 5438-1152, insulation and render sample.

**Case Officer:** Tom Burke

**Direct Tel. No.** 020 7641 2357

**Recommended Condition(s) and Reason(s):**

- 1 The development hereby permitted shall be carried out in accordance with the drawings and other documents listed on this decision letter, and any drawings approved subsequently by the City Council as local planning authority pursuant to any conditions on this decision letter.

**Reason:**

For the avoidance of doubt and in the interests of proper planning.

- 2 You must carry out any building work which can be heard at the boundary of the site only:

- \* between 08.00 and 18.00 Monday to Friday;
- \* between 08.00 and 13.00 on Saturday; and
- \* not at all on Sundays, bank holidays and public holidays.

Noisy work must not take place outside these hours. (C11AA)

**Reason:**

To protect the environment of neighbouring residents. This is as set out in S29 and S32 of Westminster's City Plan: Strategic Policies adopted November 2013 and ENV 6 of our Unitary Development Plan that we adopted in January 2007. (R11AC)

- 3 All replacement pipework shall be coloured black and maintained in that colour.

**Reason:**

To make sure that the appearance of the building is suitable and that it contributes to the character and appearance of the area. This is as set out in S28 of Westminster's City Plan: Strategic Policies adopted November 2013 and DES 1 and DES 5 or DES 6 or both of our Unitary Development Plan that we adopted in January 2007. (R26AD)

- 4 The installation of external wall insulation must be installed to all 10 properties as part of a single contract and as a single phase of building works.

**Reason:**

To ensure a uniform appearance to the alterations and to make sure that the appearance of the buildings is suitable and that it contributes to the character and appearance of the area. This is as set out in S28 of Westminster's City Plan: Strategic Policies adopted November 2013 and DES 1 and DES 5 or DES 6 or both of our Unitary Development Plan that we adopted in January 2007.

**Informative(s):**

- 1 In dealing with this application the City Council has implemented the requirement in the National Planning Policy Framework to work with the applicant in a positive and proactive way. We have made available detailed advice in the form of our statutory policies in Westminster's City Plan: Strategic Policies adopted November 2013, Unitary Development Plan, Supplementary Planning documents, planning briefs and other informal written guidance, as well as offering a full pre application advice service, in order to ensure that applicant has been given every opportunity to submit an application which is likely to be considered favourably. In addition, where appropriate, further guidance was offered to the applicant at the validation stage.

**DRAFT DECISION LETTER**

**Address:** 14-32 Ashmore Road, London, W9 3DF

**Proposal:** External alterations to Nos. 14-32 Ashmore Road comprising the installation of new aluminium sash windows and installation of external wall insulation to rear elevation.

**Plan Nos:** 5438-1000; 5438-1100; 5438-1110/A; 5438-1150; 5438-1151/A, insulation and render sample.

**Case Officer:** Tom Burke

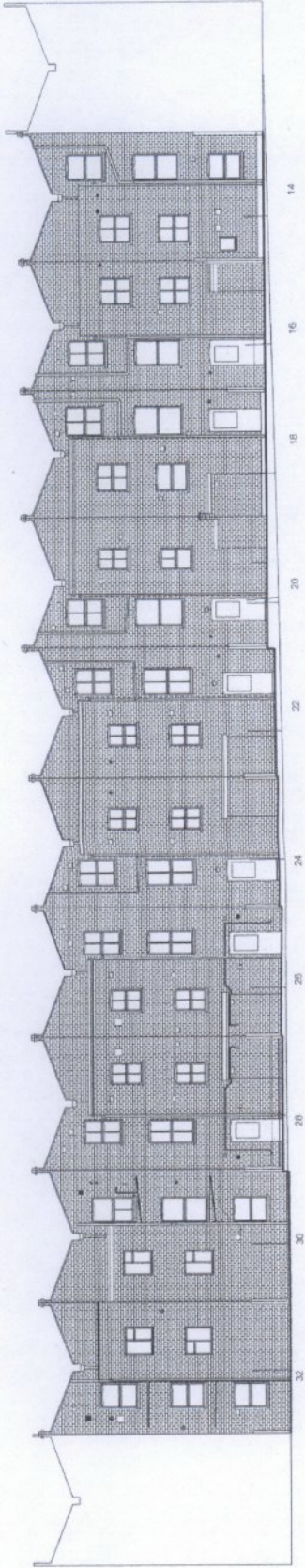
**Direct Tel. No.** 020 7641 2357

**Recommended Reason(s) for Refusal:****Reason:**

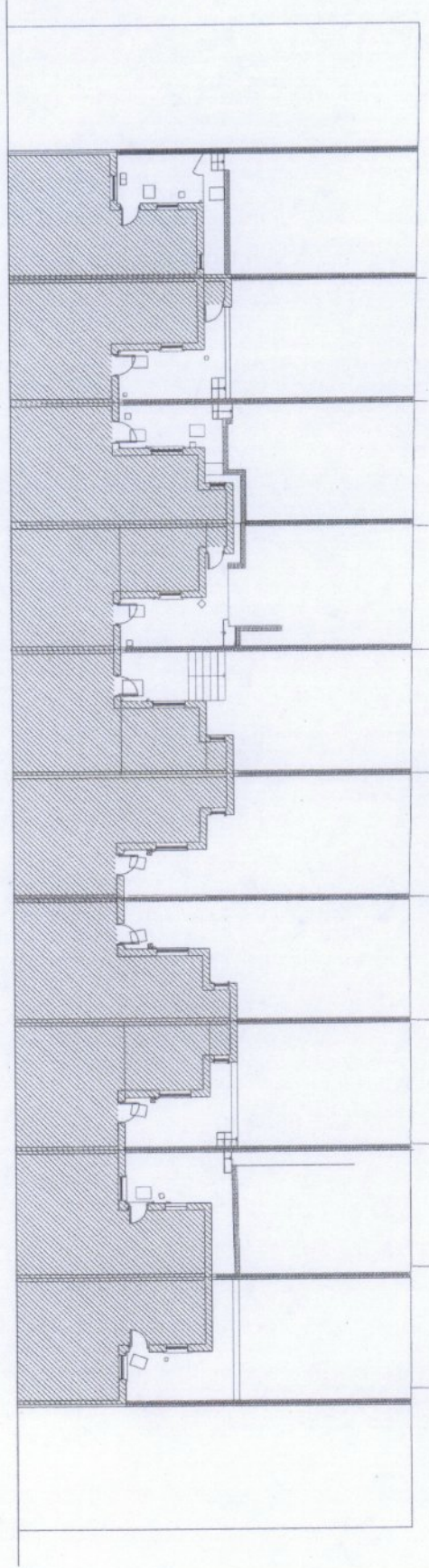
- 1 Because of their material and detailed design the aluminium windows would harm the appearance of this group of buildings and this part of the City. This would not meet S28 of Westminster's City Plan: Strategic Policies adopted November 2013 and DES 1 and DES 5 or DES 6 or both of our Unitary Development Plan that we adopted in January 2007.

**Informative(s):**

- 1 In dealing with this application the City Council has implemented the requirement in the National Planning Policy Framework to work with the applicant in a positive and proactive way so far as practicable. We have made available detailed advice in the form of our statutory policies in Westminster's City Plan: Strategic Policies adopted November 2013, Unitary Development Plan, Supplementary Planning documents, planning briefs and other informal written guidance, as well as offering a full pre application advice service. However, we have been unable to seek solutions to problems as the principle of the proposal is clearly contrary to our statutory policies and negotiation could not overcome the reasons for refusal.
- 2 While the principle of aluminium replacement windows is considered unacceptable, the City Council would consider favourably a proposal for double-glazed timber windows, subject to their detailed design.

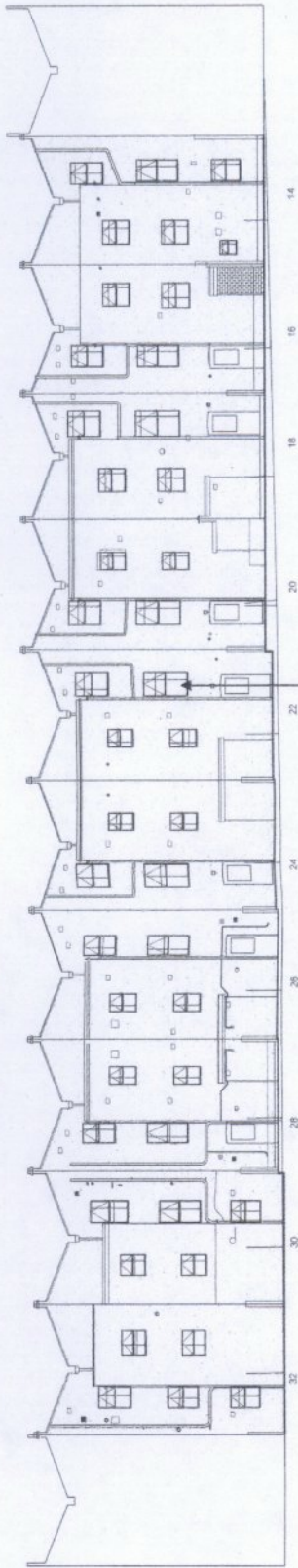


EXISTING REAR ELEVATION  
SCALE 1":100



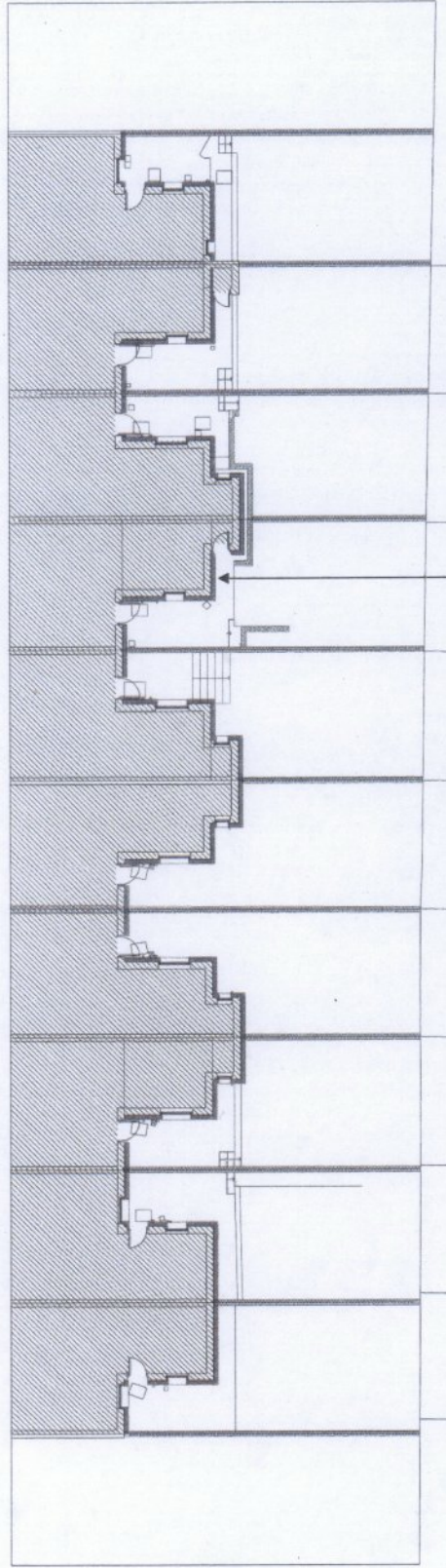
EXISTING PLAN - REAR SIDE  
SCALE 1":100

Existing rear elevation and part plans (NTS)



PROPOSED PLAN - REAR SIDE  
SCALE 1:100

Existing windows to be replaced with double glazed aluminum sash windows with openings as shown.



PROPOSED REAR ELEVATION  
SCALE 1:100

110mm rendered external wall insulation as over-cladding to brick work..

Proposed rear elevation and part plan.





CGI's of rear view as proposed.



### 3.0 Access Statement

Access -  
Transport Links

There are no proposed alterations to the transport network leading to or around the property.

### 4.0 Sustainability Statement

Sustainability

Housing in the UK accounts for 27% of carbon emissions. More than 80% of the houses we will be living in in 2050 have already been built. To meet the UK's target of an 80% reduction in carbon emissions by 2050, we must dramatically improve the performance of our existing housing stock. These proposals will therefore form an important blueprint for the upgrade of similar residential properties owned by Octavia Housing. Over-cladding not only protects the building fabric from future decay, it also preserves the thermal mass on the inside of the envelope where it can help to moderate internal temperatures.

The specified insulation is a stone wool product, one of the most abundant materials on earth. It has half the embodied energy of petro-chemical derived equivalent insulations from manufacture and unlike polystyrenes, polyurethanes or phenolic foam boards, is inherently fire proof and dimensionally stable. The assembly is vapour permeable and will eliminate the risk of internal condensation. Another significant benefit for residents is that the stone wool insulation has excellent acoustic properties, further enhancing dwelling comfort for residents.