

1.0 SPECIFICATION FOR THE REPAIR OF THE EXISTING TIMBER SASH WINDOWS AND EXISTING FRONT DOORS:

The works include the inspection, repair, overhaul, and redecoration of existing traditional timber sash windows and the traditional timber front door to ensure they all operate smoothly, are weather-tight, and maintain their historic character. All works must follow good conservation practice and retain as much original fabric as possible.

- Protect all internal finishes, floors, and furnishings.
- Provide dust sheets, temporary boarding, and weather protection as required.
- Ensure safe removal and reinstatement of ironmongery, weights, cords, and glazing.
- Where lower panes are below 800mm in height above floor glass is to be replaced with single glazed safety glass.

Timber repairs: Use matching species to existing (typically slow-grown softwood or hardwood where originally used). Timber must be FSC-certified, well-seasoned, and free from defects.

Glazing: Retain historic glass wherever possible. Replacement glass to match existing (e.g., cylinder, crown, or drawn glass).

Putty: Traditional linseed oil putty or approved heritage glazing compound.

Paint: High-quality microporous exterior paint system (e.g., linseed oil paint or water-based microporous system). Colour to match existing

Ironmongery: Retain and refurbish original fittings where possible. Replacement items to match existing in style, finish, and operation.

REPAIR METHODOLOGY

Dismantling & Access

Carefully remove sashes from frames. Label each sash for correct reinstatement. Remove staff beads and parting beads with minimal damage.

Timber Repairs

Splice repairs to decayed sections using matching timber. Resin repairs permitted only where minimal intervention is required and approved by the architect. Replace severely decayed components like-for-like (e.g., bottom rails, meeting rails, glazing bars). Retain original mouldings and profiles; replicate exactly where replacement is necessary.

Overhaul of Sashes

Remove old sash cords and replace with waxed cotton sash cord of appropriate gauge. Check and adjust weights to ensure smooth operation. Lubricate pulleys and ensure free movement. Replace parting beads and staff beads with timber beads incorporating brush seals where draught-proofing is specified.

Glazing Works

Carefully remove loose or defective putty. Re-bed glass using linseed oil putty. Replace cracked or missing panes with matching glass. Ensure correct putty lines and sightlines.

Draught-Proofing

Install discreet brush seals to:Meeting rails, Parting beads, Staff beads, Bottom rail. Ensure seals do not impede sash movement.

Surface Preparation

External & Internal Surfaces- Remove loose, flaking, or defective paint using hand tools only. No hotair guns on historic glass; no open-flame burning off. Lightly sand to provide a key. Treat bare timber with preservative primer where required. Fill minor defects with timber filler or linseed putty as appropriate.

Painting & Finishing

Paint System
Apply a full three-coat system unless manufacturer requires otherwise: Primer, Undercoat, Topcoat (two coats if linseed paint).

Maintain sharp paint lines; avoid sealing sashes shut. Paint to be taken slightly onto glass (1–2 mm) to protect putty. All ironmongery to be masked or removed before painting.

Completion & Quality Checks

Ensure all sashes operate smoothly without sticking. Check that draught-proofing is continuous and effective. Confirm all glazing is secure and putty properly cured. Remove all debris and reinstate internal finishes. Provide maintenance guidance to the client.

3.0 SPECIFICATION FOR THE REPAIR OF EXISTING RENDER

The works include the repair and redecoration of the existing render in the form of band detailing, stone sills, external walls and wall plinths. Only existing rendered surfaces to be impacted. The repair must retain historic fabric, use compatible lime-based materials, follow minimal-intervention principles, and be carried out by experienced conservation contractors.

Materials:

Lime render — NHL 2 or lime putty render depending on original fabric. Aggregates — Washed sharp sand with grading to match existing. Primer/bonding coat — Lime harling or slurry coat where substrate requires improved adhesion. Finishing coat — Fine lime finish coat with mineral pigments only.

Preparation:

Carefully remove loose, friable, or hollow-sounding render using hand tools only. Avoid damaging adjacent historic masonry or intact render. Clean substrate with soft brushes; no pressure washing.

Repairs:

Localised patch repairs — Reinstale missing sections using lime render in two or three coats. Crack stitching — Where structural cracks exist, install stainless helical bars in lime grout. Feathering edges — Blend new render into existing without creating visible steps.

Finishing:

Match original band profile, width, and arris detail. Apply finish coat with wooden float to replicate historic texture. No modern paints; use breathable mineral silicate paint or limewash. Match existing colour.

Protection & Environmental Conditions:

Maintain render moisture levels through controlled curing (mist spraying, hessian sheeting). Protect from frost, direct sun, and rapid drying. Ensure temperature remains between 5°C and 25°C during curing.

5.0 SPECIFICATION FOR SMALL SCALE LOCALISED LIME POINTING REPAIRS TO EXISTING BRICKWORK

Scope of Works:

Lime pointing repairs — Localised raking out and repointing of deteriorated mortar joints to existing brickwork.

Works limited to small-scale patch repairs, retaining maximum historic fabric.

All repairs to be like-for-like in appearance, strength, colour and texture.

Materials:

Lime mortar to match existing in:

Binder type (likely NHL2 or lime putty depending on existing)
Aggregate colour, grading and texture
Finished appearance (flush, slightly recessed, or brushed back to match)

Aggregates to be well-graded sharp sand, colour-matched to existing mortar.
No cement, plasticisers or waterproofing additives permitted.

Preparation:

Raking out joints by hand using non-percussive tools. Depth of raking: minimum 2x joint width, or until sound mortar is reached. Avoid damaging brick arrises; defective bricks to be reported. Joints to be thoroughly cleaned of dust and debris using brushes and low-pressure water.

Pre-Wetting:

Brickwork to be dampened before application to prevent rapid suction. Avoid saturation; surface should be matt-damp.

Application of New Mortar

Mortar to be placed in thin, compacted layers, ensuring full joint fill. Joints to be finished to match existing profile: Typically flush, lightly brushed, or slightly recessed. No smeared mortar on brick faces; any residue removed immediately with a soft brush.

Curing

Fresh mortar to be protected from:
Rapid drying, Frost, Direct sun, Heavy rain

Use damp hessian or similar breathable coverings for 3–7 days, depending on weather.

Completion:

All adjacent surfaces left clean. Mortar colour and texture to be visually consistent with surrounding historic work. Contractor to provide details of mortar mix used for record purposes.

7.0 SPECIFICATION REPLACEMENT OF DAMAGED HISTORIC BRICKS – EXTERNAL WALL

Scope of Works:

Carefully remove and replace isolated damaged bricks within an existing historic masonry wall. Works to retain maximum historic fabric; replacement only where repair (e.g., turning bricks, plastic repairs) is not viable. All work to be carried out by contractors experienced in conservation brickwork. Protect adjacent surfaces, openings, and landscaping.

Brick Selection

Replacement bricks must match the original in size, colour, texture, porosity, and firing method. Use handmade or soft-fired clay bricks where appropriate to match historic fabric. Source from specialist manufacturers capable of producing heritage bricks. Bricks to be frost-resistant to the degree appropriate for exposure but not excessively hard relative to the original masonry.

Mortar Specification

Lime mortar only; no cement permitted. Binder: NHL 2 or NHL 3.5, or hot-mixed lime mortar depending on exposure and conservation officer requirements. Aggregate: well-graded sharp sand, colour-matched to existing. Mix ratio (guidance): NHL: 1 part lime : 2.5-3 parts aggregate. Hot-mixed: as per traditional volumetric ratios. Mortar to be breathable, flexible, and sacrificial relative to the brick

Removal of Damaged Bricks

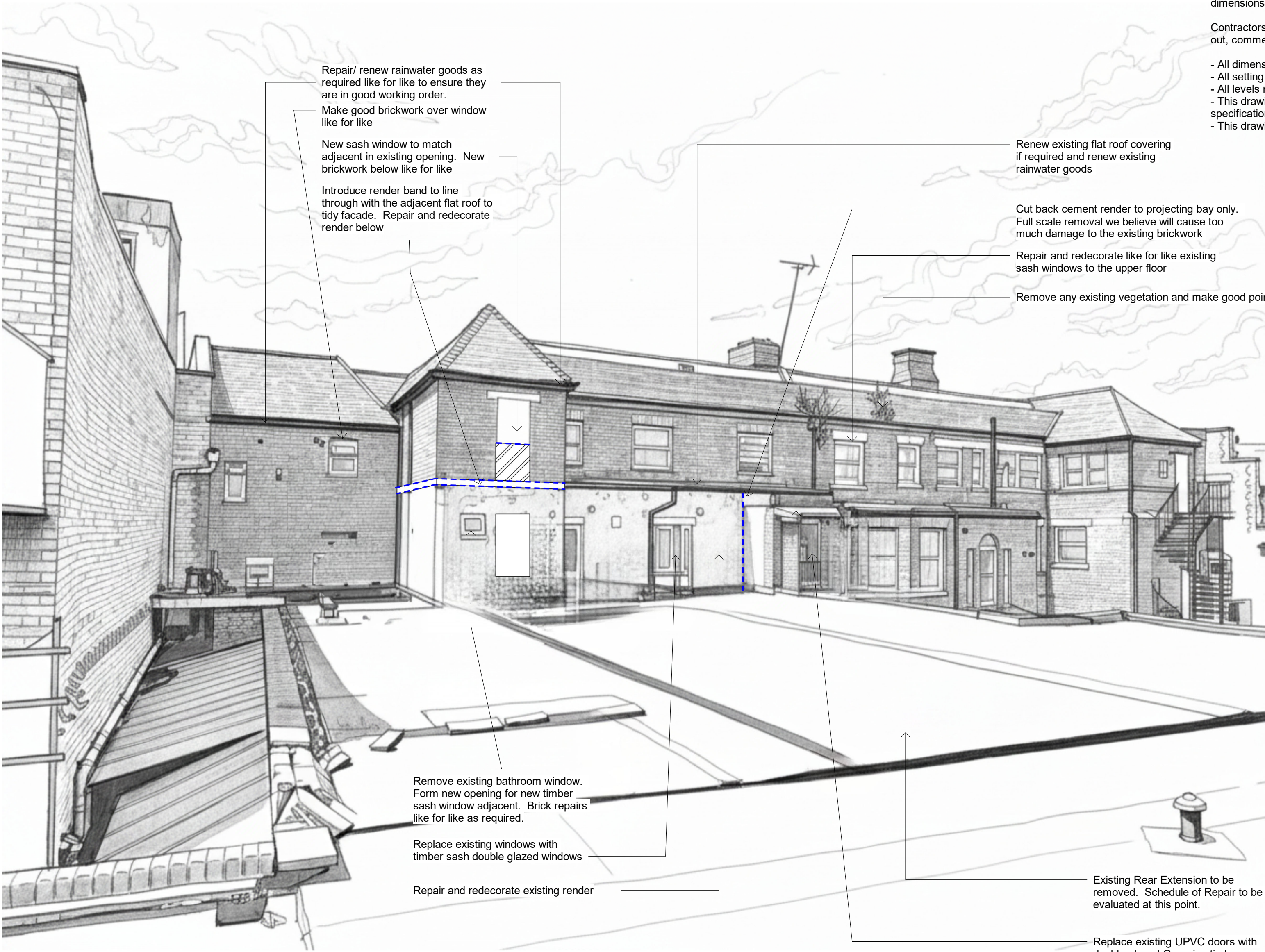
Carefully cut out defective bricks using hand tools where possible; avoid percussive tools that may damage adjacent masonry. Remove mortar fully from the recess: clean and dampen the cavity before inserting new brick. Where feasible, reverse bricks to expose a sound face.

Installation of Replacement Bricks

Pre-dampen brick and recess to reduce suction. Bed brick in lime mortar ensuring full contact on bed and perpend joints. Align with existing bond pattern; maintain original joint thickness. Tool joints to match existing profile (typically flush or slightly recessed for historic work). Keep work protected from frost, rapid drying, and rain for minimum 7 days.

Finishing & Making Good

Brush back joints lightly once "green hard" to expose aggregate and match historic appearance. Remove all debris and clean down using soft-bristle brushes only—no pressure washing or chemical cleaners. Ensure replaced bricks visually blend with surrounding masonry; avoid obvious patching.



NOTE: Report all errors and omissions to the Architect. All dimensions to be checked on site before fabrication.

Contractors must verify all dimensions on site before setting out, commencing work, or making any shop drawings.

- All dimensions must be checked on site
- All setting out to be checked on site
- All levels must be checked on site and their datum confirmed
- This drawing must be read in conjunction with the relevant specification clauses
- This drawing must not be used for land transfer purposes