

# 4 THE GROVE, LONDON N6 6JU

## OUTLINE SCHEDULE OF WORKS

Planning Permission and Listed Building Consent Application  
2<sup>nd</sup> December 2015

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**PROTECTION**

**1 General Protection**

- 1.0 No hot works will be permitted in the listed building or within 3 m of the building
- 1.1 No flammable liquids or gases are to be stored in the listed building or within 5 m of the building
- 1.2 Before any works are undertaken to the listed building, fit temporary protection to the historic staircase treads (carpets may be retained in situ), handrails, newels and turned balusters. The protection materials are available from Protec International Limited, Construction House, Adlington Industrial Estate, Adlington, Cheshire SK10 4NL (Tel. 0800 834704). Use the following items in the locations identified
- 1.3 Before any works are undertaken ensure the on-going stability and survival of the staircase by carrying out essential repairs and inserting props within the new Shoe Store as required. The stair is at particular risk during construction work from repeated very heavy use and impact damage from materials in transit. All operatives to be instructed concerning careful use of the stair.
- 1.4 During the works, and to reasonable programme, provide suitable temporary impact protection:  
4mm thick white Correx sheeting fixed with low-tack tape to historic glazing (review with Architect)  
Min 12mm ply boxes to fireplaces and original hearths
- 1.5 Record, number and lift deal floor boards where access required to floor voids ref. 10.1: floors for detail; lay temporary ply flooring for use during works;
- 1.6 Scaffold to be designed to avoid risk to external timber projecting cornices to front and rear

**2 Access**

- 2.0 Provide a temporary roof over the main house, designed by a suitably competent person. Any scaffold or support structures must not use putlogs and must not be fixed into the building or through any door or window openings. The scaffold lifts must be located to allow access to remove and install external joinery. Safety/debris netting is to be provided. The scaffold should be inspected by a suitably competent person under the CISRS.

**EXTERNAL REPAIRS AND ALTERATIONS**

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- 3 EXTERNAL WALLS**
- 3.0 Strip out**  
Remove all surface cables;  
Remove and replace all plastic vents and grilles (see 3.4 below)
- 3.1 Mortar analysis**  
Commission mortar sample analysis by specialist eg.  
PAYE Stonework and Restoration  
Stationmasters House, Mottingham Station Approach  
London SE9 4EL  
Minimum 4 no. samples to be analysed: 2 no. to interior and 2 no. to exterior
- 3.2 Brick cleaning**  
Brick should not be cleaned;  
Efflorescence to north east chimney stack to be removed with low strength hydrofluoric acid-based chemical application.
- 3.3 Repointing sample**  
For purpose of assessment of repointing to front and rear elevations:  
Provide repointing sample to flank elevation as noted on GA as follows:  
Remove cement pointing and cut back lime behind it to a depth of at least 20mm to an area at least 500mm<sup>2</sup> utilizing a small diamond tipped cutting wheel run through the centre of all horizontal joints (not the perps). The remaining material to be cut into the void away from the arris using tungsten tipped chisels  
Repoint area in a lime mortar slightly recessed back past flush.  
3:1 aggregate to lime (NHL 3.5) ratio, trying to achieve a good match in colour, texture and permeability to the assumed original pointing following mortar analysis
- 3.4 Pointing repair**  
Subject to approval of sample, carry out pointing repair to following areas:  
Party wall parapets with no. 3 The Grove  
Rear elevations  
Flank elevation where not proposed to be fully repointed  
Area of cracking at lead rwp to flank elevation  
Chimney stacks  
The works to the rear garden, including walls will be subject to a further Listed Building Consent application
- 3.5 Airbricks**  
New airbricks to provide bathroom extract terminations to masonry/ render walls:  
Cast Iron Airbrick Company Fly 6 Air Brick  
9x6  
Painted without flood screen
- 3.6 Copings**  
Strip off concrete copings to west and north parapet walls to Lean-to;  
Carefully lift original brick on end and re-bed on nibless Keymer tile stretches two courses on approved lime mortar mix with minimum flaunching
- 3.7 Clapboarding**  
Replacement of most of the historic clapboarding has been carried out within the last 30 year.  
Investigate original timber species; replacement boarding to match original in species, cut, size and profile;  
Subject to close inspection from scaffold, carry out local repair/ replacement of boards affected by rot or cut/ damaged to accommodate modern drainage goods

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**3.8 Render**

Sand-cement render to rear party parapet wall with no. 3 to be improved in appearance with application of light sootwash

## 4 ROOFS AND RAINWATER GOODS

### 4.0 Inspection

With full scaffold access allow for Architect, Structural Engineer and other specialists as required to inspect the roof finishes, flashings, sarking board, battens, timbers (from interior) etc. to carry out detailed survey and assessment of essential works of repair;  
Where battens are not accessible from interior due to modern bitumen felt, review condition during repair works if battens are rendered visible;  
Check fall to valley gutter, where potentially affected by structural movement;  
All works proposed below are to be further verified following inspection.

### 4.1 Structural repair

Allow provisional sum for repairs to structural timbers to be expended only on instruction of Architect and to Structural Engineers details

### 4.2 Pitched roofs to Main House, Extension and Side Extension

Replace broken, cracked and delaminating roof and ridge tiles all subject to further agreement with Architect, as follows:

Concrete plain tiles to internal slopes to match existing;

Peg tiles from Keymer from Weathered or Antique range subject to review of samples;

Third round 12" ridge tiles from Keymer or as suitable to match existing

Keymer Tiles Ltd

Ewhurst Works, Wallis Wood, Ockley, Surrey, RH5 5QH

info@keymer.co.uk

01444 232931

Fixed to Keymer specification guide

Lift off and re-bed ridge tiles to south end of Extension to improve appearance of mortar bedding

Install 150Ø drilled round cast iron eaves vent grille with fly mesh from Cast Iron Airbricks Ltd to termination to Ensuite Bathroom extractor; mount flush with eaves board.

### 4.3 New dormers to main roof

#### 4.3.1 Protection

Full scaffold roof and sheet protection as required whilst interior exposed

#### 4.3.2 Strip out

Protect adjacent finishes and set aside any original roof tiles for reuse;  
Strip existing rear dormer felt and hung tiles; nb. non-peg tiles will not be suitable for either repair work or new roof work.

Strip lead flashings;

Remove and discard sash windows, architraves, window boards and skirtings

Strip internal plaster finishes to dormer rear wall and cheeks

Cut back modern plasterboard ceiling finish beyond point of spring of dormers

Dismantle timber structure without damage to original structure

#### 4.3.3 Structure

All to SE detail;

New rafters with paired rafters to support dormer cheeks;

Ashlar wall beneath dormer window;

Framing to form dormer cheeks and profiled roof to match existing to achieve thickness/ margins/ detail to match original dormers;

#### 4.3.4 Linings

Sw boarded linings and roof decking to take lead sheet (see below);

Foil back plasterboard linings to interior.



#### 4.4 **Leadwork to roofs to Main House, Side Extension and Extension**

##### 4.4.1 Survey

Prior to stripping of existing lead provide Architect with access to carry out survey of existing to include measurements of laps, flashing girths, weight, lead type etc.

##### 4.4.2 Generally

Subject to closer inspection retain:

zinc clad flat roof to Side Extension;

stepped abutment flashings to Extension at party wall with no. 5, flank wall to Main House and chimney stacks.

Screed flat roof section over ground floor accommodation to rear of Extension

All existing leadwork (primarily milled) to roof to Main House and rear box gutter to Extension to be replaced in sandcast lead of weight to match existing, available from:

The CEL Group

Progress House

256 Station Road, Whittlesey

Peterborough PE7 2HA

01733 206 633

Replacement work to existing detail, subject to further review;

New leadwork in milled sheet to Lead Sheet Association details unless otherwise agreed;

Allow for building paper underlay.

##### 4.4.3 Stripping

Carefully remove cement fillets at abutments of Main House and Side Extension tiled roof pitches with masonry for replacement with lead flashings see below; provide 300mm long sample of removal technique for assessment of damage to substrates by Architect and await instruction;

Carefully remove the existing linings comprising asphalt, zinc, and lead to the valley gutter and box gutters to front and rear (including Extension and timber formed gutter to north flank elevation) avoiding disruption to formation boards;

Unscrew modern external architraves and carefully remove milled lead sheet from existing dormers roof, cheeks, cills, roof soakers and flashings; request advice from Architect where risk of damage to substructure arises;

Strip zinc cheeks and lead capping to access dormer to internal pitch to roofs to Main House.

##### 4.4.4 Formation boards

Where possible formation and lining boards are to be retained; provide access to the Architect to carry out inspection of condition of boards and suitability of falls, and provide further instruction concerning any repairs, replacement or alterations;

Movement in building structure may have caused fall to gutters to have distorted: risks and benefits of making adjustments to falls by way of firrings beneath renewed linings to be weighed up;

Replacements only in like-for-like board, sizing etc.; penny gap boards to maintain ventilation to underside of lead only where heightened risk of underside condensation (ref insulation within Attic floor and eaves to reduce risk).

##### 4.4.5 Box and Main House valley gutters

Neoprene expansion joints by T-Pren or similar fixed to manufacturer's recommendations;

Main House valley gutter to be lined with sandcast Code 6 lead, dressed up pitch of roof slope;

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- Box gutters to front, rear and flank to be lined with sandcast Code 6 lead; expansion joints to stop short of visible capping to front edge of timber cornice and to be lapped with suitable lead flashing;  
Review accessibility of outlets of box gutters for purpose of maintenance;  
Provide removable leaf guards to outlets
- 4.4.6 Vally to junction between Extension and Side Extension  
Provide access for Architect to carry out inspection of condition of existing vally flashing; no allowance for replacement
- 4.4.7 Dormers  
Review historic damage from condensation to sheet lead to existing dormers;  
In the case that cheeks to existing dormers are not being relined internally, where appropriate, provide vapour impermeable membrane between external boarding and backside of lead to minimise future damage from condensation;  
All nail heads to cheeks to be sealed by welding or solder dabs;  
Curved dormer tops to have folded drip edge to front and cheeks in lieu of existing projecting cut edge.
- 4.5 New leadwork to Lean-to roof**
- 4.5.1 Stripping  
Strip off felt, flashband etc;  
Strip internal plasterboard finishes to underside of rafters;  
Remove fixed rooflight, kitchen extract termination cowl and boiler flues,
- 4.5.2 Inspection  
Following stripping of finishes Architect and Structural engineer to carry out inspection of timbers and decking for structural sufficiency, rot etc.
- 4.5.3 Timber and decking  
Allow provisional sum for repairs to structural timbers and replacement of timber to be expended only on instruction of Architect and to Structural Engineers details;  
Infil with timbers to suit at original openings;  
20mm treated well seasoned plain edged boarding; fixed diagonally to rafters with fixings punched well below the surface
- 4.5.4 Lead  
Milled code 5 lead sheet with wood-cored rolls to Lead Sheet Association details to suit roof pitch <30°with:  
Top bay abutting parapet wall turned 50mm up brickwork wall with lead welded saddles;  
Lead welded corners with gussets to suit;  
Sealed nail heads;  
Lead welded roll end at eaves;  
Staggered laps of length relative to pitch;  
Turned lead at eaves over new treated sw fascia, to drip in to gutter  
Continuous ventilation to rafter void to parapet and eaves to avoid condensation damage to lead;  
Welded collars to suit flues and rwp penetrations.  
Laid on building paper confirming to BS 1521 Class A  
Lead capped mushroom ventilation terminations
- 4.6 Other rainwater goods**
- 4.6.1 Generally  
New cast iron rainwater goods from Longbottom Foundry Ltd  
Bridge Foundry  
Holmfirth  
Nr Huddersfield  
01484 682141
- 4.6.2 New cast iron rainwater goods

Replace upvc half round gutter to Extension with 4" sand-cast ogee half round with stop end, drop end with socket and fascia brackets as required;  
Low modulus silicone sealant to joints;  
Replace upvc rwps to Lean-to and Extension with 3" cast iron rainwater pipe with ogee bend and ear sockets for fixing to masonry with large headed stainless steel pipe nails;  
Primer and two coats of alkyd based oil paint finish; colour to be confirmed subject to specialist paint analysis.

4.6.3 New lead rainwater pipes:

Replace upvc section of RWP1 located to flank wall of main house, serving roofs to main house, with lead section to match original over, with 2 no. folded lead fixing ears to match original.

4.6.4 Existing rainwater goods

Subject to closer inspection, retain:  
existing gutters and rwps to Side Extension roofs; redecorations only;  
existing internal RWP within Extension serving rear roof slopes to Main House and Extension

**5 PAVING**

**5.0 Front garden**

Carry out photographic record before lifting York stone and brick paving;  
Lift and set aside for safe keeping during trenching works and installation of  
mains services by others.  
Relay on sand bedding; joints and coursing to match existing;  
Provide sample of silver sand/ John Inness no. 2 mix brushed into joints for  
approval prior to jointing fully.

**5.1 Yard**

Carry out photographic record before lifting York stone only where required;  
Lift and set aside for safe keeping during excavation for drainage works and  
services duct to Extension;  
Relay on sand bedding with joints and coursing to match existing;  
Weak sand/ hydraulic lime joints with well-graded aggregate, exposed with application of  
stiff churn brush before fully gone off; provide sample for approval

**5.2 Passage**

Lift and discard brick paving to passage;  
Lay reclaimed York stone paving to match that to Yard as closely as possible  
in texture, colour and size on sand/cement bedding with joints and coursing  
to match existing;  
Weak sand/ hydraulic lime joints with well-graded aggregate, exposed with application of  
stiff churn brush before fully gone off; provide sample for approval

## 6 FOUL DRAINAGE

### 6.0 Below ground combined drains

#### 6.0.1 General

Provide CCTV survey of main drains prior to commencement of works;  
During excavation monitor and record evidence of historic construction; in case of significant findings cease work and required further instruction from Architect.

#### 6.0.2 Manholes

No work to existing front or rear manhole enclosures, connections or flaunching;

Replace mild steel lid to manhole to front garden with new fabricated galvanized double sealed lid to take brick paving (80mm) from Wrekin Products size to suit; paint finish to galvanised lifting corners.

Delta Dual pump chamber with fabricated galvanized double sealed lid to accommodate York stone paving (80mm) from Wrekin Products size to suit; paint finish to galvanised lifting corners.

#### 6.0.3 Below ground branches

Adapt, alter and extend below ground branches as shown in upvc to building control approval;

New or adapted below ground branches to serve:

Main House Sump/ pump to central drainage under new floor slab;  
WC, Utility and Kitchen;

New SVP to Extension to take Bathroom 1, Shower room and Extension Kitchen;

New SVP and RWP dropping within Lean-to to serve Lean-to and Main House;

New gully to interior of Lean-to

#### 6.0.4 Gullies

Retain 4 no. existing gullies to Yard and Passage;

New gully with cast iron grille to Plant Room to connect to new bottle gully with cast iron grille to Yard.

#### 6.0.5 Sumps

Ref 9. Drained Cavity Tanking for sump/ pump to serve tanking discharge to Lower Ground floor.

Excavate and install 1 no. Delta DUAL V3 Sump incorporating two Delta V3 pumps and audible high water alarm and power back up to Wine Cellar as flood precaution.

### 6.1 Above ground foul drainage

#### 6.1.1 Strip

Strip all external upvc foul drainage pipes;

Strip first floor section of internal SVP 5;

Retain all internal lead drainage goods, fixings etc. whether or not in use.

#### 6.1.2 New cast iron

Replace lower upvc section of VP4 with cast to match existing;

#### 6.1.3 New UPVC

New internal SVP to Side Extension to serve Family Bathroom shower; Guest WC and condensate to boilers within Lean-to Plant Room;

New internal SVP to Extension to serve Kitchen within Extension, Shower room and Bathroom 1 (transfer within new floor structure at first floor)

New section of internal SVP 5 to accommodate new Guest Ensuite Bathroom and Family Bathroom;

6.1.4 Other

Cap off original vent termination at Side Extension roof level with welded lead capping to suit

**INTERNAL REPAIRS AND ALTERATIONS**

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**7 STRIP OUT & DEMOLITIONS**

**7.0 General**

7.0.1 Room names

For clarity for purpose of stripping out schedule room names are those on

7.0.2 Security

Stripping out to be programmed to maintain security at all times

7.0.3 Asbestos

***Ahead of any stripping out:***

***Commission Asbestos Refurbishment and Demolition survey under strict guidance of the Architect to avoid damage to historic fabric; Commission specialist removal or encapsulation of items of asbestos or asbestos containing materials, subject to agreement.***

***Records of work executed to be included within Principal Contractor's Construction Phase Plan and retained by the owner;***

***Items noted below may fall under the remit of specialist asbestos removal.***

7.0.4 Floors

Strip all carpets, vinyl sheet finishes and underlays;

Retain carpets to stairs for protection of boards and nosings during works;

Refer to item 8 (Floors) for detail in relation to floorboards;

Retain all evidence of pugging within floor voids

7.0.5 Wall finishes

The internal wall finishes comprise the following:

Modern sika render on masonry

Modern plasterboard and skim on studwork

Historic plaster on masonry

Historic plaster on laths

Most wall surfaces are lined with plain thick gauge lining paper. To enable controlled chasing during the installation of services, and plaster repair, paper is to be carefully removed using the following technique to minimize risk of loss of historic plaster:

Gently score existing paper to increase water absorption;

Steam surface using wallpaper steam-stripper and gently remove paper using plastic scraper.

Provide sample areas for Architects inspection

Ref *Item 9: Walls* below for plaster repair

7.0.6 Ceiling/soffit finishes

Most historic plaster and lath ceilings have been replaced with plasterboard and skim; where ceilings have paper finish remove with the same technique as above. Consult Architect prior to removal of any paper, where historic plaster and lath is detached from substrate.

Ref *Item 9: Ceilings* below for repair to plaster and lath ceilings

Strip modern soffit panels to all fireplaces subject to asbestos survey.

7.0.7 Services

Strip all visible surface cables;

Preserve all historic services within floor and wall voids eg.

Bell wire and pulleys

Pneumatic tubes (late C19)

Lead sheathed and thread sheathed cables

Mk wooden 2-compartment conduit

Lead foul, rainwater and water supply pipes;

Remove sockets, switches, spurs, plates etc. except for servant bells and front door bells which are to be retained in situ.



All cables and fittings are to be replaced but it is not desirable to strip out cabling if it would require otherwise unnecessary disruption to floors and plaster finishes.

Refer to *6.1: Above ground foul drainage* for strip out in relation to drainage goods

Strip all sanitaryware; set aside items subject to supplementary schedule  
Strip and discard all radiators, brackets, heating and hot and cold water pipework; release radiator wall brackets from historic plaster or paneling using without undue force to avoid damage to substrate.

Strip and discard boilers, cylinders, vessels, pumps etc.

7.0.8 Joinery

Items of fitted joinery for removal itemised by room;

Reveal and release mechanical fixings wherever possible;

Carefully remove and set aside internal doors where at risk of damage due to existing poor fit or intense use during the construction works.

Preserve evidence of wall finishes or fittings currently concealed by fitted joinery for Architect examination;

Preserve and protect historic cornicing and mouldings concealed by fitted joinery; minimise risk of damage during removal of modern joinery.

7.0.9 Fittings

Remove and discard all curtains, blinds, curtain poles and tracks

Carefully remove all picture hanging hooks and battens

**7.1 Exterior**

7.1.1 Boxings

Strip all pipe/ service boxings to Yard/ soffit to Side Extension and façade of Extension

**7.2 Lower ground floor**

7.2.1 Floors

Main House: Lift and discard terracotta tiles

Ref *8.0 Floors* below for removal of slab

Lift and discard timber decking to Wine Cellar

Extension: Strip out laminate flooring and underlay

Lift and discard carpet to stair, following completion of works

7.2.2 Walls

Main House: Strip tiles to Kitchen and Utility

Strip dry lining to Play room north wall

Strip lining to rear/ east of Wine Cellar

Extension: Strip tiles to Kitchen

Strip decorative wallpaper

Strip plaster vent grille

Subject to structural analysis remove block partition wall

forming understair cupboard and associated boxings/ ducts

within understand cupboard/ sink area

Lean-to: Strip all boxings and linings back to masonry

7.2.3 Ceilings

Main House: Do not strip finishes from historic plaster and lath ceiling to

Larder without full investigation of condition and adhesion of plaster, ref *10. Ceilings* below

Strip and discard fibreboard ceiling to Wine Cellar;

investigate presence of asbestos to vent pipe (for retention)

which terminates within front garden

Lean-to: Strip plasterboard ceilings/ linings

7.2.4 Services

*Remove and discard:*

- Kitchen: Ranger cooker and overhead extractor within flue  
 Utility: Attendance to be provided to National Grid removal of Gas meter and mains supply pipe  
 Larder: Attendance to be provided to UK Power Networks' removal of electricity meters, service heads, main fuses and cable  
 Obtain specialist advice concerning asbestos content/ removal once power cut  
 Wine Cellar: Sink tap  
 WC: Back to wall pan/ cistern  
 Extension kitchen:  
 Sink, hob, cooker, fridge  
 Attendance to be provided to UK Power Networks' removal of electricity meters, service heads, main fuses and cable  
 Lean-to: As above, strip boilers and flues, cylinders, expansion vessels, pumps, pipework, water meter etc.  
 Attendance to be provided to National Grid removal of Gas meter and mains supply pipe

*Remove and set aside:*

- Wine Cellar: Belfast sink

7.2.5 Joinery

*Dismantle and discard:*

- Kitchen: Units  
 Wall shelves  
 Tiled cill to WL6  
 Glass shelves to WL9  
 Utility: Sink unit  
 Spur shelving  
 Gas meter cupboard  
 Corner cupboard  
 Architrave used as conduit  
 Larder: Electricity meter cupboard enclosure and doors  
 Wine Cellar: Deep shelving to far end with back panel (noted above)  
 Counter  
 Sink stand  
 Family room: Fitted and loose shelving  
 Play room: Fitted shelving/ units  
 Store (Comms): Counter  
 Understairs cupboards and linings to cupboards (2 no. deep)  
 Extension kitchen:  
 Kitchen units  
 Door to understair cupboard and internal shelf  
 Boarding/ panels supporting electricity meter etc. within understair cupboard  
 Lean-to: Strip all shelves, boxings etc.

*Remove and set aside:*

- Kitchen: Table

7.2.6 Fittings

*Remove and discard:*

- Wine Cellar: Curtain and track  
 WC: Toilet roll holder  
 Family room: Concertina shutters to WL3 and WL4  
 Play room: Concertina shutters to WL5 and WL6  
 Lean-to: All fittings

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**Upper ground floor**

- 7.2.7 Floors  
 Ref 8.Floors below for floorboards  
 Lift and discard modern hearth stones to Hall, Reception and Dining Room  
 Strip and discard carpet and underlay to Shower room and Back stair/ landing  
 Strip out section of winder stair to Extension
- 7.2.8 Walls  
 Carefully unscrew picture hanging battens from paneling  
 WC: Strip out pipe boxings without damage to substrate paneling  
 Shower room: Strip tiling
- 7.2.9 Ceilings  
 Strip:  
 Shower room: Access panel
- 7.2.10 Services  
*Remove and discard:*  
 WC: wc pan  
 Shower room: wc  
 Basin/ cupboard/ taps  
 Bath, bath screen taps etc.  
 Heated towel rail
- 7.2.11 Joinery  
*Dismantle and discard:*  
 Hall: Window seat with ply internal box  
 Radiator cover  
 Reception: Radiator covers with mesh fronts  
 Fitted low level timber unit  
 Living/ Dining: Radiator covers with mesh fronts  
 Interior linings to fitted cupboard to Dining  
 Bedroom 7: Understair cupboard doors
- 7.2.12 Fittings  
*Remove and discard:*  
 Living/ Dining: Curtains, pelmets and tracks  
 WC: Towel rail and toilet roll holder

**First floor**

- 7.2.13 Floors  
 Ref 8.Floors below for floorboards  
 Lift and discard modern hearth stone to Bedroom 1;  
 Lift and discard raised floor with laminate finish to Dressing Room  
 Carefully lift and set aside boards to raised floor section within Dressing Room WC;  
 Strip and discard carpet and underlay to Shower room and Back stair/landing;  
 Within Extension dismantle and remove stair from upper ground to first, first floor landing, winder stair treads at first half landing and three tread stair at upper ground floor landing;  
 Strip boxing beneath basin to Ensuite Guest Bathroom;  
 Carpet and underlay/ paper
- 7.2.14 Walls  
 Dressing room  
 & WC: Strip tiling to shower enclosure and WC;  
 Subject to structural investigation, remove modern brick lining to fireplace and fake timber beam over;  
 Strip out boxing (wall and lid) separating WC from Extension stair;  
 Strip out pipework boxings within WC;

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- Ensuite Guest  
Bathroom: Remove tiled stud wall and carefully strip tiling from paneling  
Strip bath panel, window boxing and pipe boxing to side of Window
- Bedroom 6: Remove vent panel to fireplace for investigation  
Linen cupboard: Carefully strip wall linings without harm to panelling beneath  
WC: Strip pipe boxing and small boxing to north east corner
- 7.2.15 Ceilings  
Landing: Strip out ceiling and support structure to expose rafters  
Dressing room WC:  
Ceiling and support structure within Extension  
Bedroom 6: Carefully remove sections of cornice planted to face of fitted cupboard at entrance for reinstatement in original location on paneled partition wall  
Linen cupboard: Remove pb ceiling
- 7.2.16 Services  
*Remove and discard:*  
Dressing room/  
WC: Shower enclosure and fittings  
Heated towel rail  
WC  
Bidet  
Pumps etc.
- Ensuite Guest  
Bathroom: WC  
Bath, bath screen and fittings  
Remove tiled stud wall and carefully strip tiling from paneling  
Basin, taps and cupboard  
Heated towel rail  
Bedroom 6: Basin and taps on cupboard  
WC: WC  
*Remove and set aside:*  
Dressing room & WC:  
Bath and taps  
Basin, stand and taps
- Joinery  
*Dismantle and discard:*  
Bedroom 1: Shelving to window wall  
Dressing room  
& WC: Framed mirror  
Fitted cupboards, panels and timber corncing  
Shelf and cupboard above wc  
Bedroom 2: Radiator boxings to windows  
Fitted wardrobes with timber moulded cornice
- Ensuite Guest  
Bathroom: Corner cupboard  
Niche shelving  
Bedroom 6: Fitted cupboards at entrance; see above re cornice  
Corner cupboard to include timber cornice  
Wall shelving  
Radiator boxing to window  
Linen cupboard: Sw shelving and shelving battens  
Boxing over rodding eye  
Bedroom 8/  
Ensuite bath: Painted mdf/ sw fire surround  
Fitted cupboard to include rear linings to expose rwp

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Shelving

7.2.17 Fittings

*Remove and discard:*

Dressing room & WC:

Framed mirror

Glass shelving to fireplace

Toilet roll holder

Bedroom 6: Towel hooks etc.

**Second floor**

7.2.18 Floors

Ref 8.Floors below for floorboards

Strip vinyl, carpet and underlay

7.2.19 Walls

Bedroom 3: Strip out partition wall forming rear of fitted cupboard  
accessed from Bedroom 5

Bedroom 5: Ref 4.3 re new dormer

Kitchenette/

Bathroom: Strip out modern stud partition tiled walls and pipe boxings  
following structural investigation

7.2.20 Services

*Remove and discard:*

Bathroom: Shower enclosure and fittings;  
Basin and cupboard;  
heated towel rail;  
pumps etc.

Kitchenette: Sink and taps

7.2.21 Joinery

*Dismantle and discard:*

Bedroom 3: Shelving and fitted wardrobes

Bedroom 4: Shelving and fitted wardrobes; radiator boxing

Bedroom 5: Fitted wardrobes; shelving

Bathroom: Boxed seat; access panel to eaves

Kitchenette: Sink unit; counter unit

Lobby: Shelf

## 8 FLOORS

### 8.0 Solid floors generally

#### 8.0.1 Introduction

Solid floors to the Main House comprise modern finishes (paint, terracotta tile) on concrete slabs. It is proposed to replace the existing slabs to achieve build-up depth to accommodate a drained cavity membrane, underfloor heating and flagstone flooring, other than in Wine Cellar and Larder where heating is not required, and interference would cause disruption to historic brick/ stone shelving. The floor levels are not to be altered and so existing door surrounds will be unaffected; there are no skirtings within the Lower Ground Floor to be harmed by the proposals.

The existing slab to the Extension and Lean-to are to be retained unaffected.

#### 8.0.2 Investigations

Excavate trial holes under direction of Conservation Accredited structural engineer

#### 8.0.3 Excavation

Record existing finished floor levels prior to excavation;

Remove modern concrete slabs;

Excavate to depth as approved by structural engineer subject to level of base of existing footings;

With reference to item 6. *Foul Drainage*, excavate as required to accommodate new below ground drainage branches as shown.

#### 8.0.4 New floor slab

Cast new rc slab to structural engineer's detail, (finish level to achieve flush thresholds between differing finishes) on:

50mm sand blinding on:

150mm well compacted type 1 hardcore with:

Compression strip between new slab and existing perimeter walls.

Cast in central drainage outlets to specialist's detail to serve drained cavity tanking system; ref. 6. *Foul Drainage*.

#### 8.0.5 Sub-floor

Min 80mm sand/ cement screed with:

water-fed underfloor heating pipes on:

100mm (subject to levels) Kingspan Kooltherm K3 floorboard to

accommodate extract and ventilation ducts as shown on:

Delta MS20 drained cavity membrane Ref. 9. Drainage Cavity Tanking below.

### 8.1 Suspended floors generally

#### 8.1.1 Timber joist structure

Lift boards (ref SPAB technique below) to expose junctions between joist ends and masonry or major beams to Structural Engineer specification for inspection.

Review damage caused by woodboring insects; assess moisture content and age of timbers which will likely preclude the presence of active insects.

Carry out repairs to Structural Engineer subsequent specification.

Where joists are inadequate as a result of rot, defect, or existing service notches splice subject to Structural Engineer instruction.

Where possible and suitable new services are to be accommodated within existing notches; new notches to be agreed with Architect.

8.1.2 Floor voids

Where pugging is no longer present floor voids to be packed with Rockwool RWA45 acoustic slab held 50mm beneath underside of floorboard; Do not lift boards solely for this purpose unless specifically noted below.

8.1.3 Floorboards

Existing floorboards are generally random widths and lengths indicating that they are likely to be local deal rather than imported Baltic softwood. Boards are fixed with cut floor brads and some screws, and where exposed are finished with modern varnish and in some case joints filled with mastic.

Existing floorboards to all rooms to Upper Ground, First and Second floors within the Main House (other than bathrooms) are to be exposed following repair, supplemented where necessary due to degree of damage or loss, and refinished in beeswax. Existing patina will not be eliminated. Timbers used for repairs and in replacement boards are to be carefully selected to achieve a close match, but it is accepted that repairs will be visible and are to be carried out to a high quality.

With reference to schedule by room below, full lifting and relaying is to be carried out only where boards require significant repair or complete access to floor void is required for structural repairs.

Provide sample area of 2m2 for approval with reference to specification below:

- |        |   |
|--------|---|
| Lift   | Lift boards in accordance with <i>The Society For the Protection of Ancient Buildings' Information Sheet 10</i> ;<br>Number up rear of boards and set aside;<br>Provide temporary ply decking during construction.<br>Discard only those boards which are beyond repair or modern replacements which are unsuitable in terms of width, colour, texture;   |
| Repair | Carry out repairs in accordance with SPAB Information Sheet 10 to:<br>Broken and damaged edges and corners<br>Cracks and splits<br>Broken board ends  |
| Relay  | Relay boards in original locations to preserve original patina distribution. Retain original sw firrings or replace where necessary to achieve level finish between boards. Pull joints tight but do not refinish edges;<br>Relay using brad floor nails in original holes; slot head greased brass screw fixings only where regular access may be required to services. Supplement boards as required with carefully selected reclaimed boards; consider salvage from proposed Bathroom subject to further agreement |
| Finish | Do not sand or vigorously scrub;<br>Strip back modern varnish and grime with turpentine/ white spirit; use wire wool gently on stubborn areas;<br>Fill gaps with papier machee (made by mixing Financial Times and wallpaper paste) set down from face of boards; provide sample for Architect inspection. Burnt umber may be required to provide good match to deal boards;  |

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Apply beeswax polish to boards and gap filler with reference to SPAB Information Sheet 13; apply thinner coats to worm damaged boards to help consolidate the timber.

**8.2 Lower ground floor**

8.2.1 To Kitchen, Utility and Playroom

Min 75mm thick reclaimed riven York stone flags laid on sand bedding on new slab build up as above;  
Tight joints with lime mix pointing to approved sample;  
SW boarded and framed hatch on counterweight balance to cover steps into Wine Cellar to further detail.  
New 50mm thick dressed bullnosed grey York stone treads to replace brick steps to rear access window from Playroom

8.2.2 Family room

Carpet on suitable underlay; on new slab build up as above with screed thickness to achieve level threshold with flagstone floors  
New 50mm thick dressed bullnosed grey York stone treads to replace brick steps to rear access window from Playroom

8.2.3 To Larder and Wine Cellar

Apply Delta water based epoxy resin to eradicate migratory damp within the existing floor slabs to Delta specification;  
Butt joint hand made London stock brick on edge paving on existing slabs to further specification;  
Sand jointing to approved sample.

8.2.4 Lower hall

Repair and refinish existing floorboards to above specification.

8.2.5 Extension Kitchen Living Dining

Subject to moisture content of existing screed supply and lay new adhesive fixed pine board floor for paint finish

8.2.6 Tool store

Reclaimed black terracotta tile on existing screed floor

8.2.7 Plant room

Concrete paint to existing screed floor

**8.3 Upper ground floor**

8.3.1 Main House all areas and Guest WC

Lift, repair, relay and refinish existing boards as 8.1.3  
Eliminate existing matwell recess

8.3.2 Cloaks

New floor structure to Structural Engineer's detail trimmed to accommodate floor hatch;  
Reclaimed pine boards for beeswax finish (as above) on ply subfloor;  
Floorhatch with flush brass backflap hinges and handle to access floor storage void;  
Provide insulation to subfloor separating Passageway

8.3.3 Bedroom 7 and Extension Landing

Existing floorboards are to be lifted and relaid to accommodate services without undue damage to maintain potential for refinishing;  
Lay carpet on hardboard on existing floorboards.

8.3.4 Shower room

Overlay existing boards with 9mm wpb ply to take  
Tile finish  
Unlacquered brass raking threshold from C.A.T BR12 or to suit



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**8.4 First floor**

- 8.4.1 Bedroom 1, Dressing Room and Linen cupboard  
Lift, repair, relay and refinish existing boards as 8.1.3, subject to condition of Dressing Room when exposed
- 8.4.2 Boudoir  
New floor joist structure to Structural Engineer's detail where stair flight removed;  
Rockwool RWA45 acoustic slab held 50mm beneath underside of floorboard;  
supplement existing narrow pine boards with those salvaged from original Extension Landing (see Ensuite Bathroom below);  
Refinish boards as per 8.1.3.
- 8.4.3 Bedroom 2  
Floorboards do not appear to have been lifted or refinished, and are in good condition. Lift only where unavoidable; consider electrical outlet positions and pipework routes to avoid lifting.  
Clean, prepare and finish as per 8.1.3 above  
Retain and protect historic flush marble hearth
- 8.4.4 Ensuite Guest Bathroom and Family bathroom  
Where suitable carefully lift boards for reuse in principal rooms; replace with suitable thickness new pine boards;  
Lift floorboards to proposed Shower within Side Extension and re-use in principal rooms as required; replace with 18mm wbp ply on firrings to take tanking and tile floor finish
- 8.4.5 Ensuite Bathroom  
New floor joist structure to Structural Engineer's detail to achieve suitable level for 'wetroom' tiled shower floor on 18mm wbp ply firred to suitable falls;  
Rockwool RWA45 acoustic slab held 50mm beneath underside of floorboard to full area to floor void;  
Remaining narrow pine floorboards are to be lifted and relaid to accommodate services without undue damage, to maintain potential for refinishing;  
Overlay with 9mm wbp ply to take stone tile finish.

**8.5 Second floor**

- 8.5.1 Bedroom 4  
Floorboards appear to be laid over a subfloor but also appear to be historic and have not been lifted for the installation of services, or refinished;  
Consider electrical outlet positions and pipework routes to avoid lifting; lift only where unavoidable;  
Clean, prepare and finish as per 8.1.3 above.
- 8.5.2 Bedrooms 3 & 5  
Floorboards have been previously sanded and varnished and are of degraded quality; check structural capacity as result of loss of thickness.  
Lift, repair and relay on ply sub-floor if required;  
Light had sand to provide key;  
Bona Gapmaster or similar joint filler, well set down;  
Paint finish in water based floor paints.
- 8.5.3 Bedroom 6 (previous Bathroom and Kitchenette)  
Finish boards as per 8.5.1 or 8.5.2 subject to condition and quality;  
Form recess to take new hearth stone.

**9 DRAINED CAVITY TANKING**

**9.0 General**

Delta System 500 cavity drain waterproofing system to Lower Ground floor areas to Main House apart from Wine Cellar, WC and Larder;  
Design, supply and installation by Delta approved installer.  
Provide flood test prior to installation of sheeting

**9.1 Preparation**

Apply Polysil TG500 to new concrete floor slab to Delta spec;  
Strip off north lining wall to Playroom;  
Review condition of substrate with specialist and Architect prior to any removal of plaster; removal of plaster only with approval of Architect.  
Do not remove existing waterproof render.

**9.2 Existing masonry walls**

Fix 8mm thick Delta PT sheeting using Delta-PT presealed Plug or Flexi-dri Plus subject to condition of existing walls; centres and sealant to Delta specification.  
Joint sheets using Delta-Tape adhesive.  
Apply Delta Koster NB1 slurry system to fireplace recesses

**9.3 Existing timber framed walls**

Investigate condition of floor plate timbers; where possible isolate from floor

**9.4 Floor**

Loose lay overlapped Delta-MS 20 onto floor slab;  
Floor-wall joint to be sealed using Delta-Corner strip;

**9.5 Drainage**

Excavate and install 1 no. Delta DUAL V3 Sump incorporating two Delta V3 pumps and audible high water alarm and power back up; provide Textmax telemetry system;  
Twice yearly maintenance contract to be put in place;  
Central drainage to be installed beneath new floor slab to Delta specification.

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## 10 INTERNAL WALLS

### 10.0 General

#### 10.0.1 Existing plaster

Where areas of plaster are hollow and detached consider repair with restraint fixings or grouting, subject to flexibility and substrate, prior to any removal of historic plaster.

Where laths have become detached from studwork, carefully screw back into place before applying repair plaster.

Repair plaster to be NHL 2.5 or 3.5 mix compatible with existing plasters; Gypsum skim coat may be used.

Unless explicitly stated no plaster beads to be used in any repair or new work.

#### 10.0.2 Existing panelling

Deal panelling extends to full height within the Upper Ground and First Floors, dado height to the upper flights of the staircase, but is not present to Lower Ground or Second Floors. It may originally have been woodgrained to resemble oak or at very least had a painted finish to resemble hardwood, stucco or stone. Full height panelling lost favour from about 1720, indicating that the panelling here is part of the first build of 1688. Prior to the 1970s refurbishment, the walls to the first floor room now referred to as the Dressing Room, were lined with hessian above dado, more in keeping with the fashions of the C18.

It should be noted that the panels were not mechanically fixed into the paneling rails and styles to allow for seasonal contraction and expansion; if panels are loose mechanical fixings should not be introduced but panels consolidated with beeswax.

Given the wall thicknesses it would appear that the panelling framing is not fixed directly to the masonry but may be fixed via secondary timbers or extended styles fixed to joist above and below, creating a void behind.

Do not use paneling for any temporary fixings or support during construction; Ref 17. Services re sockets and switches.

### 10.1 Lower ground floor

#### 10.1.1 Kitchen, Playroom, Family Room and Utility

Where drained cavity tanking installed provide new render and skim finish direct to lathed membrane;

No plaster beads to be used in the new work.

Proud render skirting to match existing subject to further investigation.

#### 10.1.2 Kitchen

Remove brick arched head to openings to proposed Comms cupboard and niche to east of fireplace and reform square heads to Structural Engineer's detail.

Relocate existing timber post to Structural Engineer's detail

#### 10.1.3 Comms

Reinstate traditional plaster and lath linings to exposed studwork to cupboard; no notches or services within voids

#### 10.1.4 Larder

Render/ skim finish at location of unfinished new concrete blockwork

#### 10.1.5 Extension kitchen/ living/ dining

Form pb/ skim boxings to take services

Make good render/ skim where partition wall removed

#### 10.1.6 Lean-to

Form t&g boarding on stud partition wall to form Tool Store and Plant Room;

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T&g boarding on treated battens on dpc strips to Tool Store external walls.

**Upper ground floor**

- 10.1.7 Landing  
Subject to further structural investigation, reinstate door opening in modern ply panelling from Landing to Living Room to Structural Engineer's detail;  
Door leaf and linings to match that to Dining Room.  
Architrave to Landing side to match original;  
Architrave to Living Room side will be the subject of a further LBC application.
- 10.1.8 Guest WC  
Without disruption to existing paneled wall, provide new lining wall formed in painted sw panelling to match original to east wall to create service riser; new styles to adjacent north and south panelling to suit.
- 10.1.9 Cloaks/ Extension Landing  
New partition wall comprising 100mm sw studwork with 2 no. layers British Gypsum Soundblock and skim with 100mm Rockwool RWA45 to void.
- 10.1.10 Shower room  
New nib wall comprising 75mm sw studwork with tile backer board to suit tiled finish;  
Form service riser and cistern boxing comprising 50mm sw framing /as required with tile backer board to suit tiled finish or pb/ skim subject to further detail
- 10.2 First floor**
- 10.2.1 Bedroom 2  
Investigate cause of dampness evident to panelling to front wall at high level
- 10.2.2 Dressing room  
Form new door opening into Extension Ensuite Bathroom to Structural Engineer's detail;  
Architect to make record of historic fabric (wall linings/ plaster, masonry including historic pointing to exterior) during creation of opening, and prior to closing up/ finishes, and provide information to Camden Planning and Historic England for record.  
Panelled linings and new door detail subject to further LBC application.
- 10.2.3 Family Bathroom  
Following removal of lining panels reline in tile backer board on suitable sw framing to take tile finish and provide service riser duct;  
Form service and cistern boxing comprising 50mm sw framing /as required with tile backer board to suit tiled finish or pb/ skim subject to further detail.
- 10.2.4 Guest Ensuite  
Without damage to panelling form service and cistern boxing and wall lining comprising 50mm sw framing /as required with tile backer board to suit tiled finish.
- 10.2.5 Boudoir/ Ensuite Bathroom  
T&g boarding on sw framing as required to form accessible data riser duct.  
New partition wall comprising 100mm sw studwork with 2 no. layers British Gypsum Soundblock and skim with 100mm Rockwool RWA45 to void; tile backer board lining as required to shower side.  
Adjusted door opening between Ensuite Bathroom and Shower to Structural Engineer's detail.
- Second floor**
- 10.2.6 Bedroom 5  
Foil backed pb/ skim linings to ashlar walls and cheeks to new dormers

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10.2.7 Bedroom 6

Make good plaster and lath where partition walls removed

Repair plaster and lath

## 11 CEILINGS

### 11.0 General

#### 11.0.1 Existing ceilings

Many historic plaster and lath ceilings have been replaced with plasterboard and skim, much of which have popped fixings, due to flexing of the joist structures to which they are attached, and cracking at board joints;  
Refix board at cracks and popped fixings prior to providing new skim coat;  
Patch repair with pb at locations of remove light fittings prior to full skim coat

#### 11.0.2 Plaster and lath ceilings

Plaster and lath ceilings are generally covered in lining paper and paint finish, with evidence of patching and repair.

No plaster and lath ceilings are to be replaced.

Test flex in ceilings and investigate condition of plaster and lath from above where access is available;

Only with Architect agreement carry out repair using technique involving ss washers, support wires and flexible metal strapping as set out in English Heritage *Mortars, Renders and Plasters* (2011) page 370. Patch repairs to plaster should be carried out in lime mix to match existing, although gypsum skim coat is acceptable.

### 11.1 Lower ground floor

#### 11.1.1 Kitchen

Patch repair pb ceiling at location of removed recessed light fittings; refix boards and carry out full skim finish

#### 11.1.2 Utility

Refix boards and provide full skim finish;  
New board/ skim to soffit of opening to external window

#### 11.1.3 Larder

Plaster and lath ceiling is very fragile; repair and reskim as per 10.0.2

#### 11.1.4 Family room

Patch repair pb ceiling at location of removed recessed light fittings; refix boards and carry out full skim finish

#### 11.1.5 Playroom

Strip blow skim; refix boards and carry out full skim finish

#### 11.1.6 Lower Hall/ stair soffit

Plaster and lath ceiling is very fragile; repair and reskim as per 10.0.2;  
Make good at location of previous lighting rose

#### 11.1.7 Extension kitchen/ living/ dining

Patch repair pb ceiling at location of removed recessed light fittings; carry out full skim finish

Profiled eml/ render/ skim soffit to spiral stair

#### 11.1.8 Lean-to

Beaded T&G boarding on vapour barrier on underside rafters for paint finish with dowl bead at junction with string

### 11.2 Upper ground floor

#### 11.2.1 Throughout

Refix modern pb and provide full skim finish

#### 11.2.2 Extension

New pb/ skim ceiling to new floor structure over, comprising 2 no. layers  
12.5mm British Gypsum Soundbloc/ skim

Under-sling existing plaster and lath ceiling to Bedroom 7, Landing and Shower room with 1no. layers 12.5mm British Gypsum Soundbloc/ skim

**11.3 First floor**

11.3.1 Throughout

Review condition of plaster and lath ceilings with Architect. Reinforce, repair and reskim as per 10.0.2.

11.3.2 Family bathroom shower

Make good pb ceiling where access cut out formed ref 12.2.1 below.

11.3.3 Ensuite bathroom

Create hatch opening re12 Lofts below;

Raise new pb ceiling to underside of rafters to east pitch over proposed shower; insulate and ventilate void between rafters

**11.4 Second floor**

11.4.1 Generally

Improve plaster finish at junction of heads of dormers and flat ceiling

Investigate status of battens at junction of dormer cheeks and skeelings; replace with dowl beads to further detail.

11.4.2 Bedroom 5

Foil backed flexi pb/ skim soffit to new dormer windows;

New foil backed pb/ skim to ceiling where affected by works

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**12 LOFTS**

**12.0 Main House**

12.0.1 Front

Strip water tanks;  
Clear out redundant non-historic servicing and debris;  
Boards will not be supplemented to provide additional storage capacity;  
Where insulation is not apparent, lift existing boarding and insulate with Rockwool Flexi to maximum depth of loft floor void; elsewhere provide 300mm Rockwool Flexi.

12.0.2 Rear

Repoint masonry to north gable wall in NHL 3.5 lime mix;  
Repair timber access ladder;  
Strip water tanks;  
Clear out redundant non-historic servicing and debris;  
Boards will not be supplemented to provide additional storage capacity;  
Where insulation is not apparent, lift existing boarding and insulate with Rockwool Flexi to maximum depth of loft floor void; elsewhere provide 300mm Rockwool Flexi.

**12.1 Extension**

12.1.1 Main roof void

Provide hatch with integral ladder to provide access to presently sealed main roof void; hatch door/ frame to further detail  
300mm Rockwool Flexi throughout; ensure well wedged into eaves;  
No boarding to be provided.

12.1.2 East roof void

Strip out water tanks and hatch

**12.2 Side extension**

12.2.1 Family Bathroom shower

Form cut out in plasterboard ceiling to inspect condition of underside of roof, and install 300mm Rockwool Flexi well wedged into eaves.



**13 STAIRCASE**

**13.0 Main House**

13.0.1 Landings, treads and risers

Staircase landings, treads and risers are to be repaired and refinished as per floorboards ref 8.1.3 where applicable.

Repairs to treads, risers and landing board in accordance with *SPAB Information Sheet 10*.

Open up stair soffits only where they are lined with modern plasterboard to repair treads which are cracked, loose or unsupported. Otherwise remove tread from above, provide supplementary support/ repair and reinstate.

Carefully open up soffit boarding to Upper Ground Floor Shoe Store to provide access to refix treads and risers where they have become detached from string and section of string is missing.

Tighten up the joints between the strings, newel posts and handrails as possible. Refix soffit boards.

13.0.2 Newels, spindles and handrails

French polisher to prepare, beeswax fill and refinish carved and turned staircase components.

**13.1 Extension**

No alterations to stair flight from Lower to Upper Ground Floor; remove staircase from Upper Ground floor to first floor ref Stripping out above

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**SERVICES**

**13.2 Drainage**

Refer to section 6 above

**13.3 Heating and hot water**

13.3.1 Pipe routes

Pipework to rise through dedicated ducts within Side Extension;  
Use existing joist notches; new notches will only be considered if other options have been exhausted and with prior agreement of Architect;  
Pipework to be lagged throughout.

13.3.2 Mains

Gas Retain existing gas main installation to serve Extension Staff accommodation to Lean-to; relocate gas meter as shown;  
New gas main installation to serve Main House to Lean-to.

Water 2 no. new water mains installations to Lean-to to serve Extension Staff accommodation and Main House; meters to be located within pavement.

Water supply to be mains pressure; all storage vessels to be discarded

Power New three phase supply and meter to Lean-to to serve Main House;  
Relocate existing single phase supply and meter from Extension to Lean-to to serve Extension

13.3.3 Boilers

2 no. Worcester Bosch Greenstar CDi 35kW system boilers to serve Main House;

1 no. . Worcester Bosch Greenstar i combination boiler to serve Extension Staff accommodation.

13.3.4 Hot water

New 300l indirect pressurised hot water cylinder with immersion back up to serve Main House;

New 300l accumulator to achieve consistent pressure.

Secondary circuits;

13.3.5 Heating

Lower ground floor:

Water fed underfloor heating comprising continuous pipework clipped fixed to insulation beneath sand/ cement screed; zoned to installers recommendations;

Manifolds to be located with Plant Room and Utility subject to further agreement.

Elsewhere:

Generally cast iron radiators set within window recesses;

Pressed steel panel radiators to Bedroom 7;

Thermostatic valves and zoned programmers.

**13.4 Electrics**

13.4.1 Switches and sockets

Flat plate toggle/ dimmer unlacquered brass plates;

Where possible re-use cut outs to paneling for new switches;

Sockets to be set into skirting boards to avoid damage to panelling.

13.4.2 Lighting

Centre pendant fittings;

5amp circuits to take floor/ table lamps;

Traditional picture lights;

Recessed fittings only to new pb/ skim ceilings within Extension.

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- 13.4.3 Electric heating  
Below tile element floor heating to tiled Bathrooms on separate programmers  
Heated towel rails to Bathrooms on separate programmers

**13.5 Ventilation**

- 13.5.1 Kitchen  
Downdraft extractor with remote motor within Plant Room; ducted within new floor insulation layer;  
termination via lead mushroom termination to Plant Room roof
- 13.5.2 Comms  
Passive ventilation duct within new floor insulation layer;  
termination via lead mushroom termination to Plant Room roof.
- 13.5.3 Utility  
Wall mounted extractor to provide rate of 35l/s;  
Humidity sensor;  
Ducted via Wine Cellar to terminate within cheek of lightwell
- 13.5.4 WC  
Wall mounted extractor to provide rate of 35l/s;  
Connected to light switch; with overrun  
Ducted via Utility and Wine Cellar to terminate within cheek of lightwell
- 13.5.5 Guest WC  
Wall mounted extractor to provide rate of 15l/s;  
Connected to light switch; with overrun  
Ducted via Family Bathroom Shower over to terminate at flank of Side Extension with cast iron airbrick.
- 13.5.6 Shower room  
Wall mounted extractor to provide rate of 35l/s;  
Connected to light switch; with overrun  
Termination to front elevation of Extension with cast iron airbrick.
- 13.5.7 Ensuite bathroom  
Wall mounted extractor to provide rate of 35l/s;  
Connected to light switch; with overrun  
Termination at cast iron eaves grille to front elevation of Extension.
- 13.5.8 Family bathroom  
Shower:  
Wall mounted extractor to provide rate of 35l/s;  
With humidity sensor;  
Ducted via roof void over to terminate at flank of Side Extension with cast iron airbrick.  
Bathroom:  
Ceiling mounted extractor to provide rate of 35l/s;  
Connected to light switch; with overrun  
Ducted via Second floor eaves void to terminate at flank of Main House with cast iron airbrick.
- 13.5.9 Guest Ensuite  
Ceiling mounted extractor to provide rate of 35l/s;  
Connected to light switch; with overrun  
Ducted via Second floor eaves void to terminate at flank of Main House with cast iron airbrick.

**13.6 Alarms**

- 13.6.1 Security installation  
Installation comprising shock sensors, contacts, perimeter alarms, discrete CCTV cameras, and PIR detectors to high risk rooms;  
Keypads and panic buttons  
Police response and IP communication compatible

Door Entry System comprising flush unlacquered brass video entry panel at gate with fob/ code reader with handsets to primary floors

13.6.2 Smoke installation

Mains operated interconnected smoke, heat and co detectors to all main landings and kitchen.

**13.7 Data**

Data installation to Comms hub rack;

All data cables to rise via dedicated service duct which is accessed directly from the Comms room via floor voids above.

Outlets to match power points in flat unlacquered brass plates set within skirtings to avoid damage to panels;

Control 4 In-wall touch screens to principal rooms to be surface mounted to avoid damage to panelling.