ADAM ARCHITECTURE
LONDON • WINCHESTER
WEST WING, SOMERSET HOUSE,
STRAND, LONDON WC2R 1LA
TELEPHONE 020 7841 0140
www.adamarchitecture.com contact@adamarchitecture.com

DP/6506

28th March 2025

GATEWICK - DISCHARGE OF CONDITION: MASONRY WORKS SPECIFICATION

We are writing to formally submit the required details for the **discharge of Condition 2** of the Householder Application **(DC/24/1591)** and Listed Building Consent **(DC/24/1592)**. As per the pre-commencement condition, we hereby provide the necessary masonry specification and construction details, ensuring that the proposed works align with the heritage conservation requirements.

This document provides details for the discharge of conditions related to the proposed and refurbishment masonry works for the **replacement and restoration of the access points and gates to allow emergency services access at Gatewick House, Church Lane, Steyning, West Sussex** under **Householder Application (DC/24/1591) and Listed Building Consent Application DC/24/1592**. The works have been designed to ensure that all new and repaired elements are in keeping with the historical and architectural integrity of the site while maintaining durability and longevity.

The property is a heritage asset, and all interventions must respect traditional building techniques, appropriate material selection, and conservation best practices. The specification outlined below details the methods and materials required for the construction of new masonry elements and the refurbishment of existing ones, ensuring a seamless match with the site's historic character. Where demolition works occur, materials such as existing bricks and flint stones will be carefully removed, cleaned, and reused to retain the authenticity of the structure.

New proposed masonry brick pier with flint stone inserts

The construction of the new brick pier with flint stone inserts will follow traditional craftsmanship techniques, ensuring a historically appropriate finish.

- Foundation and structural integrity: The pier will be built on a reinforced concrete footing with a core to provide stability. The inclusion of metal ties and Helifix bars at key points will ensure structural resilience, particularly in areas susceptible to moisture ingress or movement.
- Flintwork: The external surface will incorporate hand-selected, hand-knapped field flint, carefully embedded into the mortar. The flints will be graded for size and colour to match the existing walls on-site, with a mix of dark grey and beige tones. Each flint will be set using a traditional lime mortar bedding, and voids will be carefully filled to maintain an authentic and historically accurate appearance. A galvanised mesh will be applied behind the embedded lime mortar to generate a key for better grip and minimise the risk of movement.
- Brickwork: The framing elements, including quoins and pier structures, will use handmade red clay bricks, laid in Flemish bond, consistent with historic local brickwork. These bricks shall be sourced from supplier specialising in heritage bricks, ensuring an accurate material match.

- Jointing and pointing: The mortar will be a hydraulic lime-based mix (NHL 3.5), carefully mixed to match the existing mortar in both colour and texture. Pointing will be applied using a small pointing trowel and finished using a stiff-bristled churn brush to match the existing texture.
  The pointing thickness will be consistent with the original masonry, typically around 8-10mm.
- Capping: The pier will be capped with flint capping or brick-on-edge coping (depending on location), designed to shed water effectively and prevent moisture ingress, reducing the risk of frost damage. A damp-proof course (DPC) with a sand layer glued to it will be applied to improve the grip of the flint stone above.

New proposed flint stone wall with brick quoins

This section details the construction of a new flint stone wall with brick quoins, ensuring it blends seamlessly with the existing heritage structures on site.

- Foundation and stability measures: Where a new flint stone wall is formed, it will be built on a mass concrete foundation and tied into adjacent structures using Helifix bars to prevent settlement or lateral movement. To mitigate potential moisture-related issues, metal straps will be integrated at key junctions to secure the flint stone in place.
- Brick quoins: The quoins will be constructed using handmade red clay bricks, replicating the size, texture, and colour of the original masonry. The bonding pattern will follow Flemish bond, with headers and stretchers alternating to ensure a robust and visually cohesive structure.
- Flintwork: The flint will be reused from the dismantled structures, where possible to ensure a perfect match with the historic site. Each flint piece will be hand-knapped and dressed using traditional flint hammers and chisels. The flints will be carefully arranged to match the existing coursing pattern, with larger, more prominent pieces placed at structural intersections.
- Mortar and pointing: A traditional hydraulic hot-lime mortar mix (NHL 3.5) will be used for both bedding and pointing, ensuring flexibility and compatibility with historic masonry. The mortar joints will be finished using a wooden beater or pointing trowel, pressed carefully to avoid excessive mortar spilling onto the flint face. Recessed pointing will be applied, mimicking the existing finish.
- Capping: The top of the wall will feature brick-on-edge coping, ensuring proper water drainage and enhancing durability.

Refurbishment and repair of existing brick quoins

The existing brick quoins will undergo careful restoration using conservation-grade methods to preserve the original material and maintain the wall's structural integrity.

- Cleaning and preparation: Existing brickwork will be hand-cleaned using natural bristle brushes and distilled water, avoiding abrasive chemicals or high-pressure washing, which could damage the historic fabric.
- Brick replacement: Any damaged bricks will be replaced with handmade red clay bricks, carefully colour-matched to the surrounding material. Replacement bricks will be cut and laid using a traditional guillotine or bolster chisel to replicate original dimensions.
- Repointing and jointing: The mortar will be NHL 3.5 hydraulic lime mortar, applied using a small pointing trowel and finished using a stiff-bristled churn brush to match the existing texture.

WINCHESTER OFFICE OLD HYDE HOUSE, 75 HYDE STREET, WINCHESTER, HAMPSHIRE, S023 7DW TELEPHONE 01962 843843
ADAM ARCHITECTURE IS A TRADING NAME OF ADAM ARCHITECTURE LTD. REGISTERED IN ENGLAND NO. 1984723

Refurbishment and repair of existing flint stone wall

The existing flint stone walls will be carefully assessed, and necessary repairs will be undertaken using appropriate heritage techniques.

- Structural assessment: All flint walls will be surveyed for loose or missing stones. Any replacement flint will be hand-knapped on-site to achieve a seamless match.
- Repointing and jointing: A hot-mixed hydraulic lime mortar (NHL 3.5 with fine sand aggregate) will be used to ensure permeability and breathability. Joints will be hand-packed with lime mortar, applied using a small pointing trowel and finished using a stiff-bristled churn brush to match the existing texture.
- Moisture management: Metal ties or stainless-steel fixings may be discreetly inserted where necessary to reinforce weaker sections, ensuring long-term stability without compromising the wall's historic character.

Conclusion

To ensure the highest standards of restoration and construction, the works will be carried out by heritage-trained masons experienced in traditional brick and flint restoration methods.

This specification ensures that all interventions maintain the historic character of Gatewick House, while improving durability and safeguarding against moisture-related deterioration.

Attachments:

1. 6506 – ADAM – DR-A-4003 – Details

WINCHESTER OFFICE OLD HYDE HOUSE, 75 HYDE STREET, WINCHESTER, HAMPSHIRE, S023 7DW TELEPHONE 01962 843843
ADAM ARCHITECTURE IS A TRADING NAME OF ADAM ARCHITECTURE LTD. REGISTERED IN ENGLAND NO. 1984723