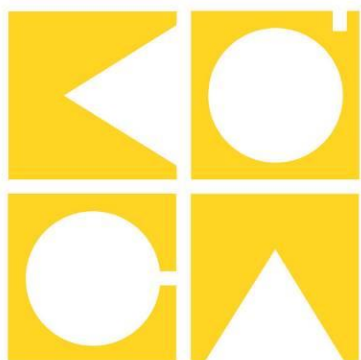
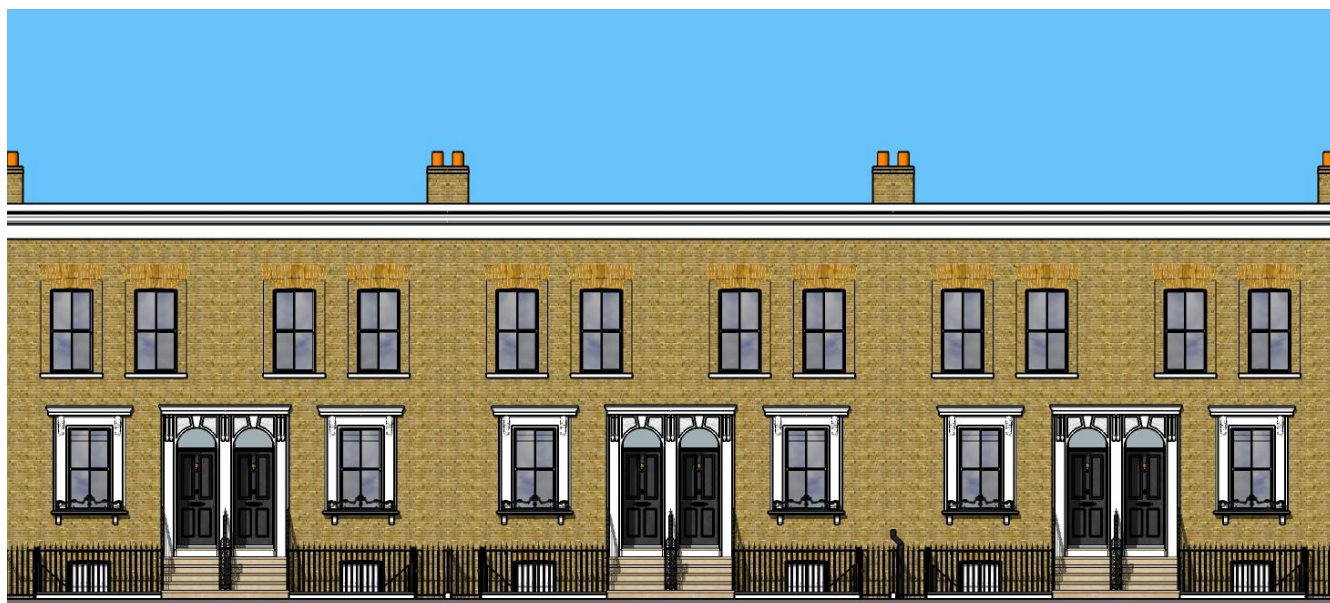


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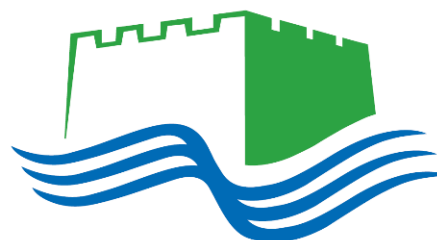
# Driffield Road Conservation Area Detailed design guidance for façade enhancements

Consultation Draft April 2017

To be read in conjunction with the Conservation Area Character Appraisal



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A r c h i t e c t s



**TOWER HAMLETS**

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## 1.0 INTRODUCTION

### **What is this consultation about?**

This consultation is seeking views from residents, and other interested parties, on proposed measures to help increase the level of public benefit associated with individual planning applications for mansard roof extensions in the Driffield Road and Medway conservation areas. Public benefits are necessary where it is considered that a development proposal, such as a mansard roof extension, will result in harm to the historic environment. This is explained in further detail below.

### **How does this consultation relate to the one that was held last year?**

Last year we consulted on options for mansard roof extensions in the Driffield Road and Medway conservation areas. These options, which were prepared by architects working on behalf of the council, explored ways to design roof extensions that would minimise the harm that they might do to the character of the conservation areas.

At last year's consultation some residents told us that they supported the idea of mansard roof extensions in the two conservation areas. However, some residents told us that they were concerned that allowing roof extensions would harm the character of the conservation areas.

Council officers carefully considered all of the comments that were received and also looked closely at the roof extension options prepared by the architects. After careful consideration, officers concluded that, overall, they could not recommend that the council adopted an approach whereby mansard roof extensions would generally be considered more favourably. This is because, even though the designs prepared by the architects did what they could to limit potential harm, this was not sufficient to comply with the council's legal obligations to preserve the character and appearance of the conservation areas. This view was presented to the Mayor and his Cabinet at their meeting in December 2016. To see the cabinet report (item 5.8 in the reports pack) and appendices [click here](#).

### **Why would mansard roof extensions cause harm to the conservation areas?**

A detailed assessment of the harm that would be caused by mansard roof extensions is included as part of the officers' report to Cabinet, which is available to view on the council's website. This assessment finds that the introduction of mansard roof extensions would cause harm to a number of features that are considered to make a positive contribution to the character of the Driffield Road and Medway conservation areas. Some of the harm, such as the increase in size of the characteristically small scale houses and the loss of historic roof structures would be permanent and would increase as more mansard roof extensions are introduced. Other examples of harm, such as changes to the uniformity of the terraces and a decline in the consistency of the roofline, may eventually reduce over time if the number of extensions reintroduced uniformity. Overall, it was concluded that there would be potential for serious harm, particularly in the short to medium term.

### **Why do planning applications need to deliver public benefit?**

The National Planning Policy Framework (NPPF), the government's overarching set of planning policies, states that where a development proposal, such as a mansard roof

extension, would result in harm to the historic environment, the harm must be weighed against the public benefits of the proposal. Harm to the historic environment can be outweighed if a development proposal demonstrates that it would deliver sufficient public benefit. However, the council does have a legal duty to give special regard to the protection of the historic environment, meaning that an appropriately high degree of benefit must be delivered to overcome the harm.

The government defines a public benefit as anything that arises from a development that delivers economic, social or environmental progress. For a development, such as a mansard roof extension, to be justified, public benefits must arise as a direct result of it. The benefit must also be of a nature and scale to be of benefit to the public at large and should not be just a private benefit, which arguably a mansard might be.

### **Would mansard roof extensions deliver public benefit?**

A detailed assessment of the possible public benefits arising from mansard roof extensions is included as part of the officers' report to Cabinet in December 2016. This assessment found that only very limited public benefit would arise from allowing mansard roof extensions.

The report to Cabinet recognises that allowing home extensions may assist some residents by enabling them to accommodate their families within their existing homes without having to move out of the area. The council wants to support families by ensuring that there is a good supply of appropriate housing to accommodate them. However, it was concluded that for the purposes of overcoming harm to the historic environment, this factor could only be given limited weight as a public benefit. This is because it is very difficult to guarantee that the benefit would actually arise as a result of a particular development. It can also be argued that allowing mansard roof extensions may undermine social cohesion by encouraging buy-to-let investment and/or the subdivision of family homes.

### **Why is there another public consultation?**

After carefully considering all of the responses to last year's consultation, council officers could not recommend that the council adopt a more permissive approach to mansard roof extensions. This was because there would not be enough public benefit to outweigh the harm caused to the historic environment. However, in making this recommendation, officers did suggest that, if Cabinet wanted to pursue a more permissive approach to mansard roof extensions, it could recommend that the council explore ways to try and secure additional public benefit, which may help to mitigate the harm caused to the historic environment. Alternatively, it was suggested that Cabinet could decide to accept the harm that would arise from allowing mansard roof extensions, providing it was confident that it would be meeting its legal obligation to have special regard for the protection of the historic environment.

Cabinet agreed to pursue the first of these two alternative options; to introduce measures to mitigate the harm to the historic environment by increasing the level of public benefit associated with this type of development. This alternative approach has not previously been consulted on, and would give rise to financial implications, as well as other considerations, particularly for residents seeking a mansard roof extension. Therefore, it is important that a further public consultation is held to seek the views of residents.

### **What is being consulted on?**

The council has appointed consultant architects and asked them to prepare guidance that identifies, describes and illustrates potential works that could enhance the character of the Driffield Road and Medway conservation areas. These enhancements could be considered to be public benefits that would help to mitigate the harm that would be caused by the introduction of mansard roof extensions, which has already been minimised as far as possible by careful design considerations.

Two different types of enhancement have been looked at:

1. Enhancements that can be made by homeowners to improve the appearance of their properties. These improvements will, in turn, help to improve the character and appearance of the conservation areas generally.
2. Enhancements to streetscape that will contribute to the general improvement of the character and appearance of the conservation areas, these enhancements are specifically heritage related. These improvements could be delivered by financial contributions made through agreements associated with the grant of planning permission.

This document explores the first of these types of enhancement for the Driffield Road Conservation Area. It illustrates the potential for enhancements to be made to individual properties that will help to improve the character of the conservation area by the reinstatement of lost features. If carried out to an appropriately high standard, these works could provide a public benefit that may mitigate harm caused by adding a mansard roof extension. The guidance is intended to show the standards expected and to illustrate examples that would be appropriate. It explains why using materials and workmanship to match the original could uplift the quality of the street. Adopting a consistent design over a group of houses or a whole terrace could contribute positively to the character of the area and could be considered a public benefit that would help to mitigate harm. The document explains the type of enhancements to individual properties which could be achieved and how they could be delivered alongside proposals for mansard roof extensions through the use of planning conditions.

Potential enhancements to the streetscape of both conservation areas are explored in a separate document, which is also part of this public consultation. It is envisaged that planning applications for mansard roof extensions will need to demonstrate how they contribute to both types of conservation area enhancement (façade and streetscape) to deliver an appropriate level of public benefit.

### **How is this document to be used?**

This document should be read in association with the revised Driffield Road Conservation Area Character Appraisal and Management Guidelines. The revised appraisal document offers guidance about what is important in terms of the character and appearance of the conservation area and provides a design for a sympathetically detailed mansard roof. This has been the subject of an earlier consultation.

The current documents set out potential enhancements to the façade and to the public realm and are intended to mitigate the harm which a mansard roof proposal is likely to engender. The documents give detailed advice regarding the type of enhancements which it is expected will accompany proposals for a mansard roof. To ensure a clear understanding of the implications of these proposals a table setting out the likely costs of the improvements identified both to individual buildings and within the public realm at today’s prices has been prepared. The relevant table of costs has been incorporated within this document and within that setting out the envisaged improvements to the public realm. The documents also set out details of the way in which the scheme is to be delivered.

**How can I find out more and how can I comment?**

The proposed measures for securing additional public benefit will be the subject of a public consultation from **Friday 7 April to Sunday 14 May 2017**. Two drop-in sessions are being held where the consultation proposals will be displayed and council officers will be available to answer questions:

Date and time	Venue
Thursday 20 April 2017 17.00 to 20.00	Bow Idea Store, 1 Gladstone Place, Roman Road E3 5ES.
Thursday 11 May 2017 14.00 to 17.00	St Paul’s Church, St Stephens Road E3 5JL.

Written comments on the proposals can be sent to us by email at:

[placeshaping@towerhamlets.gov.uk](mailto:placeshaping@towerhamlets.gov.uk).

You can also write to us at the following postal address:

The Place Shaping Team  
 Place Directorate, Strategic Planning  
 Mulberry Place  
 5 Clove Crescent  
 London  
 E14 2BG

## **2.0 POTENTIAL FOR ENHANCEMENT – TERRACED HOUSES**

### **2.1 CORNICES AND PARAPETS**

Illustrated Sheet 2 indicates the parapet wall, coping, cornice and stucco band and illustrates the contribution of the stucco mouldings to the character of the streetscape.

The guidance explains how it could be possible to achieve consistent parapet details even when they are carried out piecemeal across different houses.

#### **Appraisal**

The Conservation Area Character Appraisal identifies the continuous line of the parapet wall and the stucco cornices to the parapet as features of special interest, making a positive contribution to the character of the Conservation Area.

Most of the terraces in the Driffield Road Conservation Area were designed to have a consistent parapet line with a rendered band course and cornice. Many of the cornices have been removed, resulting in an irregular, broken parapet line. Some have already been successfully renewed where previously missing and this can enhance the terrace substantially contributing positively to its character and appearance.

The maintenance, conservation and reinstatement of cornices is encouraged by the Council.

#### **Parapet stucco band and cornice repairs**

Repairs should be carried out by specialist contractors with experience of using lime mortar. The parapet brickwork should be checked for damaged bricks or loose or missing mortar. The coping should be checked to make sure that it is stable and there is no plant growth. Gutter cleaning and removal of all organic growth should be carried out regularly. Care should be taken when removing damaged render and when preparing surfaces for redecoration because they are likely to be coated in lead-based paint, which is toxic.

The stucco or render band on the face of the brickwork and the cornice should be checked for cracks and tapped with a metal tool to establish if there are any hollow areas where it may have come un-keyed. Where damaged, areas should be replaced in stucco to match the original mix (often containing lime putty with sand and stone dust but sometimes with other additives), or lime render. Lime products can only be applied if the temperature is at least 5 degrees and rising and it may require protecting with hessian to allow controlled drying, so these requirements need to be considered when the works are planned. Cement renders are not considered appropriate, as they can damage the brickwork because they do not allow for movement and water can get trapped behind hairline cracks and migrate to the inside of the wall. When any trapped moisture freezes it expands and can cause cracking.

#### **Cornice replacement**

If replacing the cornice the contractor would need to establish the moulding profile by taking a template from an adjacent property, accessed by ladder, by prior arrangement and the agreement of the householder. Ideally, property owners in adjacent houses would

liaise to facilitate reinstatement of lost mouldings at the same time, as this is likely to be cost-effective, would have the greatest visual benefit, and would allow the greatest consistency of detail.

Repairs to the brick parapet and coping may be needed before implementing cornice reinstatement. The parapet surface should be prepared and cleaned. The area to receive the cornice should be roughened to provide a key for the cornice.

There are 2 common methods of replacing cornices: run on site, or fabricated off site, as described below.

### **Run on site method**

For short videos on running mouldings on site see <https://specialistplastering.com/blog/><sup>1</sup>

The specialist contractor should make a template to match the original cornices in the terrace and make up a runner and guide. Brass fixings are installed at approximately 30 centimetre centres, drilled in with resin. Non-ferrous wire is fed through the brass fixings to provide a framework to prevent the cornice from blowing. The temporary guide needs to be set up carefully to prevent damage and to ensure the moulding is aligned with the moulding on adjacent properties and adjustment may be required to take into account any settlement or changes in height across the terrace. The cornice will then be run freehand on site using the template as a runner, typically with a stucco mix of sand, cement and hydrated lime. Once dry this can be painted. (If a self-coloured finish is required to reduce future maintenance, a pre-mixed stucco of Portland or stone can be used but this approximately doubles the cost. Samples of the finish should be obtained in advance, so that colour and texture can be reviewed.)

### **Off-site method**

Cornice mouldings can be fabricated from a template in a purpose-made mould and cast, typically using Fibrocem or Jesmonite<sup>2</sup> or similar materials made to look like stone and suitable for painting. Fixings are cast into the mould to allow fixing on site. Moulds can be re-used and therefore it may be a cheaper method for use over several properties at a time, but normally the specialist subcontractor would assess the best method for each application.<sup>3</sup>

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<sup>1</sup> This is included for information only; we cannot vouch for the suitability of the work by the company or the contents of this blog.

<sup>2</sup> We cannot vouch for the suitability of these materials but specialist suppliers would provide advice on appropriate methods and materials for each situation.

<sup>3</sup> The technical guidance has been compiled with the assistance of local plasterers listed below but their work has not been inspected and we cannot vouch for their suitability.

- [KEVRyan@londonrepointingandrestorationltd.co.uk](mailto:KEVRyan@londonrepointingandrestorationltd.co.uk), Kev Ryan Tel: 07830911177  
[www.londonrepointingandrestorationltd.co.uk](http://www.londonrepointingandrestorationltd.co.uk)

- [cornicerepairs@gmail.com](mailto:cornicerepairs@gmail.com) St. James' Plastering Services, James Lawlor Tel: 07970 308 825 / 0208 648 9173 [www.cornicerepairslondon.co.uk](http://www.cornicerepairslondon.co.uk)

A list of specialist suppliers, consultants and craftsmen in traditional building conservation, refurbishment and design can be found in The Building Conservation Directory by Cathedral Communications Ltd, [www.buildingconservation.com](http://www.buildingconservation.com). All suppliers in the Directory pay a fee to be included and while Cathedral Communications does not formally 'approve' or 'recommend' them, they do screen out inappropriate suppliers and products to maintain the established integrity of the



The Council does not wish to be prescriptive about the method of installation of replacement mouldings provided that the appearance of profile and surface is appropriate and that it is adequately secured to the building.

However, products that are self-finished with a plastic appearance, such as fibreglass mouldings, would not be considered acceptable as they do not have the character and appearance of the traditional mouldings.

### **Corners and edges**

Where only one house in a mid-terrace property is installing a replacement cornice, care should be taken to finish the ends neatly so that the next door neighbour could extend it seamlessly in the future. A movement joint may be necessary, especially where jointing to an existing neighbouring cornice; this should be profiled and coloured to match the cornice. Where adjoining properties do not align in height and at the end of terrace, care should be taken to return the moulding at 90 degrees to provide a neat edge.

### **Paint for cornices and rendered band courses**

The original paint is likely to have been off-white to resemble stone. Traditional paint contained white lead and linseed oil which yellowed and dulled down over time. Care should be taken when removing damaged render and when preparing surfaces for redecoration because lead is toxic. Lead paint is no longer permitted except on some listed buildings. Redecoration paint should be in cream, off-white or a light stone colour. RAL 9001 is suggested. Matt or semi-gloss paints are considered to be appropriate. On lime render it is important that a breathable paint should be used.

## **2.2 WINDOW AND DOOR SURROUNDS**

Illustrated Sheet 3 shows typical details of the original stucco window and door surrounds.

The council supports the repair and reinstatement of original features where missing, using traditional techniques and materials wherever possible.

### **Appraisal**

The decorative mouldings around doors and windows make a positive contribution to the character of the Driffield Road Conservation Area. The details vary from terrace to terrace, from simple brick detailing to ornate stucco surrounds with foliate embellishments. Many properties have recessed front doors with an embellished stucco surround, often featuring vermiculated or reticulated stucco panels over the door, and projecting mouldings with stucco console brackets. These details require regular maintenance and redecoration.

### **Repair**

Each property should be assessed individually, to establish which features are original and if details are missing which details of neighbouring properties are the most appropriate to

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Directory. Users should seek more detailed information and advice from suppliers before undertaking any project.  
Specialist trades may be members of the Craft Plasterers Guild or the League of Professional Craftsmen

be copied. Most houses are paired with their neighbour ie they are halls adjoining houses, but in some cases the features of the neighbouring property are not original. Where decayed, original mouldings should be repaired before they become dangerous. Embellishments should be carefully recorded and repaired before the original details are lost. Missing door hood mouldings in paired houses should be replaced to match the adjacent original existing and so it may be necessary to get permission from a neighbour to allow a template to be made. Some of the projecting mouldings can be seen to be supported by brick or tile slips, but the construction details are likely to vary from house to house. The Council does not wish to be prescriptive about the method of repair or installation of replacements provided that the appearance of the profile and surface is appropriate and that the moulding is adequately secured to the building. This guidance recommends that repairs should be carried out by specialist contractors with experience of replicating traditional mouldings to match the original and experienced in the application of lime render or stucco (refer to Cornices footnotes above). The choice of colour is also important as a terrace looks more cohesive where consistency is achieved. As with the painting of the cornice, a cream, off white, or light stone colour is the most appropriate. RAL 9001 is suggested.

### **Replacement console brackets**

Console brackets can be made off site, by plaster specialists (refer to Cornices footnotes above) or specialist suppliers of cast stone using products such as Fibrocem or Jesmonite<sup>4</sup>, using moulds of the original, or using 3-d software to provide laser cut templates. This becomes more cost effective if the reproduction moulding templates can be re-used and costs are likely to decrease if a large number were required for several properties at once.

### **Bay windows**

Refer to illustration Sheet 3. Some of the properties in Driffield Road Conservation Area have bay windows, for examples properties in Chisenhale Road and Ellesmere Road; these are fairly consistent in appearance but vary slightly from street to street. However, incremental changes such as loss of console brackets, mouldings, sash windows or leadwork can alter their appearance such that their historic character is substantially eroded.

Bay windows require maintenance and should be inspected and maintained periodically, including the roof. From time to time bay windows require structural repair, especially if they have not been adequately maintained. If they are visibly sagging or cracks appear on or near to the bay, a structural engineer's advice with experience of historic structures should be sought. A site inspection will be required and possibly some opening up for further investigation may be needed before the repair can be specified.

### **Paint for window and door surrounds and bay windows**

Refer to guidance for 'paint for cornices and rendered band courses', on page 9.

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<sup>4</sup> We cannot vouch for the suitability of these materials but specialist suppliers would provide advice on appropriate methods and materials for each situation.

## Lead flashings

Traditionally the bay windows are likely to have been roofed in lead. However, the depths of flashings were small and the visibility of the lead limited. In some cases the leadwork over bay windows has been removed, or painted over.

The original door and window hood mouldings and some of the shallower projecting mouldings formed in stucco were laid to fall and do not appear to have originally had lead cappings, although some have been added to protect them over the years.

Leadwork that is of adequate thickness and with suitable laps and flashings generally has a life-span of in excess of 70 years. Some of the leadwork has been renewed with good quality replacement leadwork, whilst in other cases it has been removed, over-painted or poorly installed, dumbing down the original quality of workmanship and detail.

Lead can be toxic and it needs to be specified and laid correctly; by specialist leadworkers using details approved by the Lead Development Association. A list of leadworkers and further information is available from [www.leadcontractors.uk](http://www.leadcontractors.uk), email: [info@lca.gb.com](mailto:info@lca.gb.com).

## 2.3 TIMBER SASH WINDOWS

Illustrated [Sheet 1](#) indicates the contribution of the traditional windows to the streetscape and [Sheet 4](#) indicates the components of a typical sash window in the Driffield Road Conservation Area.

The Council seeks to preserve and enhance the character of the streetscape by conserving the original windows, and replacing inappropriate windows.

### Appraisal

The Victorian terraced houses typical of the Driffield Road Conservation Area, had timber boxed sash windows of varying shapes and sizes, many of which remain intact, and these are features of special interest which make a positive contribution to the character of the Conservation Area. However some have been replaced with inappropriate alternatives such as plastic or metal framed windows or casement windows.

Historic England states<sup>5</sup>:

*“in conservation areas, surviving historic fenestration is an irreplaceable resource which should be conserved and repaired whenever possible”*

*“Replacement plastic (PVC-u) windows pose one the greatest threats to the heritage value of historic areas”*

*“Traditional windows can be simply and economically repaired, usually at a cost significantly less than replacement. For timber windows this is largely due to the high quality and durability of the timber that was used in the past (generally pre-1919) to*

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<sup>5</sup> <https://content.historicengland.org.uk/images-books/publications/traditional-windows-care-repair-upgrading/heag039-traditional-windows.pdf/>

*make windows. Properly maintained, old timber windows can enjoy extremely long lives.”*

*Repairing traditional windows rather than replacing them is not only more sustainable but makes better economic sense, particularly when the use of shutters or secondary glazing to improve their thermal performance is taken into account. Crucially, retaining historic fabric, including traditional windows, is fundamental to good conservation.”*

*“Estate agents suggest that using poor facsimiles of historic features can actually reduce the value of a property. A survey of UK estate agents carried out by English Heritage in 2009 showed that replacement doors and windows, particularly PVC-u units, were considered the biggest threat to property values in conservation areas. Of the estate agents surveyed, 82% agreed that original features added financial value to homes and 78% thought that they helped houses sell more quickly.”*

In the late C19th sash windows with relatively large panes of glass were fashionable and the windows in Conservation Area are typical of their period, with timber box sliding sash windows with horns. The intermediate glazing bars were typically 19mm or slimmer.

*“The introduction of cheaper and stronger plate glass in the 1830s removed the need for glazing bars, thus allowing uninterrupted views to the outside. However, the weight of the glass and the absence of any internal supports necessitated the introduction of ‘sash horns’ on the upper frame, extensions of the stiles that helped to strengthen the vulnerable frame joints at either end of the meeting rail”*

The C19th glass had more character than modern float glass, retaining smaller bubbles and wavers. Where original glass still exists, it should be retained.

Many of the original windows also incorporate internal shutters, which significantly improve draught exclusion and solar shading when closed and their retention is encouraged.

### **Window Repair**

Timber repairs should be carried out by a specialist. There are many specialist joiners who can undertake refurbishment including discrete draught exclusion using brush systems and repairs using precise replication of original moulding profiles.<sup>6</sup> They will assess whether the windows can be repaired in situ or if they need to be taken to the workshop.

### **Paint removal**

Paint accumulation can clog up the drips and anti-capillary grooves and should be removed carefully. All accessible paint should be removed using wet abrasive paper. The original paint would be lead-based, which is toxic if inhaled, so masks and finger protection should be worn and the wetting reduces dust. Avoid stripping by immersion in an “acid bath” as this will deform the timber and weaken the joints ultimately leading to faster deterioration of the window. The paint removal will reveal the original mouldings.

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<sup>6</sup> A list of specialist suppliers, consultants and craftsmen in traditional building conservation, refurbishment and design can be found in The Building Conservation Directory by Cathedral Communications Ltd, [www.buildingconservation.com](http://www.buildingconservation.com). All suppliers in the Directory pay a fee to be included and while Cathedral Communications does not formally ‘approve’ or ‘recommend’ them, they do screen out inappropriate suppliers and products to maintain the established integrity of the Directory. Users should seek more detailed information and advice from suppliers before undertaking any project.

### **Timber repair**

Damaged components should be retained and repaired to match the existing (where original). Modern off-the-shelf replacements are often less crisp than the original moulding profiles and samples may be needed to ensure an exact match and for quality control.

Further information on windows and glass and their conservation is available from Historic England.

SPAB Technical Pamphlet 13 describes and illustrates typical joinery repairs and explains how to repair loose joints and carry out other repairs<sup>7</sup>.

### **Sealing**

Weather stripping and acoustic sealant can be applied by creating a groove in the frame and/or replacing the timber beads at the edge of the window (sash beads parting beads). There are various methods, some of which are highly visible, and others which are equally effective but more discreet because they are inserted behind the timber bead. Replacement beads can incorporate draught seals. These can make a significant improvement to the thermal comfort of the room reducing draughts.

### **Double glazing**

If householders are considering replacement of glazing with double glazing then detailed proposals should be submitted for consultation and approval as double glazing is considered to be a material alteration requiring planning permission in the Conservation Area.

Installation of double glazing can damage existing glass and mouldings, and is not encouraged in the Conservation Area. However where original glass is no longer present, it may be acceptable to install a thin sealed double-glazed unit (such as Histoglas<sup>8</sup> or others) with coloured spacers, but this is not encouraged as it is all too easy to lose original mouldings and dumb down the fine detailing. Wide profiled double-glazed units with silver spacers are not appropriate for use in the Conservation Area because they are highly visible and often require replacement glazing bars with deeper profiles.

### **Secondary glazing**

Secondary glazing, sometimes referred to as storm windows can be considered. As the properties are not listed, internal secondary glazing that is separate from the external window does not require planning permission. A sheet of glass or perspex can provide a good level of acoustic insulation, draught exclusion and security, although it should not be considered if this would result in damage to shutters or original mouldings and the contractor should assess whether secondary glazing could be installed without damage. It is necessary to consider how the room will be ventilated and how the windows will be cleaned.

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<sup>7</sup> [www.spab.org.uk/bookshop](http://www.spab.org.uk/bookshop)

<sup>8</sup> We cannot vouch for the suitability of this product but specialist joiners should be able to provide advice on appropriate methods and materials for each situation.

### **Redecoration**

The windows should be primed and painted with a minimum of one undercoat and one top coat, but this will need to be done in stages if the windows are repaired in situ. The junction of the sash window pulley stile and sash stile should be waxed instead of painted to allow the window to slide open.

### **Window replacement**

If a property has windows that have been replaced in the past with plastic or metal windows or casement windows, then replacement with timber sash windows to match the original is encouraged. Original windows may still be intact on neighbouring properties and these may be appropriate for basing the details on; professional guidance might be needed but illustrated Sheet 4 provides guidance on the typical components of the traditional Victorian windows to facilitate identification of the original features. There are many joiners who specialise in providing traditional timber sash windows to match original Victorian details and who should be able to provide advice on thermal and acoustic performance. It is important that detailed site dimensions are taken for every window as Victorian properties are often out of plumb and sizes may vary.

Changing windows within a single family house does not require planning permission unless it is considered to be a material alteration such as a change to upvc (plastic) , to double glazing, to the size of the window, or to the method of opening, whilst in a flat within a terraced house changing windows is something which needs planning permission. Upvc is not likely to be acceptable as the details and appearance differ from traditional timber framed windows. Double glazing would require careful detailing to maintain a traditional appearance (see Double Glazing above).

## **2.4 FRONT DOORS**

Illustrated Sheet 5 shows photos of typical doors and Sheet 6 identifies typical original details for design guidance.

The council supports the repair and reinstatement of original features where missing, using traditional techniques and materials wherever possible.

### **Appraisal**

Many of the properties in the Conservation Area retain their original front door and architraves. Their details and quality enhance the character of the Conservation Area. The typical door in Driffield Road Conservation Area is a four panel door. The top has two vertical glazed panels with timber beads, the bottom two solid shorter panels. Some of the doors have leaded lights with stained glass, some have plain glazed panels which may have etched or sandblasted glass for privacy. Some replacement doors have solid timber panels with beaded surrounds. Most doors do not have a weather bar projecting at the base as this is not required due to the depth of recess, so driving rain is not an issue. The doorways have plain glazed over-lights (or fanlights) above the front doors, sometimes with the house number applied to the glass. Some doors retain their old glass, but others have been replaced, sometimes with laminated glass to enhance security.

The doors are typically set well back from the façade behind the stucco surround, which provides shelter and modulates the terraces. In some cases doors have been repositioned at the front of the reveal and in some houses metal gates have been added, but these interventions have a detrimental effect on the character of the terraces.

### **Repairs to doors**

Repair using traditional methods is favoured wherever possible, and many joiners offer this service. If the original door is in place, this should be regularly maintained and overhauled. Specialist conservation joiners may upgrade the draught resistance and security by concealing seals and bars within the frame and replacing the hinges. Leaded lights can be temporarily removed for restoration and cracked panels can be re-glazed.

Sometimes even if the original door has been lost, the original frame is still intact and can be retained. Conservation joiners are usually able to determine the most appropriate method for repair. Previous grooves for locks can be in-filled using pieced in timber. In some cases a two-part filler may be used if this retains more of the original timber; conservation grade filler can allow planning and sanding whilst some products dry too hard and can lead to further timber decay.

### **Replacement doors**

Victorian style doors to match the original style are considered to be the most appropriate. Quality timber door manufacturers can offer the best traditional methods of construction for durability, using sustainably sourced timber, together with combined with draught resistance, advanced paint systems and integral locks with high levels of security.

Replacement front doors can be inappropriate such as those with large panels of glazing, semi-circular top-lights within the door, applied plywood panels or flush doors. These are not traditional features of Victorian doors and are not considered appropriate. PVC (plastic) doors are not appropriate in the Conservation Area because they do not follow traditional patterns or details adequately closely.

Doors should be positioned set back in the opening in their original location, to retain the depth and modulation of the streetscape.

### **Glazed panels**

Original glass should be retained where possible. Replacement glass may be clear, etched, sandblasted, stained glass or obscured with film. A variety of glazed panels adds character to the area. Glazed panels may be laminated for improved security.

### **Door colour**

Doors were traditionally painted in different colours, using oil based paint with natural pigments. Historic colour charts are now available from many paint suppliers, offering Victorian and Edwardian paint colour ranges. These colours are the most appropriate. Gloss or semi-gloss finishes are both considered acceptable.

### **Door ironmongery**

Traditional doors generally had a central letter-box, a knocker and knob, an applied house number, and key holes protected by an escutcheon cover. Fittings would have been brass

or cast iron. Door bells often had a push button beside the door. Some properties retain their original ironmongery although in some cases this has been over-painted. The quality of ironmongery is now very variable throughout the Conservation Area. Where properties are divided into flats, large surface-mounted intercom boxes can be detrimental to the appearance of the front of the property. Ideally boxes should be discretely located within the recessed area. Good quality traditional ironmongery can enhance the character of the property and Victorian patterns are still available. Where missing, reinstatement of traditional style fittings is encouraged.

### **Metal door gates / grilles**

Some properties now have a metal grille in front of the front door, presumably added for fashion or to enhance the sense of security, especially where garden gates have been lost. These are not an original feature of Victorian properties and detract from the character of the Conservation Area, because they reduce the modulation of the facade provided by the recessed front doors. Planning permission is required for the introduction of a metal gate and would not be granted if permission were sought. The removal of gates in door openings is encouraged.

## **2.5 BRICKWORK AND POINTING**

The guidance on illustrated [Sheet 13](#) alerts residents and contractors to the harmful effects of cement pointing and illustrates appropriate and inappropriate pointing.

### **Appraisal**

The original soft London stock bricks provide a consistent appearance to the Conservation Area. The brickwork would have been bed and pointed using lime mortar. The pointing (the visible finished surface of mortar) can be susceptible to damage, particularly when bricks are cleaned, and needs periodic replacement. Many properties have suffered from inappropriate pointing in hard cementitious mortar. Most of the properties in the Conservation Area have been re-pointed with mortar that projects beyond the face of the brick. This does not match the original pointing, which was more recessive and therefore less visible than projecting mortar. This detracts from the delicate character of the original brickwork.

### **Re-pointing**

The pointing should be set back from the edge of the brick to expose the arris (the edge of brick) to provide a crisp appearance. Some of the Victorian properties had a “struck” joint but the modern version of this (“weatherstruck pointing”) is far too visible and great care must be taken to avoid the mortar projecting in front of the face of the bricks.

### **Re-pointing in lime mortar**

The use of traditional lime mortar for re-pointing is encouraged. Natural lime products must be applied when the temperature is above 5 degrees and rising and so this needs to be taken in to consideration when programming work. The existing pointing should be removed to a depth of about 20mm, carefully so as not to damage the corners of the soft brickwork. Re-pointing in lime mortar should be done by a specialist brickworker with experience of selecting and using lime mortar; pre-mixed lime mortars are available and



can assist in quality control but the appearance can vary from one batch to another. The choice of sand is important to the final appearance of the pointing and samples are useful to establish an agreed appearance.

The problem with cement mortar and pointing is that it is harder than the soft bricks and so any moisture absorbed by the bricks cannot evaporate out through the joints. Trapped moisture builds up behind the face of the brick and frost-thaw action can accelerate deterioration of the brickwork.

### **Brick cleaning**

Brick cleaning is sometimes desirable for aesthetic reasons, but it is not often necessary if the brickwork has not had any coatings applied. Sometimes staining is uneven and local stain removal is required, such as cleaning off bird fouling or atmospheric particulates that build up unevenly beneath projecting mouldings, so each case needs to be assessed individually to determine the most appropriate method of cleaning. The removal of paintwork or cleaning of brickwork after removal of over-coatings requires specialist procedures.

The main methods of brick cleaning are water cleaning using cold or hot nebulous spray, chemical cleaning, or poultice application. Brick cleaning should only be done following a trial sample area, using specialist methods with skilled specialist brick cleaning contractors with proven experience, as it can have a harmful effect on brickwork and decorative mouldings. The contractor will need to know the main factors of brick cleaning i.e. water contact time, water pressure, associated rinse procedure, pre-wetting procedure, etc. Aggressive sand blasting, high pressure water or harsh chemical cleaning are not generally accepted conservation methods because they can damage the surface, removing the fireskin (the outside hardened face) of the brick, leading to premature decay. This is can sometimes only become evident after the damage is done so close site control and a great deal of skill is necessary.

## **2.6 RAILINGS**

The illustrated guidance starting at [Sheet 7](#) identifies the features of existing railings in the Conservation Area and points out the features that are traditional. Some railings provide a safety function to guard the edge of a light-well, whilst on properties with no basement the function of the railings is to demark the property's boundary, provide security and enhance the character of the streetscape.

Railing repair and reinstatement, where missing, is encouraged by the Council and the design guidance identifies the elements, methods and materials to consider. It may not be appropriate to install railings in all streets and in all properties, but the guidance is generic.

### **Appraisal**

The original railings that still exist contribute a great deal to the streets of London and this is especially true of the Driffield Road Conservation Area, where there are several patterns of cast iron railings that characterise the area and enhance the streetscape. These tend to be robust, with generous rail heads and ornate scrolls, as illustrated in the guidance

sheets. Most of the railings that have been retained are used to guard the drop to the basement light-well and for this reason they were not removed during the war.

Where proposed, each property should be assessed individually to establish which pattern would be most appropriate. In most cases this will be the replication of the original style nearest to the property.

### **Cast iron**

The traditional railings of the late 19th century were of cast iron. Ornate rail heads and finials on gate posts were cast from moulds and mass produced in foundries using sand casting. Over 200 patterns are still available for re-casting. The rail head was forged to the bar, which was typically  $\frac{3}{4}$ -inch (20mm) diameter, or profiled in a fluted or barley sugar patterns which were cast together with the rail head. Top rails to join the bars together were formed from flat iron bars supplied loose, drilled at six-inch (150cm) centres, and fixed on site, with the palings (vertical rails or bars) pegged and leaded to the rail, and the rails were joined together with traditional lap joints. At the base, each bar was installed into a recess in the stone plinth and secured using molten lead to caulk the joint, a technique which is still used today and is favoured by conservationists (see guidance on caulking below). At the end of the run and at gate posts, cast iron stays were installed to provide lateral restraint, often detailed with a scroll and sometimes with some further embellishment and boot scrapers were sometimes incorporated. These elements are common in Driffield Road Conservation Area. The embellished railings provided richness to the streetscape.

### **Steel**

In the C20th mild steel became more commonly used as a cheaper alternative to cast iron. Steel is heavier than cast iron and modern steel railings are often much thinner than the originals and their details appear unsubstantial and less characterful than cast iron. However, it is possible to detail steel railings to have the same appearance as traditional cast iron, combining traditional craftsmanship with modern production techniques. To enable this, the traditional details need to be adapted to suit steel as described in the guidance below.

Steel rail heads were developed using the dye cast process which is a stamping method using hydraulic pressure applied to molten steel inside a box containing reusable templates. This method is quicker and more cost-effective than the cast iron sandblasting technique. Steel components are often supplied to the factory in 6 metre lengths and they need to be produced in lengths that are possible to deliver and erect easily on site and so railings are often produced in panels, which can lead to details that are not considered to be as appropriate as cast iron in the Conservation Area, railings as a panel often have a bottom rail and are not set into the plinth individually.

Where cost constraints drive the proposal for steel in place of cast iron, great care should be taken in the detailing to ensure that when painted, the railings resemble the traditional cast iron originals as closely as possible.

### **Details to avoid**

Thin bars, railings without decorative rail heads or with rail heads that are too small are not considered to be appropriate in the Conservation Area as they are not traditional and are not a close match to the original. Welded joints visible on the surface should be avoided as they can be unsightly. Some modern finials are screwed to the rail, but if the screw remains accessible these are unsightly and can be prone to theft, so all fixings should be concealed. Some modern replacement railings incorporate a bottom rail but this is not considered appropriate as the traditional railings in the area were fixed directly to the base with lead caulking (see below for guidance on caulking). Householders should also be aware that steel can be galvanized for rust resistance, but galvanised railings are not considered appropriate because most galvanised railings are made in panels and factory finished and this technique does not lend itself to traditional detailing. Railings traditionally had an oil based painted finish and the appearance of a galvanised steel finish or a polyester plastic coated finish are at odds with a traditional appearance.

When considering a planning application for railings, the Council would require adequate drawings and illustrations or samples to ensure that the proposal would be appropriate for the Conservation Area. The bars, heads and finials should be as large as the original examples in the surrounding neighbourhood, and all details should be designed to the correct authentic design. Guidance is given below.

### **Railing Repair and Maintenance**

The illustrated guidance starting on Sheet 7 provides illustrations and notes to facilitate identification of authentic railings in the Conservation Area and appropriate details for their repair or restoration.

If not adequately protected from the rain, over time cast iron rail heads can become brittle at the junction with the bar when rust leads to decay. Some properties have missing rail heads, some top rails have become loose, and many railings are in need of redecoration to maintain them before they decay further. Cast iron is durable provided that it is well protected by rust inhibiting metal primer and paint; both iron and mild steel will rust if not adequately protected. The original paint would have been lead based and adequate health and safety procedures should be taken when removing it. Cast iron railings were traditionally coated in a red lead base layer to provide rust resistance. Care therefore needs to be taken when carrying out repairs as lead is toxic and health and safety procedures must be followed. If the metal is rusting the affected areas should be rubbed down to bare metal or stripped using conservation approved paint stripper in a controlled environment, and re-protected using specialist paint systems, often using zinc phosphate as a rust prohibitor. See 'painting ironwork' below for further information on decoration.

Where original railings remain, even if they are in poor condition, it would be appropriate to repair them as follows:

*“seek to retain and preserve as much original material as possible, using traditional materials and techniques in repairs, with minimal disturbance to the original work, and using reversible processes where possible”<sup>9</sup>*

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<sup>9</sup> <http://www.buildingconservation.com/articles/historicrailings/historicrailings.htm>

*“Regular inspections combined with cleaning back and repainting localised defects can extend the life of a paint system almost indefinitely. Historic railings should ideally be repainted using traditional paint systems<sup>10</sup> but, where maximum longevity is required or the site is very exposed, the use of modern two-pack epoxy-based paints, which provide excellent protection for up to 25 years, may be considered”*

If the existing railings are original or appropriate good quality cast iron railings, they should be repaired with missing components replaced to match existing, using traditional techniques, by a specialist contractor<sup>11</sup>.

Missing rail heads can be replaced to match existing, either using castings from standard patterns where available, or from a cast made from an adjacent rail head. The replacement rail head can be wedged into place and fixed with a galvanised pin through the side, sheared off, sealed and decorated.

### **Regulations for guarding**

If new railings form a balustrade guarding a change in level, the current building regulations require the gap between bars to be no more than 100mm to reduce the potential for someone getting trapped between railings or fitting through the gap. Guarding is required to be 1100mm high, or 900mm on staircases above the string line, and with a loading to restrain a minimum of 0.74 KN/m. In a Conservation Area a relaxation may be permitted to allow bars to match the traditional spacing, but where the railing provides protection from falling over a change in height of 600mm then the strength should be certified by the metalworker and the fixing details and component sizing must be selected to comply with the required loading and additional supports and brackets or back stays may be required. In some cases ‘dog bars’ were installed to provide additional bars at low level to reduce the gap, although there are not many examples of this in the neighbourhood.

For other gates and railings not acting as guarding, the spacing is not currently legislated, but safety should be taken into consideration and it is important that there are no sharp edges or loose bars or rail heads.

### **Replacement railings**

If railings do not exist, it may be appropriate to install railings to a traditional pattern to complement the streetscape and enhance the conservation area. This would have the greatest benefit if the design is consistent with other houses in the terrace, but some variation is likely to be consistent with the original and can add to the character of the terrace. It is important to establish which style is considered most appropriate as this will vary according to location.

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<sup>10</sup> Lead paint is not permitted except in some grade 1 and 2\* buildings so would not be appropriate here.

<sup>11</sup> A list of specialist suppliers, consultants and craftsmen in traditional building conservation, refurbishment and design can be found in The Building Conservation Directory by Cathedral Communications Ltd, [www.buildingconservation.com](http://www.buildingconservation.com). All suppliers in the Directory pay a fee to be included and while Cathedral Communications does not formally ‘approve’ or ‘recommend’ them, they do screen out inappropriate suppliers and products to maintain the established integrity of the Directory. Users should seek more detailed information and advice from suppliers before undertaking any project.

Non-traditional materials or features designed out of character with the existing buildings will not normally be acceptable. The replacement of existing non-traditional features with traditional alternatives will be encouraged.

There are several specialist ironwork companies that specialize in supplying and installing railings to closely match the traditional pattern and details and some provide a complete package of design, installation and decoration, including the stone base. They would be able to match the details and reproduce railings to match the original examples that remain in the neighbourhood. There would be an economy of scale if metalworkers were to produce the same design for multiple properties, especially if bespoke details were to be produced.

### **Finials and Rail heads**

Finials are the decorative feature sometimes used on the top of gate posts and on the wider bars supporting railings providing guarding of a change of level. Between finials are rail heads, often more simply and modestly detailed.

Finials are generally more substantial than rail heads and are still formed in cast iron as the pressed steel method is not suited to finials. Timber templates were formed and sometimes the cast had to be made in several sections to allow the removal of the template from the cast. Modern templates can be made in resin using 3-d laser cutting using computer aided design. Existing original finials should be maintained and may be suitable as a template for reproduction. The guidance sheets illustrate examples of original styles of finial and rail head. If possible, liaise with owners who have original railings so that the railings contractor can measure the originals and if this is not a standard pattern they could take a cast of a rail head to use as a template for reproduction. This would mean that the sizes can be matched an important element of the historic character of railings. Taking a cast does not normally create any damage but any damage should be made good.

In streets with no precedence for original railings, a standard pattern of rail head as indicated in the guidance is considered to be appropriate and other styles may be acceptable although in order to maintain a locally distinctive vernacular, copies of original details from the area are encouraged. It is important that the rail heads are adequately substantial as small rail heads are not characteristic of the C19th railings in the area.

The rail head may be produced complete with the bar, or should be fixed to the bar without visible welds or fixings. The combined rail head and bar can be fed through the holes in the top rail with a 0.5mm gap all round that must be fully filled with paint to avoid degradation.

Finials should be fixed to the bar without visible welds or fixings and the joint should be neat and well decorated.

### **Balusters / Bars / Palings, top rails and backstays**

The paling is the vertical rail, or baluster, in a railing. Some of the original railings in the Driffield Road Conservation Area are round with a minimum diameter of 20mm, whilst

others have a barley twist pattern and others are cast with a fluted profile. They were typically spaced six inches apart (150mm centres).

The top rail is typically 50x10mm, but may be larger on some of the original railings with wide bars. The rail should be traditionally jointed with a lap joint. This was traditionally wedged and leaded but non-ferrous screws may be used if countersunk, filled and painted. Visible welds are not traditional and should be avoided.

Brackets and back stays are used to support the railings and gate posts. These were often formed with scrolls and embellishments, adding character to the railings.

New railings may be produced in panels, provided that the panel has no bottom rail and that the supports and joints between panels are traditionally detailed. A typical railing assembly may be supplied in 2 panels with a lap joint in the top rails, with the bars pre-assembled to the top rail, and with a temporary angle clamp at the base to maintain the spacing and facilitate site installation. At the base the bars should be caulked as described below.

### **Gates**

Traditional Victorian railings often incorporated a gate to provide security and to demark the property boundary. Properties with no basement often had a front gate facing the door and those with a basement had a second gate providing access to the steps down to the basement area. Gates were fabricated to match the railings, so that the railing centres were maintained hung from a pin and supported at the base. Some examples have gate posts with ornate finials and decorative scrolled stays, whilst others are a simpler design to match the pattern and spacing of the railings. Traditional gates can still be made to match the railings. Gates should be inward opening as they must not encroach on the pavement.

### **Plinth Details**

Traditionally the plinth, or base, was stone. In the C20th concrete was used as a cheaper substitute, sometimes painted, and cast stone is now available.

To establish whether an existing base is of stone or concrete, look for visible joints and if there are joints it is likely to be stone. Paint removal can reveal the surface but beware the possibility of lead-based paint and take adequate precautions such as wearing a mask and gloves and wet down the surface prior to rubbing with damp abrasive paper.

Cast stone plinth blocks are available in pre-cast units made of a composite of cement, stone dust and other additives. They are typically 600mm long in order to be handled on site and the joints are typically 5mm wide, and are filled on site with a mortar containing stone dust to match the cast stone, so they do not need site painting. The units are pre-cast to include the recess for the railing bars and any gate posts and stays that are incorporated in the design. Sometimes deeper recesses are formed to increase the strength especially for railings that are for guarding. The coordination for setting out for of the plinth is usually done by the metalworker, who provides detailed drawings using computer aided design which are then used by the manufacturer of the plinth. The company responsible for design, structural calculations and detailed coordination should hold professional indemnity insurance.

On some of the properties in the Driffield Road Conservation Area the railings had a curved cast iron plinth capping, several of which have been retained and refurbished, providing an attractive local characteristic detail. Where these exist it is important that they are retained or replicated. Replica curved metal plinth cappings can still be reproduced at specialist foundries. The originals are likely to have been produced with holes set out to house the palings and stays at 6-inch (150mm) centres, and used a template for the recesses to be cut into the stone prior to fixing the railings (see caulking below).

### **Caulking**

Railings were caulked into the stone plinth / base. Pockets were cut into the top of the base to form a square or circular recess. This is still the preferred method of installation and whilst today many of the bases are formed in reconstituted stone as a substitute for stone, this method can still be used. Once each bar (or paling) is in place, molten lead (or caulking) is poured in carefully, and is finished flush with the stone to ensure moisture run off, or filled with stone dust mix. In properties with the curved metal capping, the base would have been caulked in the same way and the lead would be installed flush with the capping.

### **Staircase feature panels, or 'flat backs' and boot scrapers**

The Driffield Road Conservation Area has examples of decorative cast iron panels at the bottom of the staircase, between properties, known as *feature panels* or *flat backs* if the sand casting was only figured on the front face and the backs were flat. Several of these remain in good condition in Driffield Road and enhance the character of the area. These are ornate and incorporate boot scrapers at their base. Boot scrapers add character and should be retained. Their paintwork should be regularly maintained as cast iron is vulnerable to decay if it is not continually protected by paint. For guidance on decoration see 'painting ironwork' below.

We have not managed to locate any pattern-book standard casting pattern that matches the remaining panels, but casts could be made from the originals, or similar standard patterns are available and would be acceptable in principle, subject to approval of detail. It is still possible to get these reproduced in foundries using a sand casting method from a template. The template can be cast from an original or from 3-d laser scanning developed using computer aided design. If a template were made then this could potentially be re-used again and again.

### **Handrails**

The original staircases up to the front doors did not have handrails but the finials were continued up the stairs. In some cases handrails have been added. Where a handrail is required, black steel handrails can be designed to be discrete and in keeping with the railings. Guidance on height and setting out is given in Building Regulation Approved Document K.

### **Painting ironwork**

Most railings in the area are painted with black gloss or semi-gloss. In Victorian times railings were not always black, but black has now become characteristic of the Conservation Area and is considered appropriate. If householders have original railings it is possible to establish the original colour using paint analysis techniques, provided that

the paintwork has not been previously stripped away. Exposing old paint by chipping the surface may not provide accurate results and may expose earlier undercoats. Gold or gilded railings are not considered appropriate, as this was only traditionally used for prestigious buildings.

Beware early paint coatings contained lead so precautions should be taken, and cast iron was often protected by red lead as a rust inhibitor. Most modern paint systems for metal include red oxide or zinc phosphate primer as the base coat. Suppliers should provide guidance for safe application and some systems are guaranteed for up to 15 years but ongoing maintenance is required. If well maintained, cast iron and steel railings should last for at least 150 years.

For rusted railings it is necessary to remove all coatings back to bare metal and to treat the rusted area and coat it in protective coatings. Surrounding paint coatings should be removed back to a firm sound edge and then feathered over a distance of 50mm in the region of the affected area. All gaps should be filled, primed and decorated as if water can get into the metalwork, rusting will lead to decay. To redecorate railings it is necessary to rub them down to get a key. It is important to ensure that the work is dry, clean, free from oil, rust and mill-scale, etc. For best results, mild steel or cast iron surfaces can be blast-cleaned or wire brushed thoroughly before painting. Degreaser should be used to remove oil or grease. This will help adhesion and give a longer life before any maintenance is required.

Some modern paints require specialist applications to allow adherence and manufacturers usually provide technical information and recommendations for surface preparation. It is good practice to carry out a trial before determining the specification for redecoration and to approve the finished appearance to use as a controlled approved area.

For painting over galvanised steel, please note that use of galvanised metal is not recommended in the guidance for replacement railings, but if redecorating existing railings that are galvanised, householders should be aware that on galvanised metal it is important not to damage the galvanised surface if removing paint and specialist preparations and paint systems are required to re-coat galvanised steel<sup>12</sup>, following manufacturers' instructions for adequate preparation. For further information on galvanised steel see [www.galvanizing.org](http://www.galvanizing.org).

For new railings, the ironwork suppliers often provide detailed guidance on coatings and many companies can include decoration in their supply and installation service.

## **2.7 CAST IRON FEATURES, GRATINGS AND GRILLES**

Cast iron was used for ventilation grilles, coal hole covers and gratings sometimes a cast iron decorative railing was installed on the ground floor window sill. Typical examples are illustrated on [Sheet 13 and 14](#).

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<sup>12</sup> such as Vinylast® although we have not tried this product and we cannot vouch for it; metalwork contractors should be able to advise on appropriate coatings that are compatible with their manufacturing techniques.



The retention and reinstatement of traditional features, where missing, is encouraged.

### **Window crestings or pot guards**

Some properties have decorative railings on the external ground floor window ledge sometimes known as 'crestings' or 'pot guards'. These are typical Victorian decorative elements that were made to provide a degree of protection from falling when cleaning windows. They were made from cast iron in foundries, using the sand casting method. They enhance the character of the area and their retention and repair is encouraged. A mark in the window sill may be visible where these features were fixed, and reinstatement of missing castings to match existing examples is encouraged.

Some traditional patterns that match those in the neighbourhood are still available and could potentially be used as a template subject to approval by house owners. A template could be cast from an original or formed in resin using 3-d laser scanning developed using computer aided design. If a template were made then this could potentially be re-used again and again.

### **Grilles**

Properties with semi-basements or coal holes were typically ventilated by a cast iron grille, and floor voids were also ventilated with cast iron grilles. The casting pattern was sometimes decorative. These details are characteristic of the area and their retention and refurbishment is encouraged. If cast iron features have been lost there may be an opportunity to reinstate appropriate grilles based on the traditional style. Existing examples from adjacent houses should be matched where possible. Specialist metalworkers may hold matching patterns that can be cut to fit and primed in the workshop, with the top coat applied on site. Templates can also be made from original patterns. Alternatively, laser cut steel is now available and traditional patterns can be replicated using computer aided design.

### **Coal hole covers and gratings**

Cast iron coal hole covers and gratings are characteristic of Victorian properties and are still intact in several properties in the Conservation Area and their character enhances the streetscape. They are varied in pattern as illustrated on Sheet 14. Their retention is encouraged. Replacement castings are available in standard patterns and could also be made from a mould of the original castings in the area.

## **2.8 PAVING AND STEPS**

The guidance on Sheet 13 includes photos of typical traditional steps in the area. Conservation of the original paving is encouraged, and re-use of traditional materials and detailing is encouraged where the original has been lost.

### **Appraisal**

Many of the houses have steps up to the front door, and this is characteristic of some of the streets in the Conservation Area, but nearly all of these have lost their original detailing or it has been covered over during property maintenance and refurbishment. The original

paving and steps are likely to have been faced in Yorkstone. The steps would have had a projecting bullnose nosing and a brick or stone riser. The top riser in some cases was an iron ventilation grille as described previously in this document. The door threshold often had a stone sub-sill with a timber sill over, sometimes covered with brass and some examples of this detail remain. For step railings see item 2.6.

### **Repair of steps**

The Building Regulations Approved Document K sets out the key dimensions that are permitted for new steps, risers, balustrades and handrails. If the existing staircases are retained and re-surfaced, the regulations for new work do not apply, but the existing condition should not be made worse. In order to avoid any trip hazards it may be necessary to adapt the levels to make the risers equal in height. In case of doubt householders should check with Building Control to confirm whether the regulations apply for the proposed scope of work.

### **Waterproofing beneath the steps**

If the space under the steps is enclosed for internal use, the waterproofing layer should be installed under the stone wearing layer, so that the stone is visible on the surface for a traditional appearance. This is illustrated on [Sheet 6](#).

### **Stone paving**

The flagstones inside the entrance porch, paving the entrance area and on the steps were very large slabs of Yorkstone and sourcing replacement slabs today can be problematic, but it is still possible but smaller slabs are considered to be acceptable. Stone can be either new or reclaimed, from a reliable source. When selecting stone or reconstituted stone it is important to ensure slip resistance in dry and wet conditions; traditional Yorkstone paving had a riven finish and on steps the front surface was dressed to form a rounded nosing, but square edged nosings would also be acceptable.

When maintaining stone surfaces avoid using household detergents and solvents as these can encourage growth of moss and lichen that can become slippery. Surfaces can be scrubbed with a bristle brush and water; specialist stone cleaning products can be used if health and safety precautions are followed.

### **Stairs down to basement**

The traditional stairs down to the basement were built in stone, with a simple iron railing and handrail; only a few examples remain in the area. Some replacements have been installed with steel timber or concrete staircases. If renewing a staircase, staircases with Yorkstone treads are preferred, but simple steel stairs painted black are also considered to be acceptable.

### 3.0 ESTIMATED COSTINGS FOR POTENTIAL ENHANCEMENTS

The following table provides indicative budget costs for the potential enhancements described in this document. The column to the right “associated costs” refers to costs that would be necessary to enable the work to be carried out such as scaffolding, rubbish chute and debris netting and the like.

It is included to offer a clear understanding of the implications of these proposals and the likely costs of the facade enhancements which you might be required to include within your planning application to offer public benefits which offset the harm which the introduction of a mansard roof will cause to the character and appearance of the conservation area.

The works proposed have been carefully considered by relevant professionals with extensive experience of works to historic buildings. The costs set out are indicative, the final cost of works being dependent upon the condition of your property, the extent of repairs needed and other matters such as scaffolding costs including the potential for extra lifts or the need to move it around.

They are intended to assist in establishing the costs of those works required to fund enhancements to your property and to broader public realm to satisfy the requirements of the National Planning Policy Framework.

Ref	Description of works	Works budget cost	Associated costs
1	Removal and replacement of the brick parapet (if unstable or if bricks are brittle)	£2,100	£1,300
2	Repair of the parapet including removal and replacement of the coping; replacement of 20 nr spalled bricks and re-pointing the parapet	£1,200	£1,300
3	Form stucco band at high level where none exists and decorate	£950	£1,300
4	Form stucco band and cornice at high level where none exists and decorate	£3,100	£1,300
5	Repair existing stucco and cornice at high level and decorate	£1,250	£1,300
6	Replace the stucco around the first floor windows if missing or beyond repair	£1,050	£650
7	Repair the stucco around the first floor windows if damaged	£350	£650
8	Replace the stucco to the ground floor windows if missing or beyond repair	£950	£300
9	Repair the stucco to the ground floor windows if damaged	£300	£150
10	Properties with a bay window - Replace missing cornice approx 3m long	£3,350	£300
11	Repair bay window cornice	£1,050	£300
12	Replace cornice to the porch if missing	£1,010	£300
13	Repair cornice to the porch if damaged	£850	£300

<b>Ref</b>	<b>Description of works</b>	<b>Works budget cost</b>	<b>Associated costs</b>
14	Replace stucco to the door surround if missing or beyond repair	£950	£300
15	Repair to stucco to the door surround	£350	£150
16	Stucco console: fabricate a mould and manufacture a replacement	£500 per console	£150
17	Repair console bracket	£400 per console	£150
18	Replace sash windows	£2,100	£270
19	Repair sash windows	£150 - £1,000	£270
20	Replace front door and frame if original is lost	£2,250	£NIL
21	Repair front door	£500 - £1,000	£NIL
22	Remove door gate, make good finishes disturbed	£200	£NIL
23	Remove cement mortar and re-point in lime mortar (price may increase if existing is very hard)	£1,200	£900
24	Replace paving up to front door on properties without a staircase up to the front door	£500	£NIL
25	Replace a single spalled paving with Yorkstone	£120	£NIL
26	Repair door threshold and top step by door	£400	£NIL
27	Renew stone on steps up to typical Driffield house with staircase up to the front door; lay damp proof membrane; supply / lay Yorkstone to steps	£4,200	£300
28	Renew stone on steps to basement on damp proof membrane	£2,750	£300
29	Cast iron vent	£400	£NIL
30	Removal and disposal of existing brick wall to the front of the property	£300	£240
31	Make good stone plinth and provide and fix new railings with traditional detailing, lead caulked fixing (prices allow £6 - 8 per rail head assuming steel rail heads on cast iron railing bars; prices can increase depending on pattern) excluding gate and return between properties	£5,400	£240
32	New reconstituted stone plinth plus railings as item 31	£6,200	£240
33	Return between properties as item 31, price allows returns to be 1.2m long but this may vary	£2000 per return	£NIL
34	Single gate in steel and cast iron with traditional details, posts and rail heads	£1,300	£NIL
35	Railings to staircase for typical Driffield property with rail heads	£2000 per side	£NIL
36	Bracket - if a horizontal stay from the top rail back to the building is required	£250	
37	Decorative end panel "flat back" at boundary between properties supply cost from an existing template	£300	£NIL
38	Pot guard in cast iron with two returns supply cost from an existing template	£400	£650

### **Notes on cost table**

Your attention is drawn to the following:

1. The costs above exclude VAT.
2. The associated costs are based upon the assumption that each work activity is carried out in isolation of any other works. If several items of work are carried out together then the cost of the associated works such as scaffolding can be shared across several work items.
3. All costs exclude general site overheads such as site cabins, portaloos, shared welfare etc. This cost would be added by a main contractor if carried out as part of more major works.
4. Assumptions have been made concerning the extent of repair works to each area of stucco work. This will vary from house to house.
5. Under item 16 the cost per console would reduce as the number of consoles increase. This is because the majority of the cost is in the taking of site measurements and fabricating the mould. If say 6 consoles can be cast the cost of the mould is split between them.
6. For the sash window repairs under item 19 the costs will vary depending upon the amount of work required. The lower end of the range assumes that a sash cord will be replaced and the window eased and adjusted. The upper end assumes significant work including the removal of one sash off-site for a repair under factory conditions with addition of draught seals.
7. Item 29 – Cast iron vent. If the manufacturer has to make a pattern to cast this then the cost would be significantly more but standard patterns are likely to be acceptable.
8. Items 32-37 – If a pattern has to be made this cost would be in the region of £5,000 to £8,000 to include a site survey and making a template by a specialist metalworker but this cost could potentially be shared across several properties if coordinated.

## 4.0 DELIVERY OF FAÇADE ENHANCEMENTS

The enhancement works set out in this document are intended to identify public benefits that will help to justify the harm caused by a mansard roof extension. In order to meet the government's definition of a public benefit for this purpose, the enhancements should arise as a result of the proposed development. That is, they should be delivered alongside the proposed roof extension as a single development scheme. Unfortunately, if enhancement works have already taken place they cannot be said to arise as a result of a proposed mansard roof extension and cannot be used to mitigate any harm that they will cause.

Planning applications will be expected to demonstrate that, as well as featuring an appropriately designed mansard roof extension, they will also provide sufficient façade enhancements to effectively mitigate the harm caused. The guidance in this document provides advice about what enhancements could be included to mitigate harm. Each case will be different, and it is not possible to say exactly which façade enhancements will be required to mitigate the harm caused by the proposed addition of a mansard roof extension. Much will depend on the existing condition of the property and whether any recent façade enhancement works have already been carried out. This should be discussed on a case-by-case basis with the council's Development Management and Place Shaping officers through the pre-application process.

In order to ensure that harm is properly mitigated, the council will use planning conditions to ensure that the proposed enhancement works are delivered alongside mansard roof extensions. This means that planning permission for a mansard roof extension will be granted, but once constructed, the extension cannot be occupied until the enhancement works have been satisfactorily completed.

In some cases, buildings have been subdivided into flats, and it would only be the upper flat that would benefit from a mansard roof extension. Where this is the case, the planning applicant in the upper flat will need to identify enhancement works that could be undertaken to the whole building façade. If the enhancement works do not directly relate to parts of the property that are within the applicant's ownership, the applicant will be encouraged to work with the owner of the other parts of the building to deliver a comprehensive façade enhancement scheme. Alternatively, grant funding (from the streetscape improvement fund) could be made available to the owners of lower floor flats, so that they can improve the parts of the building façade that are under their ownership. However, such schemes tend to be expensive and time consuming to implement and would require a greater proportion of collected funds to be spent on administration.

As well as demonstrating how they will deliver façade enhancements, planning applications for mansard roof extensions will also be required to help to deliver off-site streetscape enhancements through a financial contribution. This is explained in more detail in a separate document that is also part of this consultation.

### **Note on guidance documents**

The design guidance is not prescriptive for all properties because it is acknowledged that there are variations from street to street, terrace to terrace and house to house. The Conservation Area map indicates which properties have been excluded from the guidance

as they are atypical. Every house will need to be assessed individually. The guidance is not exhaustive, but is intended to provide background information and general information for key items that would need to be considered.

The drawings included in this guidance document are diagrammatic only and are used to illustrate general principles. The guidance sheets and drawings are not intended to be used for the purposes of construction. Older buildings need to be evaluated individually to assess the most suitable design and form of construction based on a wide variety of possible variables and safety considerations should be addressed for each project. **The London Borough of Tower Hamlets and Kennedy O'Callaghan Architects do not accept liability for loss or damage arising from the use of this information.**

## **5.0 ILLUSTRATED ENHANCEMENT SHEETS**



# For consultation

## Sheet 1 Architectural characteristics of the Driffield Road Conservation Area

The following features are positive attributes of the Conservation Areas -

- Continuous line of parapet wall to conceal London roofs
- Cornice (decorative horizontal moulding on parapet)
- Mouldings or brick borders to first floor windows
- Timber sash windows with delicate glazing bars
- Embellished stucco surround to recessed front doors
- Decorative mouldings or bay window to ground floor
- Cast iron railings on stone plinth
- Cast iron metal pot guards on window sills
- Cast iron grilles
- Stone paving

The photographs illustrate where one or more of these characteristics has been lost from each of the properties

There is an opportunity to reinstate lost features when proposing a mansard roof extension as illustrated on the following sheets



## Sheet 2

### Enhancement of cornices and parapets in Driffield Road Conservation area

#### Definitions

Refer to first photo for numbering

#### 1. Coping

The Coping is the top course of the wall. It usually sits on a damp proof course

#### 2. Parapet

The Parapet is the portion of of the wall above the roof or concealed gutter

#### 3. Cornice

The Cornice is the horizontal decorative moulding made from stucco

#### 4. Stucco band

The stucco or render band is the flat surface applied to the front of the parapet, originally made from stucco or lime render and painted

#### Maintenance and repair

#### Parapet

Parapets are exposed on both sides and are prone to weathering. it is common to see re-built parapets in Victorian terrace houses.

#### Stucco band

Stucco and render require regular redecoration (normally every 5 years) to prevent water penetration and a breakdown of the surface or bulging. The stucco or render should be checked for cracks and tapped to make sure that it is not loose. Repairs should be carried out and gaps should be filled prior to any work to the cornice.

#### Cornice

If running a new cornice on a new render band, the render should include a scratch coat on the line of the cornice to provide a key. Cornices can be repaired or reinstated where missing by running a moulding on site. The profile should match the original and the top surface should be sloped to allow water run-off. A template can be made from an adjacent property with an original moulding by mutual arrangement between owners, by a specialist contractor, who then makes up a runner. Fixings are resin fixed into the brickwork at regular intervals and runner guides are temporarily fixed. The moulded profile is run using the guide and is built up in several layers. The ends should be neat enough for a neighbouring property to continue the moulding in the future. Ends of terrace and changes of level require 90-degree angles. Once sufficiently dry, the moulding is painted.

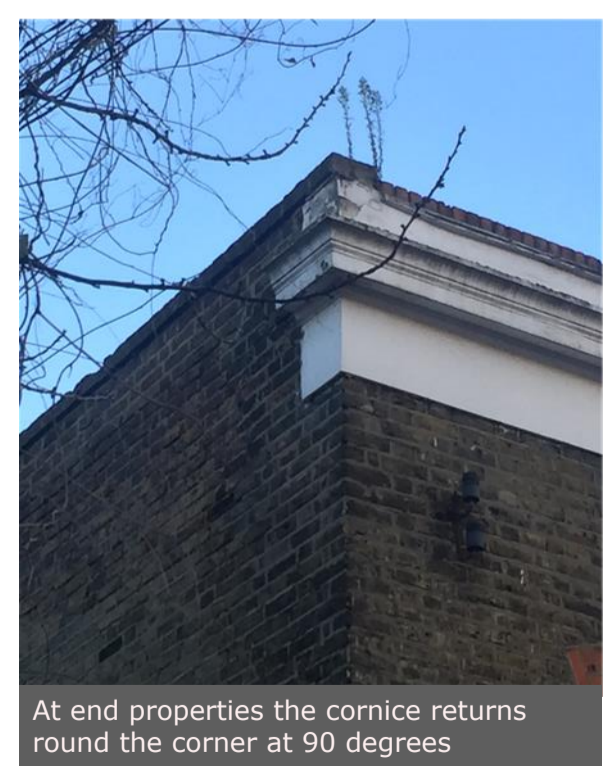
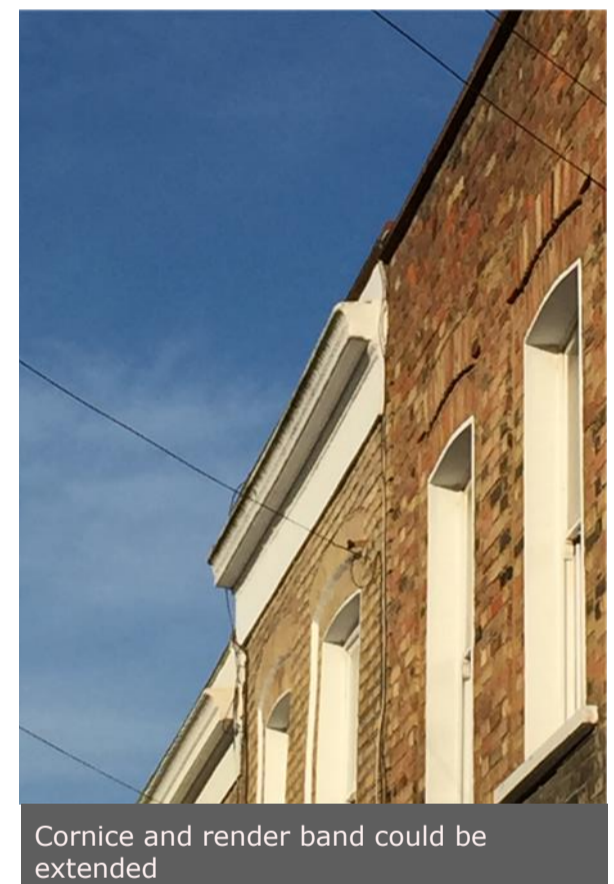
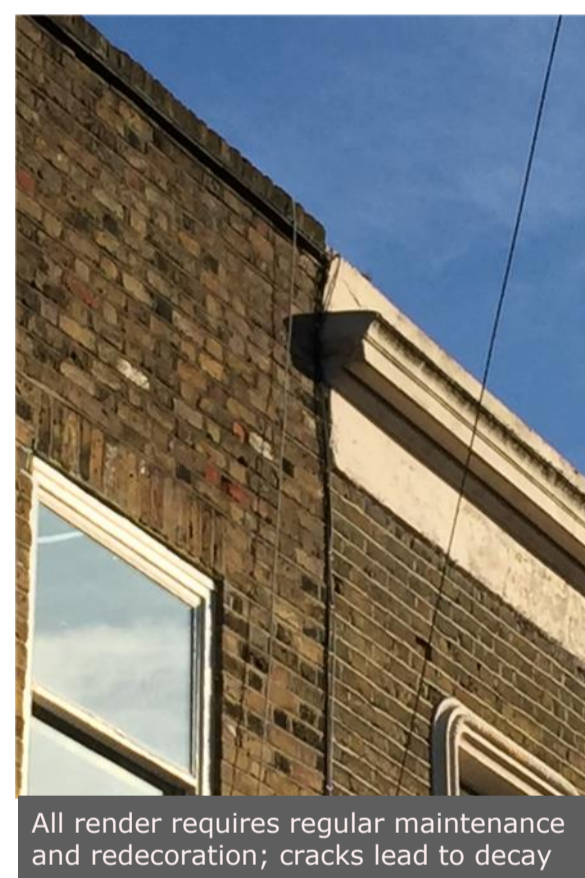
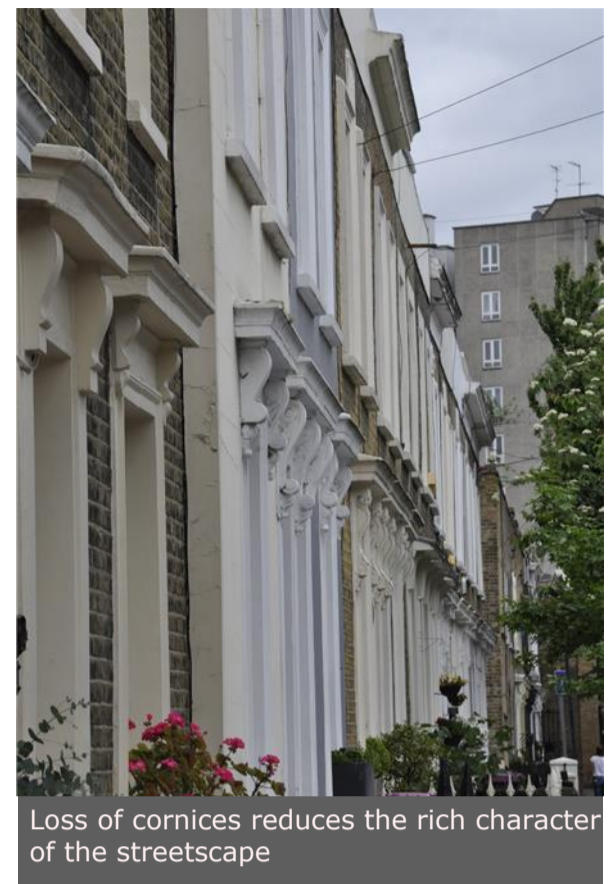
#### Gutter

Gutters should be swept regularly and biological growth should be removed and treated. Flashings should be checked.

#### Pointing mortar

Repairs should use lime mortar to allow the bricks to move and breathe and the pointing should not project beyond the face of the brick. See Sheet 13.

#### Enhancement Guidance



# For consultation

## Sheet 3

## Window and door surrounds in Driffield Road Conservation Area

### Characteristics

The photographs indicate some of the common characteristics of the Driffield Road Conservation Area. There is a strong characteristic of paired doors with stucco hood mouldings and embellished surrounds, and moulded console brackets. The doors are recessed in the openings, providing depth and visual interest. The profiles vary from terrace to terrace as the construction of the properties in the Conservation Area spanned over 3 decades (c.1860-1893). The detailed embellishment enhances the character of the Conservation Area.

### Maintenance

Stucco architectural features require maintenance and redecoration to protect them from rain and frost. Signs of staining or plant growth are indicators that excessive moisture is present. This can lead to bulging, cracking and premature failure.

### Repair

Stucco features can be repaired or re-run to match the existing by specialist contractors. Casts can be made from nearby mouldings by mutual consent with neighbours.

Horizontal surfaces on mouldings were slightly angled to shed water.

### Restoration

Where mouldings have been lost, their restoration is encouraged. Like-for-like reproduction can be achieved using materials to match the existing. Specialist contractors may need to investigate the original details and may need to take a cast of original mouldings from an adjacent property, by mutual consent.

The cornices over doorways were often formed over projecting tile courses to provide support but the detail may vary from property to property. Modern replacement mouldings usually use metal straps epoxy fixed into the brickwork and non-ferrous wire to provide support for mouldings that are run on site.

### Exposed services

Services should not be run on the front facade and care should be taken to avoid penetrating through original features



The paired doorways with painted stucco surrounds are characteristic of the area



Bringing the door forwards in the opening reduces the modulation on the street



Zealand Road loss of sash windows and stucco console brackets



Kenilworth road The replaced consoles in the house to the left have lost the character of the original ornate consoles



Hewlett Road first floor window with characterful rope moulding with grapes



Driffield Road cornice penetrated by pipework

### Enhancement Guidance

## Sheet 4

### Timber sash windows in Driffield Road Conservation Area

#### Window surround components

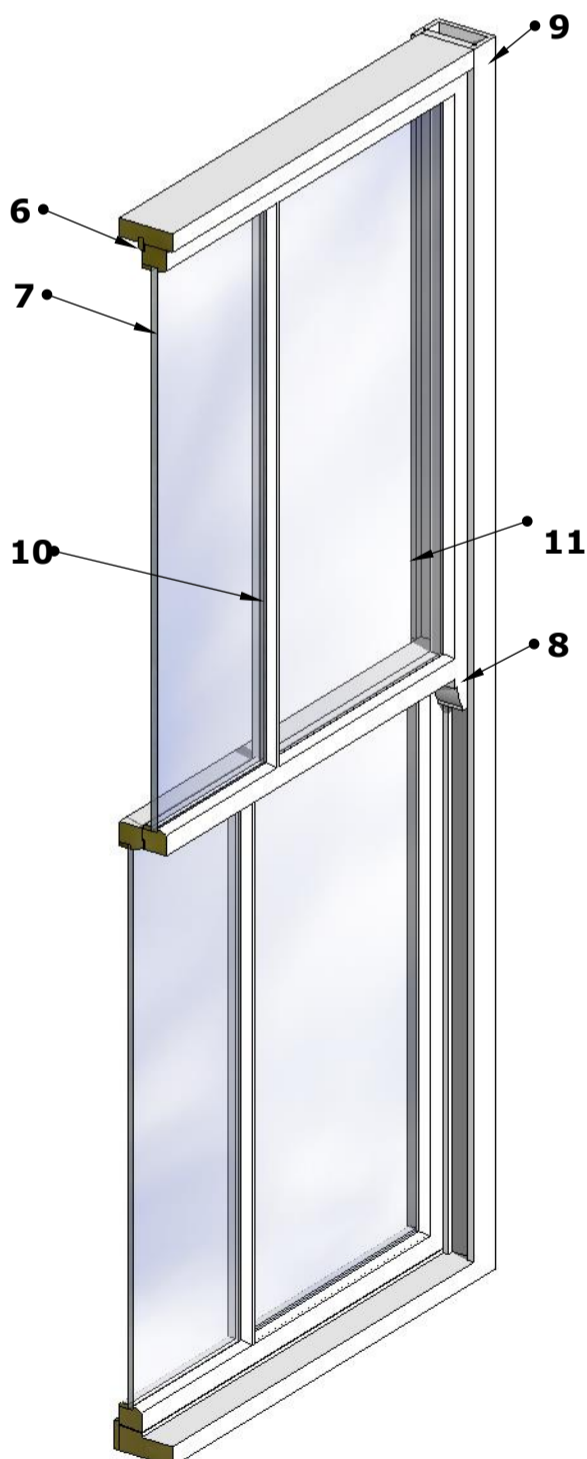
1. Cornice made of stucco with sloped top surface
2. Console (bracket) made of stucco
3. Stucco window surround
4. Pot guard window casting made of cast iron
5. Cill bracket likely to be made of stone if structural or stucco if purely decorative (this may depend on the projection of the window cill); sometimes they were made in timber

#### Timber boxed sash window components

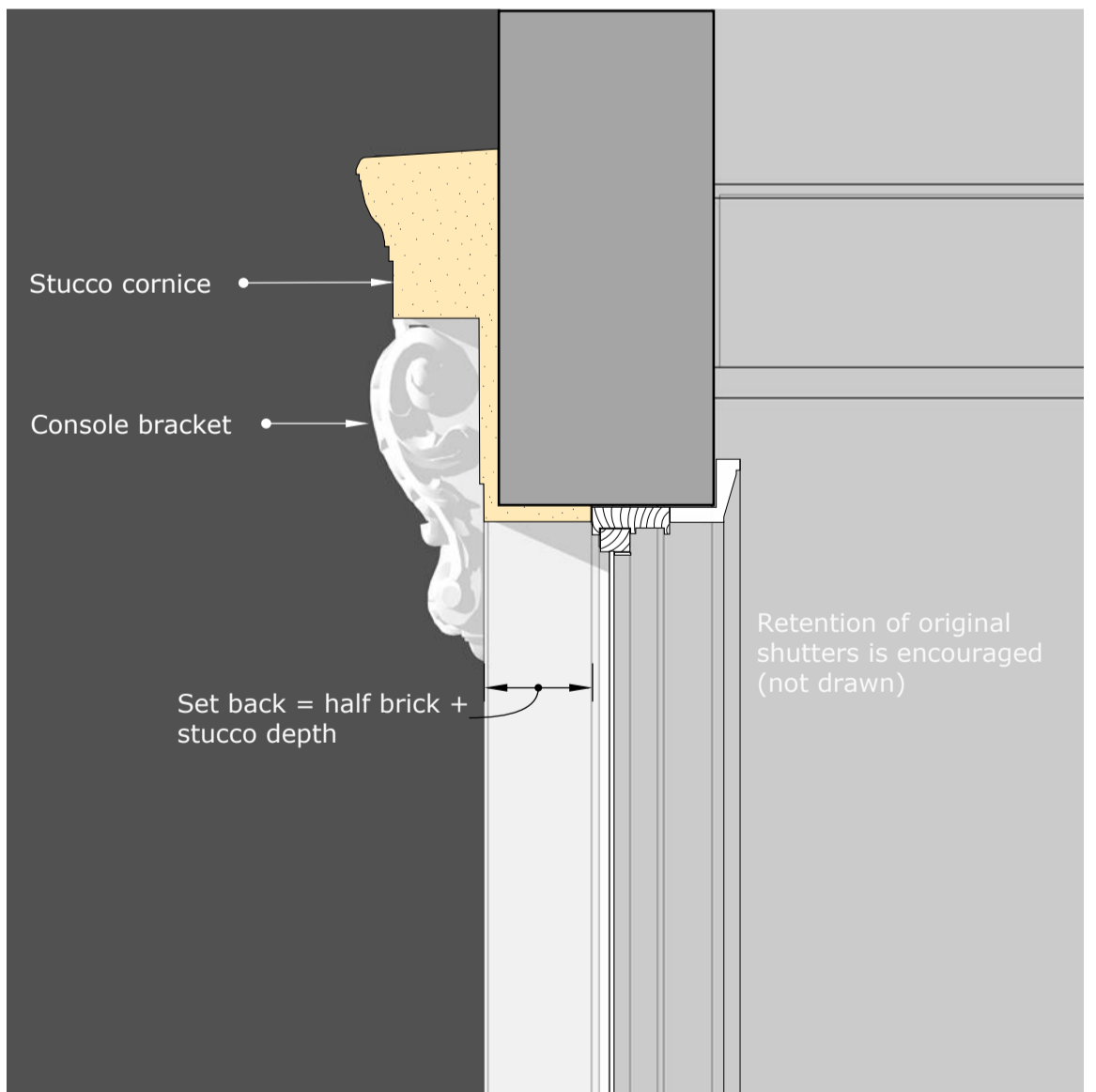
6. Staff bead & parting bead may be replaced with timber bead incorporating a concealed draught excluder brush or rubber strip
  7. Original glass looks uneven and should be retained
  8. Horns provide strength; these are characteristic of late C19th windows and were often curved
  9. Box sash timber frame with lead weights the weights may need adjusting to suit the weight of glass.
  10. Victorian style glazing bead with linseed oil putty externally
  11. Concealed sash locks can be fitted to the internal frame
- (not illustrated) Internal shutters and heavy curtains provide good thermal and acoustic performance



Typical timber sash window in Driffield Road Conservation Area



Typical timber sash window components



Section through window showing position of window in reveal

# For consultation

## Sheet 5

### Doors in the Driffield Road Conservation Area

#### Appraisal

The original Victorian doors were characteristically recessed in behind ornate stucco surrounds.

The stucco is likely to have originally been painted off-white to resemble stone.

The original doors had two glazed panels and one or two solid panels beneath. The threshold was often Yorkstone.

The ironmongery is likely to have been brass or cast iron.

#### Loss of character

Some of the replacement doors have lost their original characteristics.

Bringing doors forward in the surround can lose the depth and modulation of the street.

Adding steel grills or gates in front of the door alters the character of the street by reducing the modelling of the facade.

#### Repairs

Original doors should be retained and repaired. If glass is broken it can be replaced with laminated glass for added security. Damaged timber can be patched with new timber pieced in. Hinges can be upgraded for improved security. Draught seals can be installed within the frame where they cannot be seen.

#### Replacement

If an inappropriate door is to be replaced, traditional Victorian style timber doors that match the original surviving doors are most appropriate.

If the original frame and architrave remain they should be retained. Recesses for old locks can be in-filled with timber if required.

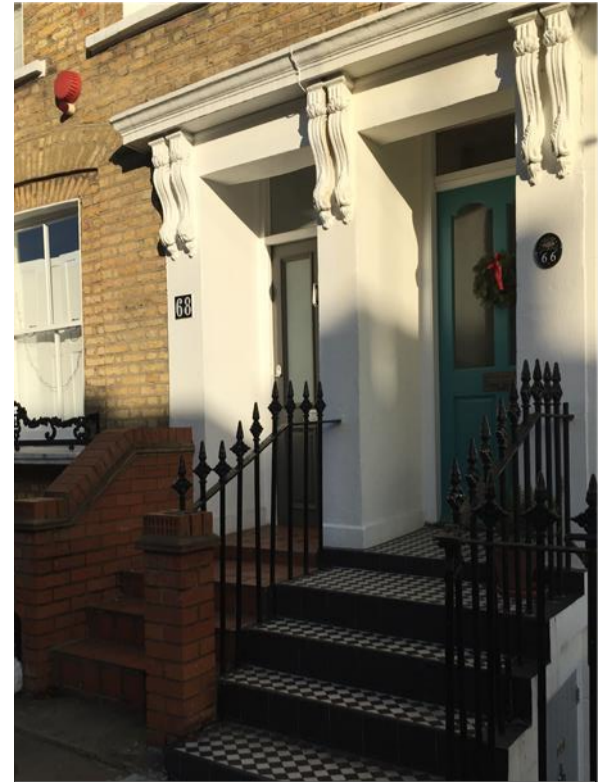
The architrave is an important feature of the door assembly and timber mouldings can be reproduced to match the original.

New doors can be made to suit the site dimensions and to match the original architectural details.

Traditional Victorian style ironmongery in brass or cast iron would be the most appropriate.



The dark colour is not characteristic of the area



The deep door recess enhances the character of the streetscape



These refurbished properties retain the original streetscape characteristics



Bringing forward the door reduces the depth of modelling on the facade



Gates, flush doors and unpainted wood are not characteristic of Victorian doors



Bringing forward the door reduces the depth of modelling on the facade

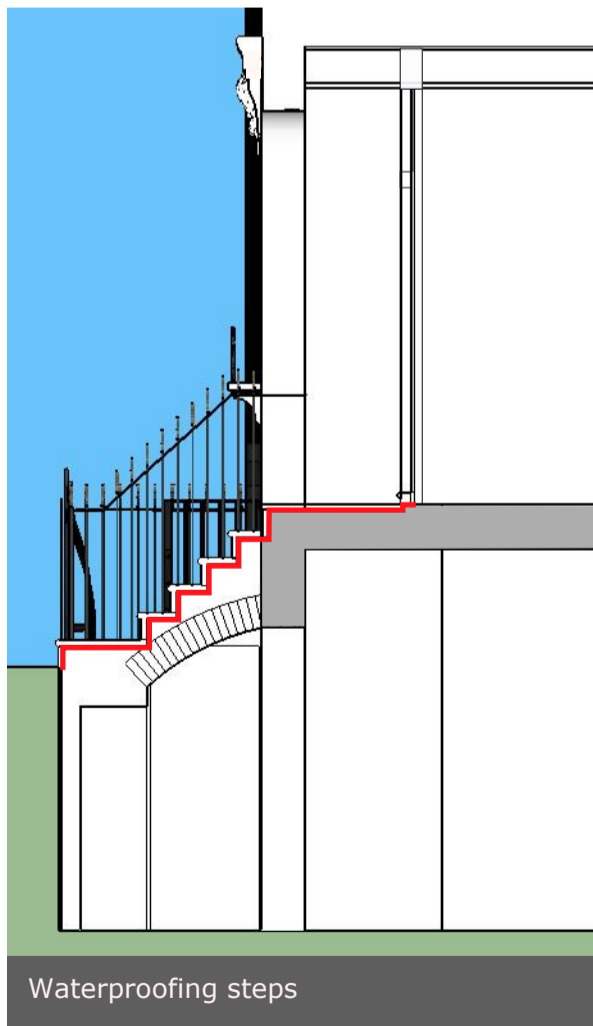
## Sheet 6 Doors in the Driffield Road Conservation Area

### Characteristics of typical doors

1. Stucco console bracket (see Sheet 3)
2. Glazed fanlight (may be plain or stained glass)
3. Timber architrave (many of the original architraves that remain have a moulded profile that enhances the character of the doorway)
4. Timber or glazed panel with timber beads (glass may be laminated for enhanced security)
5. Traditional Victorian style ironmongery (originally brass or cast iron)
6. Timber panels may be flush or recessed. Some original doors survive with ornate mouldings around the panel whilst some had a simpler profile
7. Timber or brass threshold
8. Yorkstone treads

### Waterproofing steps

If the space under the steps is enclosed for internal use, the waterproofing layer should be installed under the stone wearing layer, so that the stone is visible on the surface for a traditional appearance. See Sheet 13 for photos of typical traditional steps.



# For consultation

## Sheet 7

### Railings in the Driffield Road Conservation Area

Definitions (refer to numbers on photos)

1. Plinth made of stone (some replacements are in cast stone or concrete)
2. "Flat Back" feature panel in cast iron
3. Vertical bar or palisade railing
4. Rail head or finial
5. Top rail
6. Gate stay (supporting bracket or scroll)
7. Boot scraper

#### Appraisal

The original railings that still exist contribute a great deal to the streets of the Driffield Road Conservation Area. In some properties the railings have been replaced with masonry walls which detract from the character of the conservation area.

There are several patterns of cast iron railings that characterise the area and enhance the streetscape.

These tend to be of high quality, with generous finials and ornate scrolls. Most of the railings that have been retained are used to guard changes in level and for this reason they were not removed during the war.

The original cast iron railings are typically more robust and ornate than the post-war replacements, which are often in mild steel with thinner bars and smaller finials.

#### Traditional features

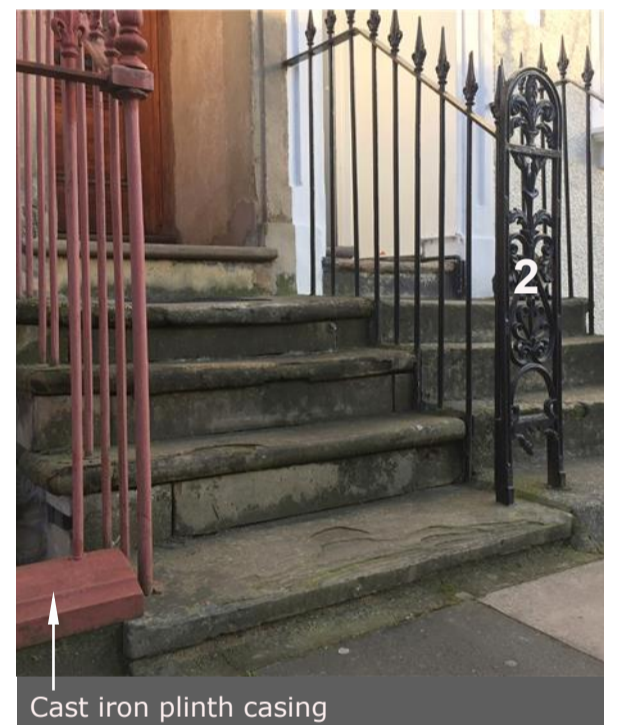
- thick, widely spaced cast iron bars
- ornate cast iron rail heads and finials
- bars led into the stone base with no bottom rail
- cast iron gates with rail heads
- Some gates had gate posts with ornate finials and /or decorative scrolled supporting brackets
- 'flat back' cast iron panels at staircases
- boot scrapers incorporated into the design
- wide round bars typically 22 - 25mm or fluted bars or twisted bars
- top rails let into the stucco and not surface-mounted
- metal handrails to basement steps

#### Repair and maintenance

Cast iron is durable provided that it is protected from moisture.

Cast iron is still produced. Standard patterns are still available or moulds can be made to match existing profiles. Repair of existing railings and reproduction of the original details where missing could greatly enhance the Driffield Road conservation area.

Mild steel is a cheaper substitute, but it has to be detailed very carefully to achieve the same character and so cast iron using traditional techniques is encouraged.



## Sheet 8

### Railings in the Driffield Road Conservation Area

#### Boot scrapers

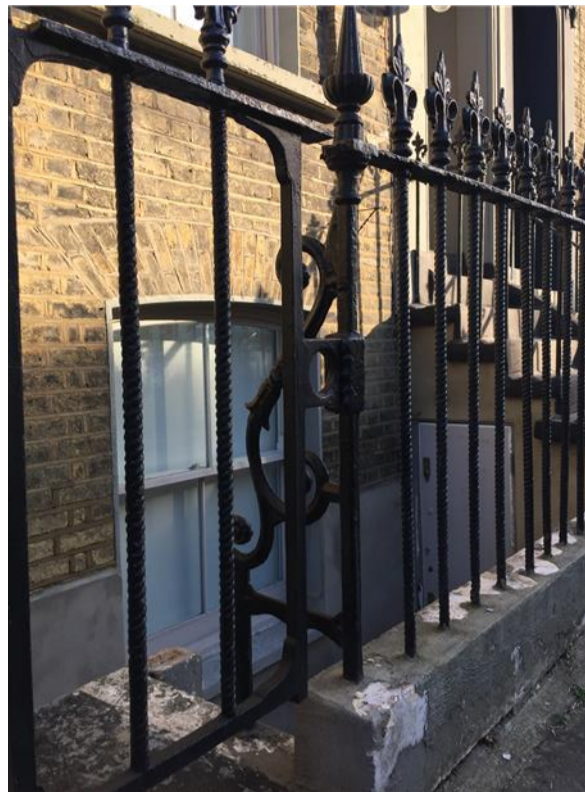
These were often incorporated into the gate post stays or flat backed feature panel dividing properties on shared staircases to the front doors.

#### Gates

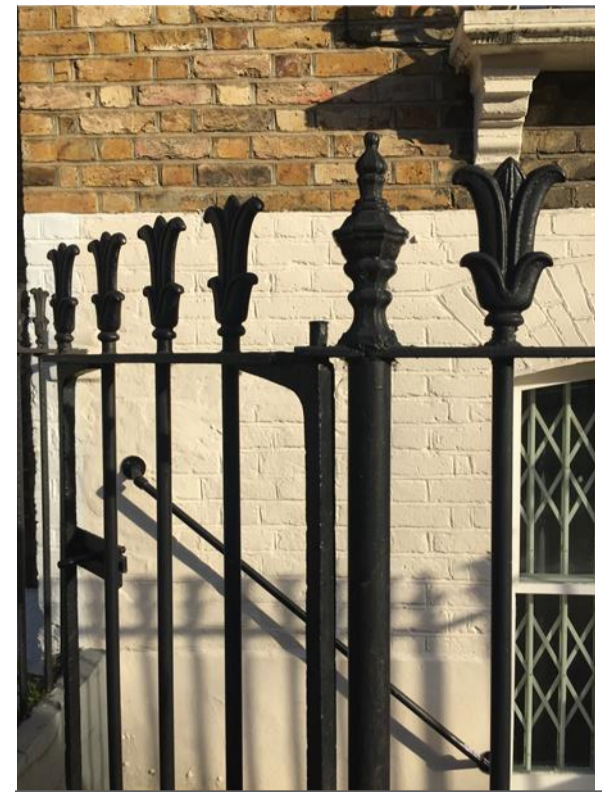
Gates were often hinged with simple pins fixed through the top rail and into a pocket in the stonework paving.

Reinstatement of missing gates with traditional gate detailing is encouraged.

The gate post often had an ornate cast iron finial and decorative support brackets.



Gate posts often had more ornate finials



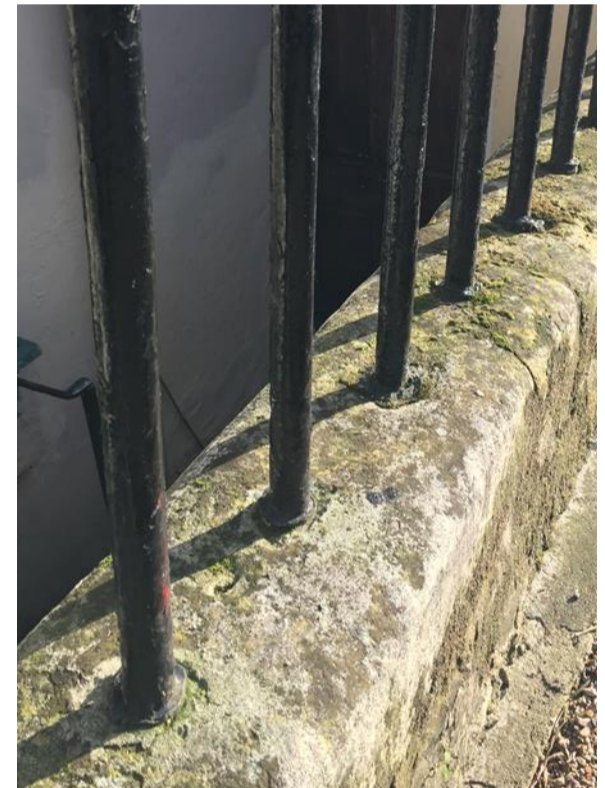
Gate posts often had different finials

#### Lead caulking

Bars were caulked into the stone plinth / base. Pockets were cut into the stone to form a circular recess. This is still the preferred method of installation and whilst today many of the bases are formed in concrete as a substitute for stone, this method can still be used. Once each bar (or paling) is in place, molten lead (or caulking) is poured in carefully, and is left 3mm proud of the base to ensure moisture run off. In properties with the curved metal capping, the railings would have been caulked in the same way and the lead would be installed flush with the capping or filled with a stone dust mix to allow moisture run-off.



Bars lead caulked into stone base



Bars lead caulked into stone base

#### Rail heads

Rail heads in standard patterns that match the original are available from suppliers such as Metalcraft, Britannia, James Hoyle and Son and others. If an existing pattern is not available, templates can be made from the existing. They can be cast together with the rail or welded from underneath in the factory so that the joint cannot be seen.



15/6/1  
BD  
H150  
W100  
B55X40  
1.15KG



7/6/205  
H240+43  
W92  
B23DIA  
1.15KG



Cast iron rail head



Cast iron rail head



## Sheet 9

### Railings in the Driffield Road Conservation Area

If the existing railings are original or appropriate good quality railings, they should be repaired with missing components replaced to match existing. Some property owners have restored their railings using traditional methods.

If railings do not exist, it may be appropriate to install railings to a traditional pattern to complement the streetscape and enhance the Conservation Area. This would have the greatest benefit if the design and quality is consistent with other houses in the terrace, but some variation is also characteristic. It is important to establish which style is considered most appropriate as this will vary according to location.

Non-traditional materials or features designed out of character with the original will not normally be acceptable. The replacement of existing non-traditional poor quality railings with traditional high quality railings is encouraged.

There are several specialist ironwork companies that specialize in supplying and installing railings to closely match the traditional pattern and details. They would be able to match the original pattern and reproduce railings to match the original examples that remain in the neighbourhood.

There would be an economy of scale if metalworkers were to produce the same design for multiple properties, especially if bespoke details were to be produced and installation were coordinated between householders.

**16/PN55**  
Flat back  
H1410  
W270  
23.00KG

#### 'Flat back' or 'cresting'

Left: Extract from James Hoyle and Son catalogue  
@jameshoyle@btconnect.com

Some properties have a cast iron 'flat back' panel between staircases, which incorporates a boot scraper. We have not identified a standard pattern number to match the original casting but the pattern on the left is the closest casting we have found, from James Hoyle and Son. Reproduction of an original would be possible by making a template of an original, by specialist metalworkers for casting by a foundry. Specialist castings may be available from Ballantine Castings, Britannia, Metalcraft, Topp & Co. or others; however we cannot vouch for any supplier or product.



Typical railing components at entrance steps

Prototype model Elevation

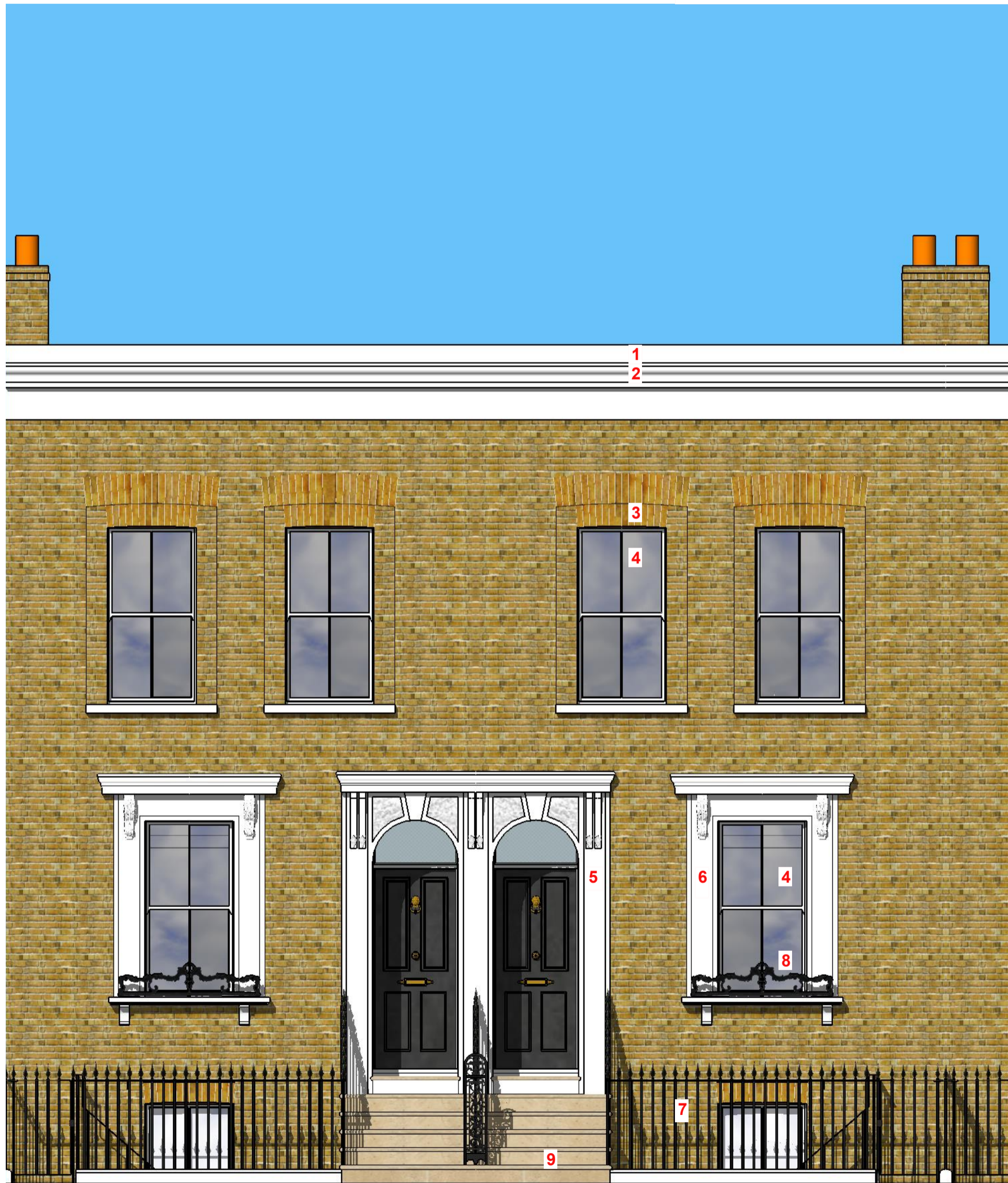
# For consultation

## Sheet 10 Reconstruction of typical house in Driffield Road Conservation Area

### Reconstruction of typical house

Original architectural features include:

- 1) Parapet wall to conceal London roof
- 2) Cornice (decorative horizontal moulding on parapet)
- 3) Mouldings or brick borders to first floor windows
- 4) Timber sash windows with delicate glazing bars
- 5) Embellished stucco surround to recessed front door
- 6) Decorative stucco surround to ground floor window (or bay window)
- 7) Cast iron railings on stone plinth
- 8) Cast iron pot guard on window sill
- 9) Stone steps



This is how a typical property in the Driffield Road Conservation Area might have looked when new

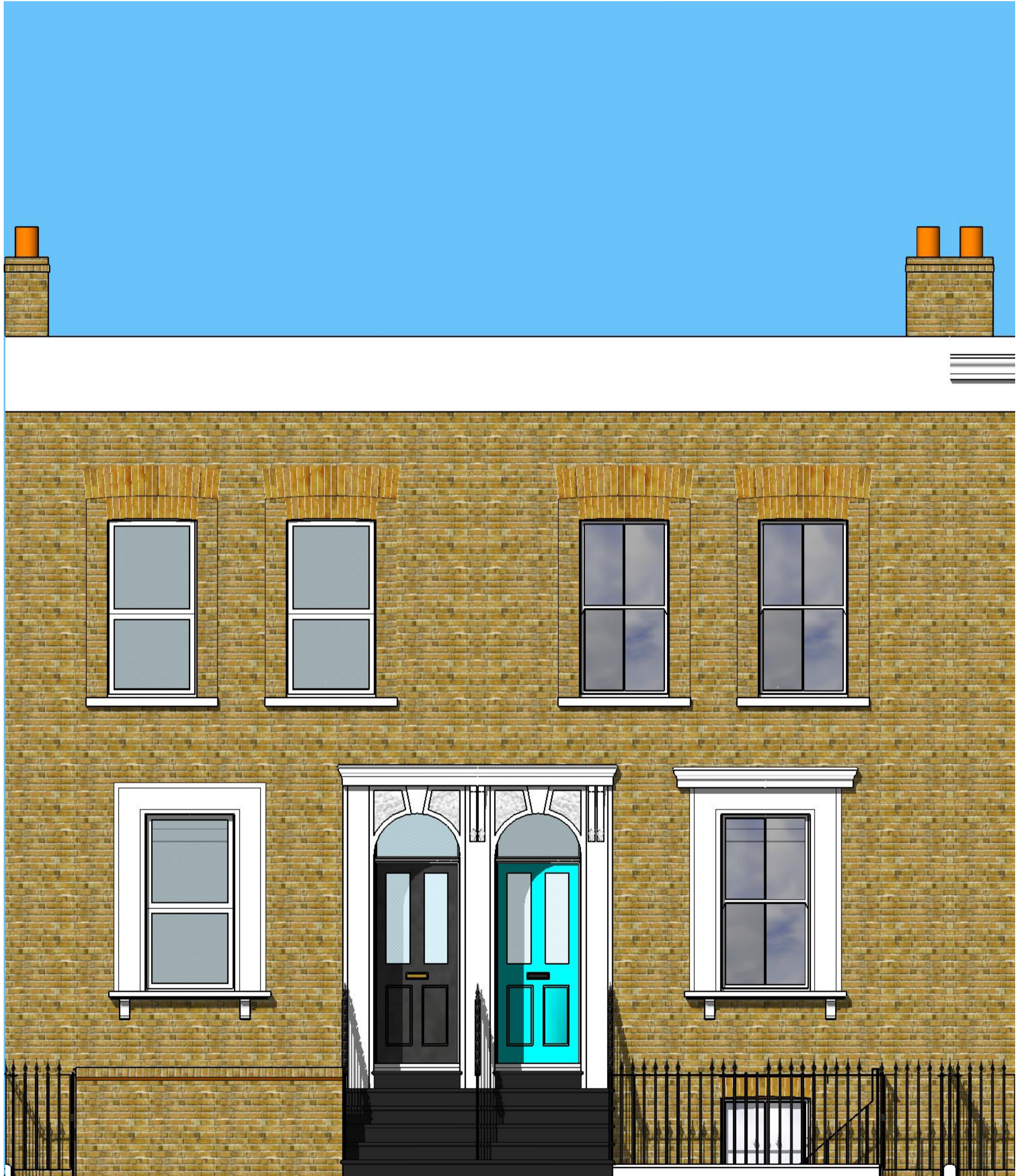
Prototype model Elevation Driffield road

# For consultation

## Sheet 11 Typical contemporary elevations in Driffield Road Conservation Area

Over time many properties in the conservation area have lost architectural features due to lack of maintenance or changing fashion. Cornices need regular redecoration and if neglected they deteriorate quickly requiring extensive repairs. Many properties have lost the cornice and some have also lost the rendered panel behind the cornice.

Replacement windows did not always match the original timber sliding sash windows and frequently top hung or casement replacement windows in timber or plastic were installed, which detract from the character of the Conservation Area. In many properties the railings have been replaced with brick walls or fences. The cumulative effect of loss of original features reduces the character and integrity of the area.



Typically properties in Driffield have lost some of their architectural features

# For consultation

## Sheet 12 Typical extended houses with restored features in Driffield Road Conservation Area

When extending properties in the Conservation Area with a mansard roof, potential harm could be offset by restoring lost architectural features as illustrated below.

The Mansard Roof Design Guidance sets out design principles to be followed when designing a mansard roof extension, including guidance on appropriate materials and workmanship and technical considerations.



Prototype elevation of typical properties in Driffield Road Conservation Area with roof extensions and architectural features reinstated

## Sheet 13

### Miscellaneous features in Driffield Road Conservation Area

#### Pointing

The original soft London stock bricks would have been laid using lime mortar. The pointing can be susceptible to damage, particularly when bricks are cleaned, and needs periodic replacement. Most of the properties have been re-pointed using mortar that projects beyond the face of the brick. This does not match the original pointing, which was more recessive and therefore less visible than projecting mortar.

**Avoid cement pointing!** Many properties have suffered from inappropriate pointing in hard cementitious mortar. The problem with this is that it is harder than the soft bricks and so any moisture absorbed by the bricks cannot evaporate out through the joints. Trapped moisture builds up behind the face of the brick and frost-thaw action can accelerate deterioration of the brickwork.

**Re-pointing** should be in lime mortar set behind the face of the bricks.

#### Cast iron grilles and coal hole covers

The coal bunkers were ventilated by cast iron grilles and access covers were in cast iron. These details are characteristic of the area. Any original cast iron features should be conserved. Their retention, refurbishment, restoration and reinstatement where missing is encouraged.

#### Stairs down to basement

The traditional stairs down to the basement were built in stone, with a simple iron railing and handrail and a few examples remain in Driffield Road CA. Some replacements have been installed with steel or timber staircases. If renewing a staircase Yorkstone treads are preferred but simple steel stairs painted black are also considered to be appropriate.

#### Steps and paving

The numbers correspond with the numbers on the photos

1. Nosing
2. Tread
3. Riser

Many of the houses have steps up to the front door, but nearly all of these have lost their original detailing, or it has been covered over with asphalt to waterproof the steps, or they have been replaced with concrete. It is possible to waterproof the structure from beneath the stone and to expose stone treads and risers (refer to Sheet 6).

The original paving and steps are likely to have been riven Yorkstone with a projecting nosing. The top riser in some cases was an iron grille as described above. Conservation of original features is encouraged. The flagstones inside the front area and on the steps were large and sourcing replacements of a similar scale can be problematic, but it is still possible, and piecing in repairs can be carried out by stonemasons. Smaller slabs would be acceptable.



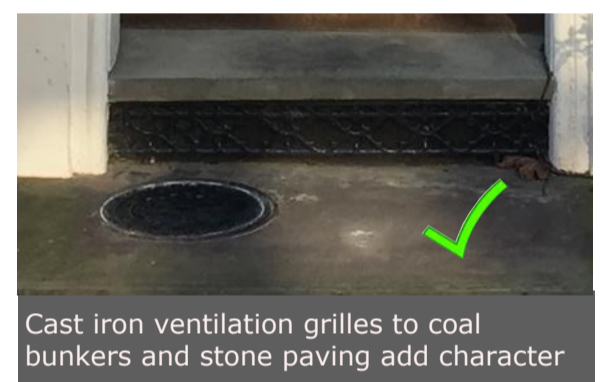
Weather-struck pointing is too dominant  
Cement pointing can damage the bricks



Re-pointing should be in lime mortar  
set behind the face of the bricks



Original cast iron and other Victorian  
features should be conserved



Cast iron ventilation grilles to coal  
bunkers and stone paving add character



Basement steps with Yorkstone  
treads (2) with painted riser (3)



Yorkstone projecting nosing (1),  
tread (2) and riser (3)

#### Enhancement Guidance

# For consultation

## Sheet 14

### An appreciation of cast iron coal hole covers in the Driffield Road Conservation Area



**YHCC4**  
P77  
Coal hole cover  
320 DIA  
50 DEEP  
COLLAR  
248 DIA  
42 DEEP  
5.20kg

Above: Extract from James Hoyle and Son catalogue @jameshoyle@btconnect.com

Replacement castings can also be made from a mould of the original castings



Medway Road