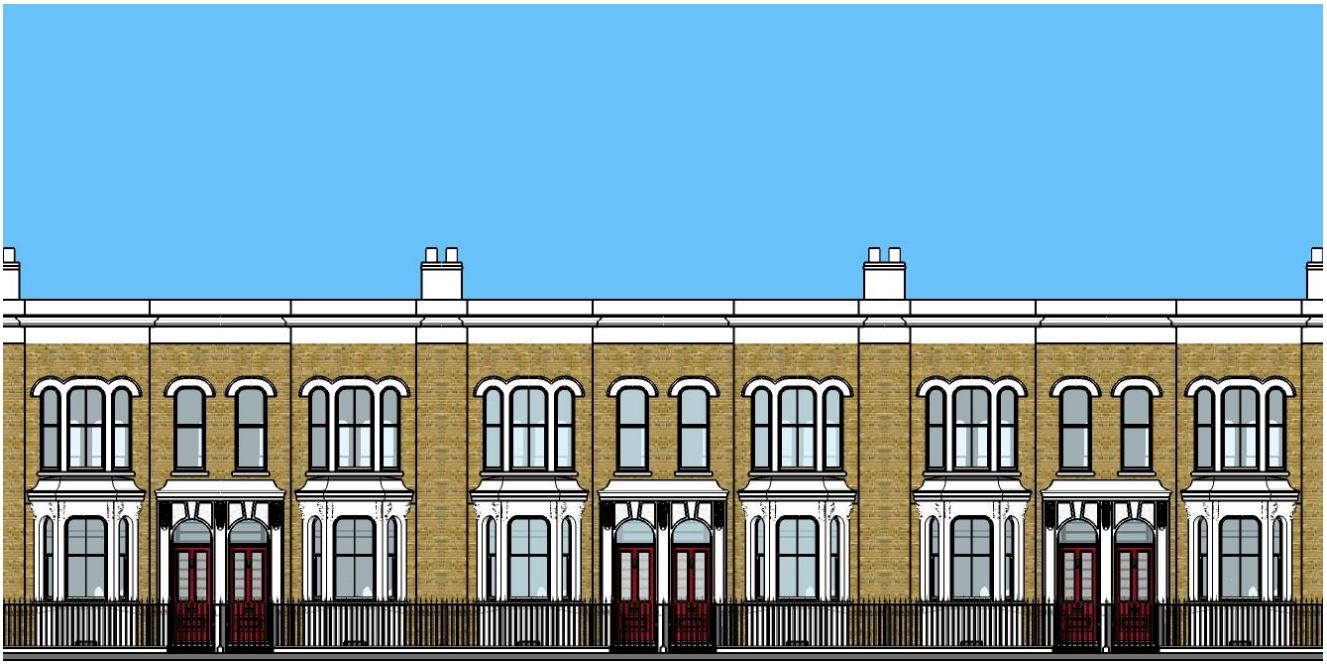
London Borough of Tower Hamlets

Medway 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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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 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 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 Medway 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 are these documents to be used?
These documents should be read in association with the revised Medway 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.

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 Medway 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/[1]

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[2] 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. [3]

[1] This is included for information only; we cannot vouch for the suitability of the work by the company or the contents of this blog.
[2] We cannot vouch for the suitability of these materials but specialist suppliers would provide advice on appropriate methods and materials for each situation.
[3] 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, Kev Ryan Tel: 07830911177 www.londonrepointingandrestorationltd.co.uk
- cornicerepairs@gmail.com St. James' Plastering Services, James Lawlor Tel: 07970 308 825 / 0208 648 9173 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. 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 terrace 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 Medway Conservation Area. The details vary from terrace to terrace, but generally include arched stucco window head mouldings, and profiled mouldings to the top of the bay windows supported with foliate embellishments. Many properties have recessed front doors with an embellished stucco surround, often featuring an arched entrance with vermiculated or reticulated stucco panels over the door, and projecting mouldings with stucco console brackets. These details require regular maintenance and redecoration. The arched tops and decorative details to doors and windows make a positive contribution to the local character of this conservation area.

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.

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 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 may not be 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 should be replaced to match existing originals, examples of which might exist at a neighbouring property. Similarly foliate supports to bay window heads and cills should be restored using existing originals as templates. To do this 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[4], 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 are required for several properties at once.

Bay windows

Refer to illustration Sheet 3. Many of the properties in Medway Conservation Area have bay windows, for example properties in Medway Road, Lyal Road and Antill Road; these are fairly consistent in appearance but vary slightly from street to street. However, incremental changes such as the loss of console brackets, mouldings, sash windows or leadwork, or more dramatic alterations such as the loss of the bay altogether, can substantially change the appearance of a property and result in the erosion of their historic character.

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.

[4] We cannot vouch for the suitability of these materials but specialist suppliers would provide advice on appropriate methods and materials for each situation.

Paint for window and door surrounds and bay windows
Refer to guidance for 'paint for cornices and rendered band courses', on page 7.

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. However, an adequate fall on the horizontal surface of a moulding is generally found to be sufficient to ensure water run-off.

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, email: 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 Medway 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 Medway Conservation Area had timber boxed sash windows of varying shapes and sizes but often with an arched head. Many of these 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. Often the replacement windows have a straight frame to the new glazing and this has a very detrimental impact upon the character of the conservation area.

Historic England states[5]:

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

"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 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 Medway 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 I830s 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. [6] They will assess whether the windows can be repaired in situ or if they need to be taken to the workshop.

[6] 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. 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.

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.

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[7].

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 that incorporate draught seals can make a significant improvement to the thermal comfort of the room by 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 if not appropriately detailed.

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[8] or others) with coloured spacers within the existing frames. However, this is not encouraged as it is all too easy to lose original mouldings and dumb down the fine detailing. Often the replacement of windows can result in the loss of the characteristic arched top to windows, and the impact of this can be particularly detrimental.

[7] www.spab.org.uk/bookshop

[8] 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.

Wide profiled double-glazed units with silver spacers are not appropriate for use in the Conservation Area because they are highly visible, result in a strange mirrored appearance to the glass 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.

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 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 Medway Conservation Area has a single bottom panel with a heavy timber moulding and applied central panel with scalloped concave corners. The top has two vertical glazed panels with timber beads. 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, 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 the modern 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, however, this is not usually 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 fowling 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 Medway Conservation Area and points out the features that are traditional. In typical Victorian properties railings provided a safety function to guard the edge of a light-well, and on properties with no basement the function of the railings was to demark the property's boundary, provide security and enhance the character of the streetscape.

In the Medway Conservation Area, there are few basements and very few of the original railings remain. It would appear that with no safety function they have largely been removed during the war to help the war effort. Some properties have replacement railings that were installed post-war and whilst these provide some streetscape enhancement, they are less embellished than Victorian cast iron railings and provide less architectural interest. By contrast, no. 9 Selwyn Road has a traditional railing style that enhances the character of the street and the details are a good example of appropriate detailing and are characteristic of the Victorian style (although the gate is missing). Illustrations are provided on Sheet 7.

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 would have added a layer of interest to the streets of Medway Conservation Area. Reinstatement of traditional railings along terraces would substantially enhance the area. Victorian railings tend to be robust, with generous rail heads and ornate scrolls, as illustrated in the guidance sheets. In Medway as there is no original precedent to use as a basis for replication, a generic style has been proposed in the guidance, using components that are available as standard patterns. Some variety is likely to be acceptable, but as a general guide the quality should be at least equivalent to that shown in the guidance, but each proposal would need to be assessed on its own merit.

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 ¾-inch (20mm) diameter, or profiled in a fluted or barley sugar pattern 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.

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 the traditional details need to be adapted to suit the use of steel.

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.

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 maintenance
The illustrated guidance starting on Sheet 7 provides illustrations and notes to facilitate appropriate details for the restoration of railings.

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. 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. Paint on original railings 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"*[9]
>
> *"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*[10] *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[11].

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.

For 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

As original railings do not survive in the Medway Conservation Area, it is appropriate to install railings to a traditional pattern to complement the streetscape and enhance the conservation area. This would have the greatest benefit if reinstatement to more than one property can take place and if the design is consistent with other houses in the terrace. It

[9] http://www.buildingconservation.com/articles/historicrailings/historicrailings.htm

[10] Lead paint is not permitted except in some grade 1 and 2* buildings so would not be appropriate here.

[11] 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. 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.

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 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 headings to railings, often a railing will include principle finials, slightly larger more decorative heads on the top of gate posts, and support stays whilst the rail heads between these principle finials are 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. Profiles of these varied, but spacings were typically 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 can 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. Gates were fabricated to match the railings, so that the railing centres were maintained. Gates were hung from a pin and supported at the base. Some examples have gate posts with ornate finials and decorative scrolled stays, whilst others can be 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.

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.

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.

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 because if water gets 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[12], following manufacturers' instructions for adequate preparation. For further information on galvanised steel see www.galvanizing.org.

[12] 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.

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 GRILLS

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 12.

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

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 (Sheet 6). 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

Front areas and front door steps were generally of Yorkstone as illustrated on Sheet 12. Conservation of the original paving is encouraged, and re-use of traditional materials and detailing is encouraged where the original has been lost.

Appraisal
The original paving of the front area and steps are likely to have been Yorkstone. The riser in many instances 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.

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.

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	Replace cornice to bay window at ground floor level if missing – approx 3m long	£3,350	£300
11	Repair cornice to bay window at ground floor level if damaged	£1,050	£300
12	Replace cornice to the porch if missing	£1,010	£300

Ref	Description of works	Works budget cost	Associated costs
13	Repair cornice to the porch if damaged	£850	£300
14	Replace the 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 mould and manufacture a replacement	£500 for a single console	£150
17	Repair console bracket	£400 per console	£150
18	Replace sash windows	£2,100	£270
19	Repair sash windows	£150 to £1,000	£270
20	Replace front door and frame where original has been lost	£2,250	£NIL
21	Repair front door	£500 - £1,000	£NIL
22	Remove door gate and make good finishes disturbed	£200	£NIL
23	Remove cement mortar and re-point in lime mortar (price may increase if existing is hard to extract ; a trial would confirm)	£1,200	£900
24	Replace paving leading to front door	£500	£NIL
25	Replace a single spalled paving with Yorkstone	£120	£NIL
26	Repair threshold and step up to door	£400	£NIL
27	Properties with staircase up to door - Remove covering, lay damp proof membrane; supply and lay new stone	£4,200	£300
28	Properties with steps to basement - lay damp proof membrane; supply and lay new stone	£2,750	£300
29	Cast iron vent in the step or bay window per 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 say 1.2m long	£2000 per return	£NIL
34	Single gate in steel and cast iron with traditional details, posts and rail heads	£1,300	£NIL
35	Pot guard on window sill in cast iron with two returns (as seen on Roman Road) 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 32-35 – Castings. If a pattern has to be made the cost could 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 though 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 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 FAÇADE ENHANCEMENT SHEETS

For consultation

Sheet 1 Medway

Architectural characteristics of the Medway Conservation Area

The following features are positive attributes of the Conservation Area -

- 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 arched tops and 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 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

Loss of render band and cornice and cast iron railings

Loss of render band and cornice and cast iron railings

Removal of features and rendering the façade can result in a significant change of character

Loss of console brackets on bay window; railings lack traditional details

Replacing cast iron railings with brick wall changes relationship of house to street

Enhancement Guidance

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For consultation

Enhancement of cornices and parapets Medway Conservation area

Definitions The numbers correspond to the numbers on the first photo

Copings
1. The Coping is the top course of the wall. Some incorporate a damp proof course such as a creasing tile

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

Cornice
3. The Cornice is the horizontal decorative moulding made from stucco

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

Maintenance and repair

Parapet
Parapets are exposed on both sides and prone to weathering. Stucco requires regular painting to prevent water penetration and a breakdown of the surface or bulging of the stucco. The rendered band should be checked for cracks and tapped to make sure that it is not loose. Repairs should be carried out to match the existing (or in a stiff lime mortar) prior to any work to the cornice.

Cornice
If running a new cornice, the new render band 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.

Pointing mortar
Repairs should use lime-rich mortar to allow the bricks to move and breathe and the pointing should not project beyond the face of the brick.

Missing cornice could be renovated using the adjacent cornice as a template


Loss of cornices reduces the architectural character

Post-war image shows the cornices intact
Picture archive http://collage.cityoflondon.gov.uk/


The same street in 2016 - the majority of cornices are missing

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Sheet 3 Medway

Window and door surrounds in Medway Conservation Area

Definitions - The numbers correspond to the numbers on the first photo

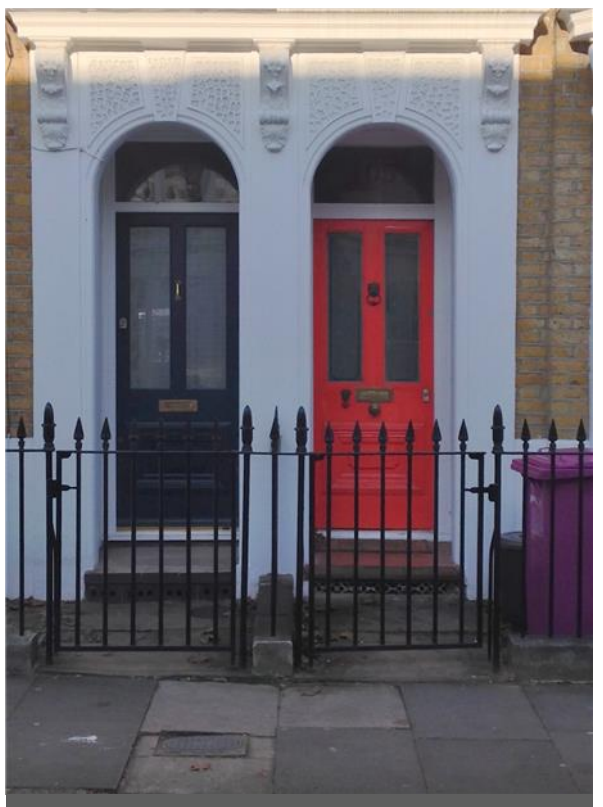
1. Stucco door surround
   Decorative feature around the door made from stucco, incorporating flat or embossed panels

2. Cornice
   Horizontal moulding above the doorway, made from stucco

3. Console (bracket)
   Decorative bracket made from moulded stucco

4. Recess
   The depth of set back from the façade to the door frame

Door surround (the numbers refer to definitions to the left)


Restored door surrounds

Characteristics
The photographs indicate some of the common characteristics of the Medway Conservation Area. There is a strong characteristic of paired doors with stucco hood mouldings and embellished surrounds, and moulded consoles. 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.

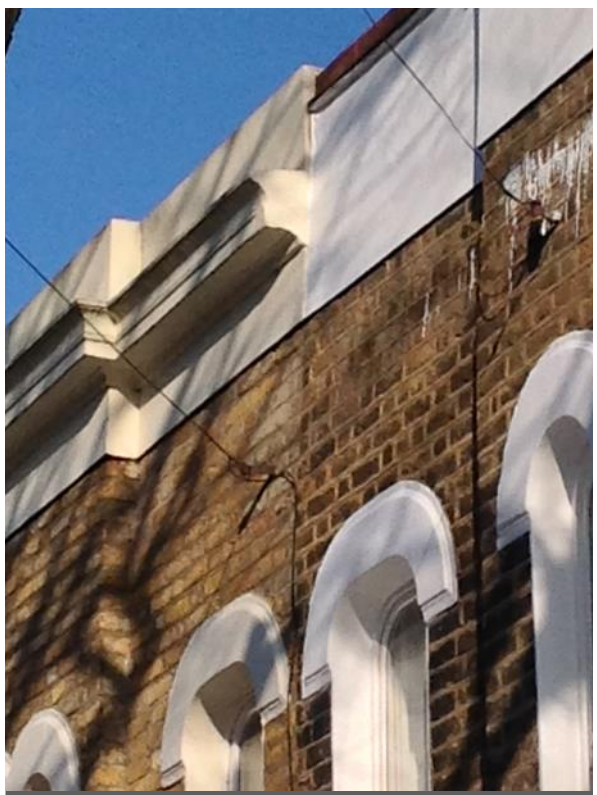
Maintenance
Stucco architectural features require maintenance and redecoration to protect them from rain and frost. Signs of staining or plant growth are indicators that excessive moisture is present. This can lead to bulging, cracking and premature failure.

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.


Typical curved stucco moulding over first floor windows in Meday Conservation Area


The curved stucco over the bay window was a typical detail but many are lost


Decorative consoles deteriorate when not well maintained


A typical bay window surround (although window horns are missing)

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Sheet 4 Medway

Timber sash windows in Medway Conservation Area

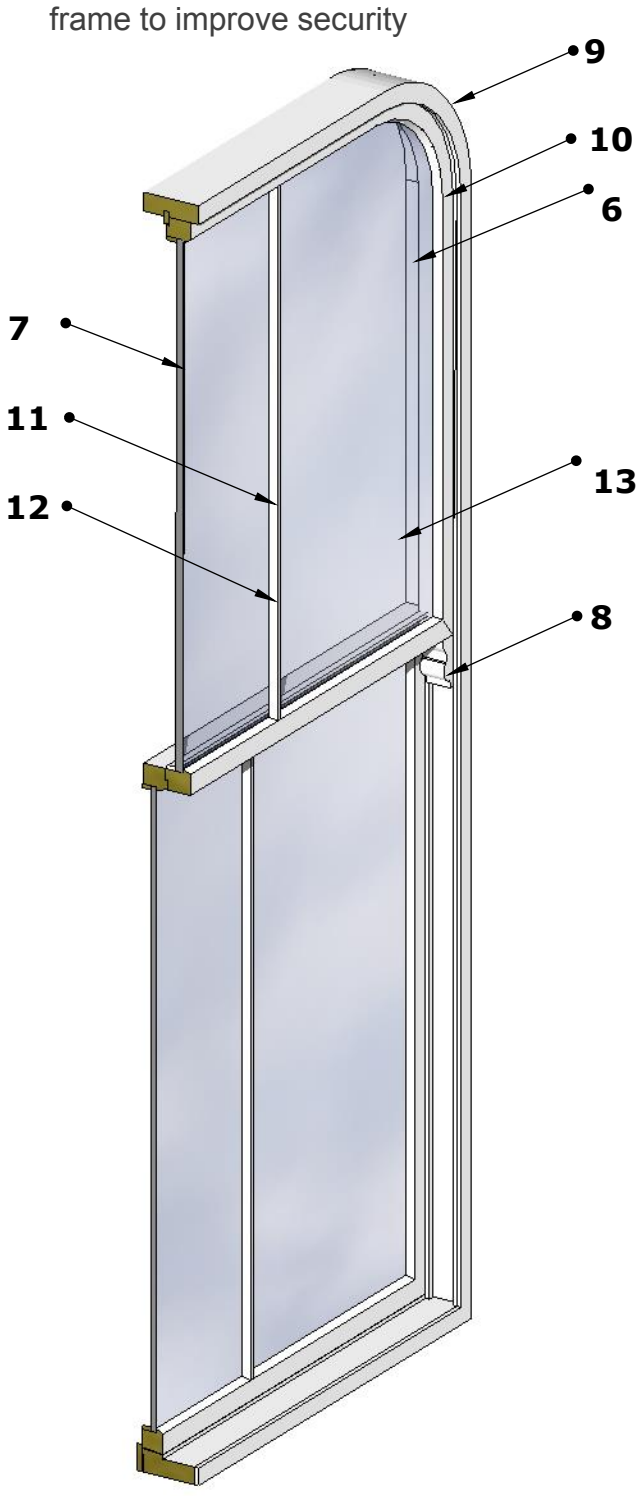
Features
The numbers correspond with the numbers on the drawing to the right

1. Stucco surround with arched head, painted
2. Curved timber window head and frame
3. Horn integral with top window sash
4. Meeting rail
5. Stone sill

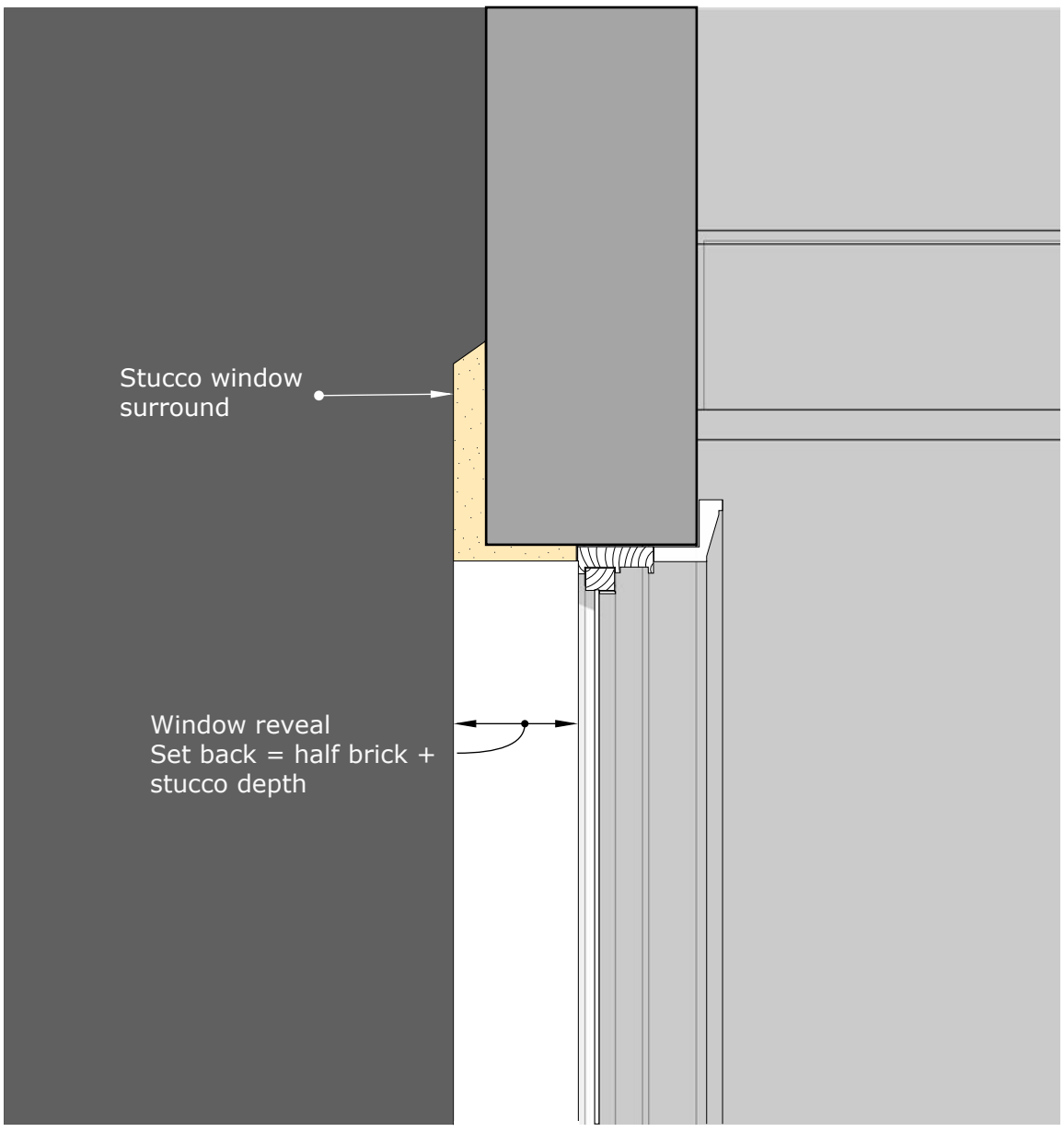
Timber boxed sash window
The numbers correspond with the numbers on the drawing below

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 are often curved
9. Curved heads should be retained / reinstated
10. Box sash timber frame with lead weights; the weights may need adjusting to suit the weight of glass
11. Timber glazing bead with Victorian style profile; it is important to retain the slim profile to suit the Victorian character
12. Linseed oil putty externally
13. Concealed sash locks can be fitted to the internal frame to improve security

Typical timber sash windows in Medway Conservation Area. It is important to retain the curved head. The numbers are explained in the text



Typical timber sash window components



Section through window showing position of window in reveal

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Sheet 5 Medway

Doors in the Medway 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 solid panel beneath with a generous timber moulding. 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 not incorporated the 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 façade.

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 encouraged as these are considered the most appropriate.

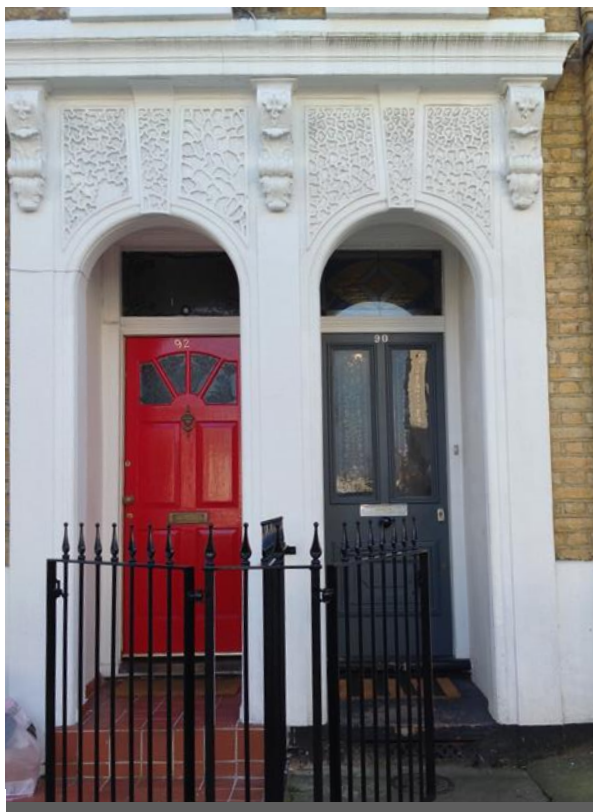
If the original frame and architrave remain they should be retained. Recesses for old locks can be in-filled with timber if required.

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. Paint charts are available that include Victorian door colours.

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


Steel gate reduces façade modelling


The style of door to the left is inappropriate


Good quality doors in Victorian style


Good quality door, grille & coal hole cover


The door to the left has lost its timber architrave

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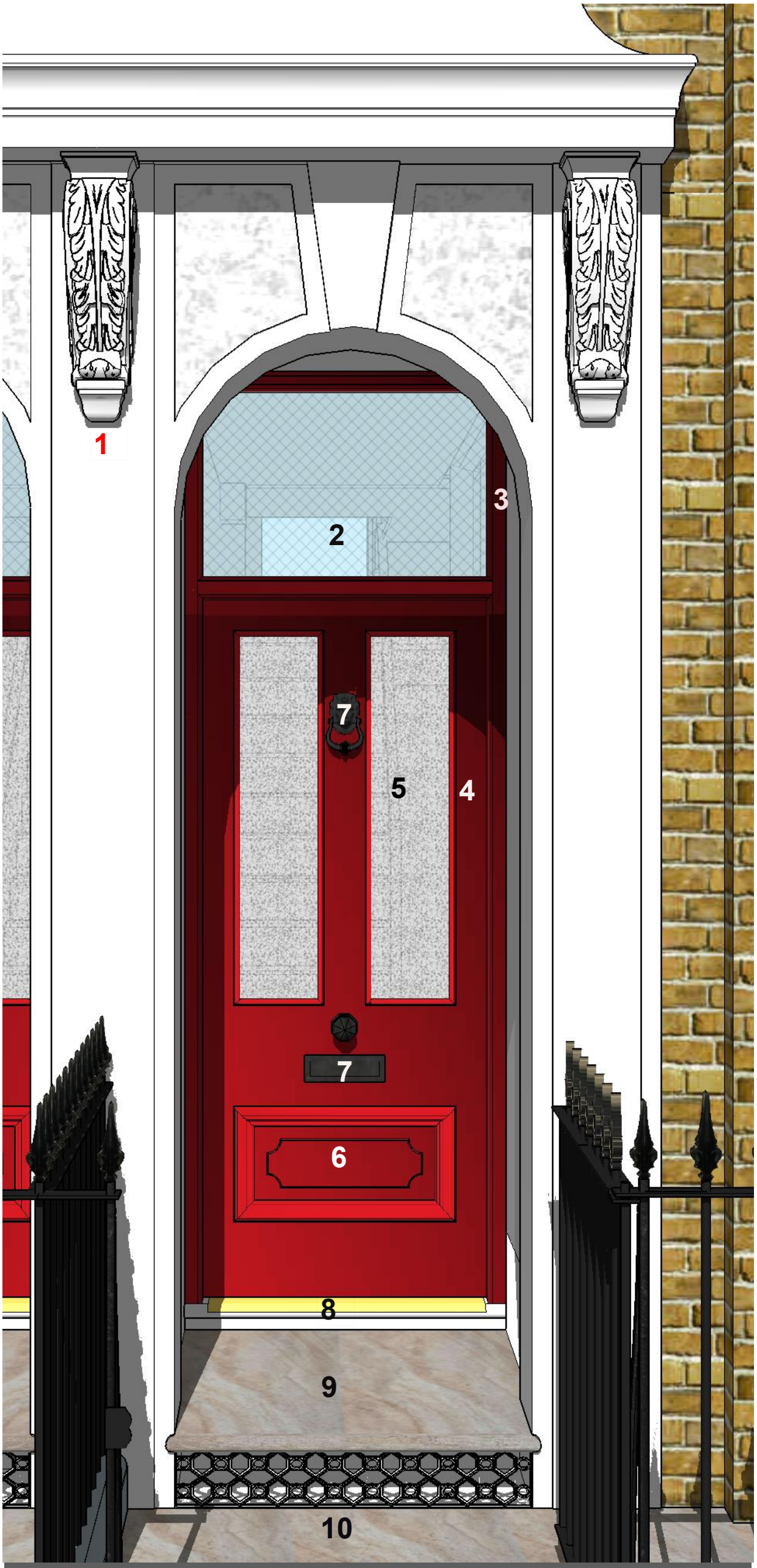
Sheet 6 Medway

Doors in the Medway Conservation Area

Characteristics of typical doors
The numbers below correspond to the numbers in the illustration.

1. Stucco door console bracket
2. Glazed fanlight
3. Timber architrave moulding
4. Timber glazing bead
5. Glass may be laminated for enhanced security and may be stained or obscured glass
6. Timber panel with heavy moulding; the style as illustrated is typical of the original doors in Medway Conservation Area
7. Traditional Victorian style ironmongery was typically in brass or cast iron
8. Timber or brass threshold
9. Yorkstone stair treads
10. Cast iron grille in stair riser to ventilate timber floors or coal hole



Typical door in Medway Conservation Area. The numbers are explained in the text

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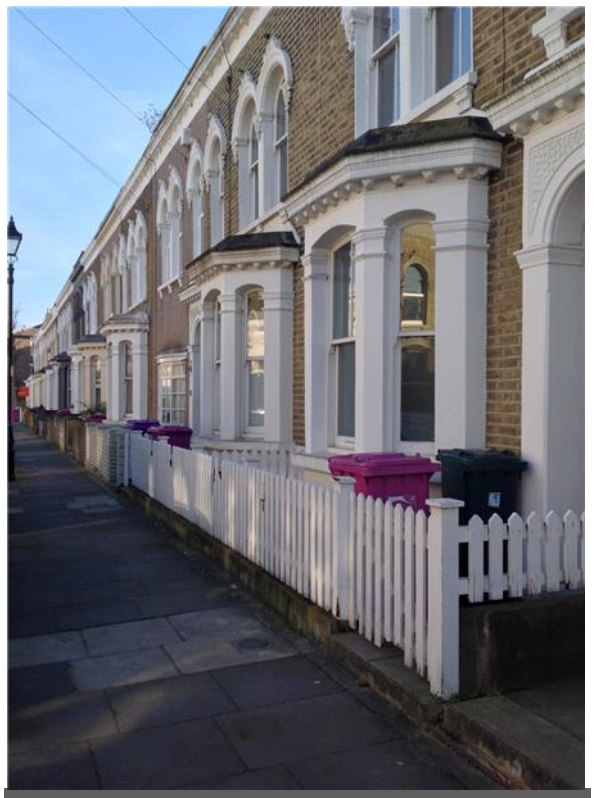
Sheet 7 Medway

Railings in the Medway Conservation Area

It is likely that the original terraces would have had railings defining the property boundary, with front gates, although some streets have no remaining evidence of railings. It is thought likely that the railings may have been removed wholesale in the war. Photographs available from http://collage.cityoflondon.gov.uk/ from the 1960s show low level plinths but no railings.

Some properties have replacement railings that were installed post-war and whilst these provide some streetscape enhancement, they are less embellished than Victorian cast iron railings and provide less architectural interest.
9 Selwyn Road has a traditional railing style that enhances the character of the street and the details are a good example of appropriate detailing and are characteristic of the Victorian style (although the gate is missing).



Strahan Road - inconsistent boundaries

Strahan Road- loss of character

Replacement railings
In Medway all or most of the railings appear to have been lost during the war and there is no precedent for restoration. Therefore a generic style is proposed in the guidance, which is sympathetic to the period style and which would enhance the character of the Conservation Area. Details should match traditional cast iron detailing with no visible welds. The bars should be a minimum of 20mm in diameter with rail heads at least 170mm high. There should be no bottom rail.

Lead caulking of bars into the plinth
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 but cast stone is an accepted alternative to stone. Once each bar is in place, molten lead (or caulking) is poured in carefully, flush with the plinth or filled neatly with stone dust mix to ensure moisture run off.

Antill Road replacement railings

Selwyn Road traditional detailing

Rail heads Rail heads to match Victorian railings that are prevalent in the wider area are available in cast iron from specialist foundries or metalworkers*.

James Hoyle & Son* 7/6/205 or Britannia MN151

Cheaper mild steel rail heads were mass produced post-war. The image below left matches the post-war replacement railings but this rail head is not as characterful as the Victorian rail heads in the area.

Metalcraft MN129 or F H Brundle London style*

Cast iron is preferred because it is easier to achieve the traditional details without visible welds, but steel is cheaper and with careful detailing steel can be acceptable, subject to approval of detail.

Medway Road traditional detailing

Lyal Road The plinth lacks the character of stone

*eg. Ballantine, Britannia, Brundle, James Hoyle and Son, Metalcraft, Topp & Co and others but please note, we cannot vouch for any supplier or their products

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Railings in the Medway Conservation Area

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 can supply, install and decorate railings using traditional methods and materials to closely match the traditional pattern, details and methods of installation. They would be able to match the details and reproduce rail heads and features to match the original examples that remain in the wider 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.

Traditional features

- Cast iron bars set out 150mm from centre to centre
- Ornate cast iron rail heads
- Bars caulked (leaded) into the stone plinth (base) with no bottom rail
- Cast iron gates with rail heads to match the railings, fixed to the gate post on pins.
- Some gate posts have decorative cast iron finials on top
- Decorative cast iron stays (support brackets)
- Cast iron boot scrapers
- Cast iron round bars minimum 20mm in diameter, or fluted bars, or barley sugar pattern. Reinformecement bars are not an acceptable profile
- Top rails let into the stucco door surround rather than surface fixed
- Stone plinth (base) with square or curved profile

Prototype model drawing of acceptable railings, with 20mm bars caulked into the plinth

3d view of railings

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Sheet 9 Medway

Reconstruction of typical house in Medway 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) Stucco mouldings around curved first floor windows
4) Timber sash windows with delicate glazing bars and curved heads
5) Embellished stucco surround to recessed front door
6) Bay window rendered and painted off white
7) Cast iron railings on stone plinth
8) Stone steps and paving
9) Cast iron ventilation grilles

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

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Sheet 10 Medway

Typical contemporary elevations in Medway Conservation Area

Over time many properties in the Conservation Area have lost architectural features for a variety of reasons.

Cornices need regular redecoration and if neglected they deteriorate quickly requiring extensive repairs. Many properties have lost their 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 has detracted from the character of the Conservation Area. In some cases the replacement windows no longer have their curved head.

The cumulative effect of loss of original features reduces the character and integrity of the area

Typically properties in Medway Conservation Area have lost some of their architectural features

Prototype model Elevation Medway

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Sheet 11 Medway

Typical extended house with restored features in Medway 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.

Prototype elevation of typical properties in Medway Conservation area with roof extensions and architectural features reinstated

Prototype model Elevation Medway

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Miscellaneous features in Medway Conservation Area

Pointing

Lime mortar
The original soft London stock bricks would have been bed and pointed using lime mortar. The pointing can be susceptible to damage, particularly when bricks are cleaned, and needs periodic replacement.

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.

Weather-struck cement pointing

Re-pointing in lime mortar that exposes the edge of the brick

Re-pointing
Most of the properties have been re-pointed using mortar that projects beyond the face of the brick. This does not match the original lime pointing, which was more recessive and therefore less visible than projecting mortar.

Cast iron grilles and coal hole covers
Some properties have coal bunkers ventilated by cast iron grilles placed at the base of the bay window and in the front step riser. These details are characteristic of the area and their retention, refurbishment and restoration is encouraged. Cast iron grilles should be decorated to prevent decay.

Cast iron grilles to cellar

Cast iron ventilation grilles to coal bunkers

Steps and paving
Most of the steps up to the front door have lost their original detailing or it has been covered over to waterproof the steps, or they have been replaced with concrete. The original paving and steps are likely to have been riven Yorkstone and the steps would have had a projecting nosing. The top riser in some cases was an iron grille to provide ventilation as described above.

The flagstones inside the entrance were large. Indent repairs can be carried out to damaged areas. If the original stone flags are missing, replacement with Yorkstone flags to match the original is encouraged. If necessary, smaller slabs would be acceptable.

Yorkstone paving

Front areas were typically paved in Yorkstone

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