PART B - FIRE SAFETY

The building shall be designed and constructed so that there are appropriate provisions of the early warning of fire, and appropriate means of escape in case of fire from the building to a place of safety outside the building capable of being safely and effectively used at all material times.

A minimum Grade D LD2 category fire alarm system shall be provided that complies with BS5839: Part 6. (B1) - Building control to confirm

The smoke and heat alarms should be mains operated and conform to BS EN 14604:2005, smoke alarm devises or BS 5446-2:2003, fire detection and fire alarm devices for dwellinghouses, part 2 specification for heat alarms, respectively. They should have a standby power supply, such as a battery (either rechargeable or non-rechargable) or capacitor.

Fire alarms / systems to be designed and installed by specialist sub-contractor. All new systems to Building Control approval. Smoke alarms must be installed in accordance with the latest British Standards and have a stand by power mode fitted. Alarms to be fitted in circulation spaces such as landings and hallways. Smoke, Carbon Dioxide / Monoxide detectors to be installed at each floor level, to be interlinked and mains powered with battery backup. An Interlinked heat / carbon monoxide detector is to be installed in the kitchen and any room with a solid fuel appliance. A smoke and carbon dioxide / monoxide detector should be installed in rooms that contain a fireplace or fuel burning appliance (e.g. boilers) and rooms that will enable escape on each floor. Smoke and Carbon Dioxide / Monoxide detectors are required to be located on the ceiling (at least 300mm from any wall) and between 1 metre and 3 metres from the appliance. Smoke and carbon monoxide / dioxide alarms /detectors should be sited so that there is a alarm in the circulation space within 7.5m of the door to each habitable room and these should be ceiling mounted and at least 300mmm away from walls and light fittings.

To inhibit the spread of fire within the building, the internal linings shall: a) adequately resist the spread of flame over their surfaces; and b) have, if ignited, a rate of heat release or a rate of fire growth, which is reasonable in the circumstances.

The building shall be designed and constructed so that, in the event of fire, its stability will be maintained for a reasonable period. Where reasonably necessary to inhibit the spread of fire within the building, measures shall be taken, to an extent appropriate to the size and intended use of the building, compromising either or both of the following: a) sub-divison of the building with fire resisting construction; b) installation of suitable automatic fire suppression systems. The building shall be designed and constructed so that the unseen spread of fire and smoke within concealed spaces in its structure and fabric is inhibited. The external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and position of the building. The roof of the building shall adequately resist the spread of fire over the the roof and from one building to another, having regard to the use and position of the building.

Note: The existing stairs to remain but are not compliant by current building regs. Balustrade at First Floor to be upgraded to current regulations. Building control to assess and confirm

Any altered or new elements of load bearing structure shall be provided with a minimum of 30 minutes fire resistance. Floors to be upgraded to achieve a minimum of 30 minutes modified resistance. (B3)

MEANS OF ESCAPE

Provide protected means of escape in all areas. Locks and child resistant safety stays may be provided on escape windows subject to the stay being fitted with a release catch which may be child resistant. Windows should be designed such that they will remain in the open position without the need to be held by a person making their escape. No method of escape is permitted over 4.5 metres in height (B1).

Except for kitchens, all habitable rooms in upper storey(s) of a dwellinghouse served by only one stair should be provided with a window (or external door) which complies with emergency egress window and door criteria (see below)

Emergency egress windows **(To Master Bedroom)**

Any window provided for emergency egress purposes provided for escape should comply with the following conditions:

1. The window should have an unobstructed openable area that is at least 0.33m2 and at least 450mm high and 450mm wide (the route through the window may be at an angle rather than straight through). The bottom of the openable area should be not more than 1100 above the floor; and

2. The window should enable the person escaping to reach a place free from danger of fire. This is a matter for judgement in each case, but, in general, a courtyard or back garden from which there is no exit other than through other buildings would have to be at least as deep as the dwelling house is high to be acceptable.

In new areas: underside of all ground and first floor ceilings to have 30 minutes fire resistance. Soil stacks to have 30 minutes fire resistance. All surface linings of walls and ceilings are to achieve the following classifications: Small Rooms under 4msq and domestic garages of area not more than 40m2 are Class 3. Other Rooms including garages and circulation spaces are Class 1. If required the use of sprinkler systems are to be in accordance with BS 9251: 2005. **In historic part of house Building Control to assess**

Building Control to confirm requirement of egress windows at First Floor

If fire escape windows at first floor are required they are to be fitted with a 'restricted egress friction hinge which has an override facility to allow egress'. Such as that from 'Nico'
http://www.nico.co.uk/product/restricted-egress-friction-hinge/
(or equal and approved)

ACCESS AND FACILITIES FOR THE FIRE AND RESCUE SERVICE

Pumped fire fighting appliance to have access to within 45 metres of all points within the building. Drive and turning circles to be as per the Latest Building Regulations (Approved Document B5:2). Every elevation to which vehicle access is provided should have a suitable door(s), not less than 750mm wide, giving access to the interior of the building. Turning facilities should be provided in any dead end access route that is more than 20m long. This can be a hammerhead or turning circle.

PART C - SITE PREPARATION AND RESISTANCE TO CONTAMINANTS AND MOISTURE

The roof shall be provided with adequate cross ventilation to include ridge and eaves ventilation. (C2)

The ground to be covered by the building shall be reasonably free from any material that might damage the building or affect its stability, including vegetable matter, top soil and pre-existing foundations. Reasonable precautions shall be taken to avoid danger to health and safety caused by contaminants on or in the ground covered, or to be covered by the building and any land associated with the building. Adequate sub-soil drainage shall be provided if it is needed to avoid: a) the passage of ground moisture to the interior of the building; b) damage to the building, including damage through the transport of water-borne contaminants to the foundations of the building.

The walls, floors and roof of the building shall adequately protect the building and people who use the building from harmful effects caused by: a) ground moisture; b) precipitation including wind driven spray; c) interstitial and surface condensation and d) spillage of water from associated sanitary fittings or fixed appliances.

LIMITING INFILTRATION

Mastic seal all openings both internally and externally. Insulated proprietary closers to all window and door jambs and sills. Lintels with solid base plate to have 12mm insulation to underside.

DPC and FLASHING

Damp proof course to suit applications.Vertical DPC to be provided around all external openings, damp proof floor membrane to be tucked under DPC to walls. Wall DPC to be minimum 150mm above ground level. All windows and external doors to be built in with DPC's to heads, sills and jambs. All flashings to match existing or in lead, use where chimney meets roof, stepped cavity trays where roofs meet at different levels.

PART D - TOXIC SUBSTANCES

If insulating material is inserted into a cavity in a cavity wall, reasonable precautions shall be taken to prevent the subsequent permeation of any toxic fumes from that material into any part of the building occupied by people.

PART E - RESISTANCE TO THE PASSAGE OF SOUND

Dwelling-houses, flats and rooms for residential purposes shall be designed and constructed in such a way that they provide reasonable resistance to sound from other parts of the same building and from adjoining buildings. Internals walls between a bedroom or a room containing a water closet, and other rooms; and internal floors provide reasonable resistance to sound.

PART F - VENTILATION

There shall be adequate means of ventilation provided for people in the building. Fixed systems for mechanical ventilation and any associated controls must be commissioned by testing and adjusting as necessary.

Mechanical, background and purge ventilation shall be provided in accordance with Approved Document F. (F)

Whole Building (background) Ventilation:
Provide fresh air to dilute and disperse water vapor and pollutants.
Local Extract Ventilation:
Mechanical extractor fan Ventilation in rooms where most of the vapor or pollutants are released in areas such as kitchens and bathrooms.
Purge (rapid) Ventilation:
Ventilation for the rapid dilution and removal of water vapor and pollutants usually carried out by opening windows.

Contractor to select one of the following ventilation systems:
System 1: Intermittent extract fans and background ventilators:
System 2: Passive stack ventilation and background ventilators:
System 3: Continuous mechanical extract fans and background ventilators:
System 4: Continuous mechanical supply and extract with heat recovery:

Specialist consultant / contractor is to be appointed to calculate and provide required ventilation rates for the chosen system as outlined above. They should also advise, install and commission any ventilation systems installed within the building. All enclosed rooms (no windows) such as basements and attics to have adequate mechanical extractor ventilation as set out by the latest Building Regulations.

All WC's & Bathrooms to have mechanical ventilation, weather the room contains an opening or not (15 litres per second intermittent extract or 8 litres per second continuous extract). Kitchen to have mechanical extract at 60 litres per second, Laundry / utility room 30 litres per second. Air flow rates to be calculated on site and notice given to Building Control. This applies to cooker hoods, extractor fans and intermittent / continuously running systems. All fans to be ducted to outside air, insulated in cold roof spaces and with condensation control.

Building control to advise if additional ventilation required to living room with fireplace following draw test of chimney. If required ventilation to be via floor vents

PART G - SANITATION, HOT WATER SAFETY AND WATER EFFICIENCY

All sanitary systems and water systems (hot and cold) shall be designed and specified by qualified specialist contractor.

The hot water supply to any fixed bath must be so designed and installed as to incorporate measures to ensure that the temperature of the water that can be delivered to that bath does not exceed 48°C.

Adequate hand washing facilities must be provided in: a) rooms containing sanitary conveniences; or b) rooms or spaces adjacent to rooms containing sanitary conveniences. Any room containing a sanitary convenience, a bidet or any facility for washing hands must be separated from any kitchen or any area where food is prepared. A suitable sink must be provided in any area where food is prepared.

Where hot and cold taps are provided on a sanitary appliance, the hot tap should be on the left. Any sanitary appliance used for personal washing should be discharge through a grating, a trap and a branch pipe to an adequate system of drainage.

All new WC's, taps, showers, dishwashers, washing machines to be energy efficient of A or A+. All devices should use as little water as possible to minimise consumption. Hot water systems / heating to be installed by a registered / competent person or persons.

Any renewable or energy saving systems to be agreed with the client and approved with Building Control. If solar / photovoltaic panels are proposed these need to be approved in writing by the LPA.

PLUMBING / SEWERAGE

All plumbing and sewage systems are to be designed by a competent / qualified Plumber / Engineer. Any GAS work to be completed by a GAS SAFE Registered engineer and all work that is completed should be provided with a certificate of completion.

PART H - DRAINAGE AND WASTE DISPOSAL

ALL DRAINAGE IS TO BE AGREED ON SITE (H)

(Indicative design shown - drainage final design by contractor / agreed by Building Control) Contractor to issue Building Control rain water / drainage layout at earliest convenience. Contractor to provide details of above and below ground water drainage (gutters, hoppers and downpipe sizes, soakaway design and locations).

Any new or altered drainage shall comply with Approved Document H. Any new or existing soil vent pipes shall finish at least 900mm above any opening into the building within 3m. (H)

A adequate systems of drainage shall be provided to carry foul water from appliances within a building to either a public sewer, private sewer, septic tank, private treatment plant, or a cesspool.

Note: All what were private sewers are now Public sewers. Any sewers found by the Contractor should be reported to the Architect / Client / Owners and then a consultation with the water authority would be required - any costs arising from such would be the Owner's / Client's liability.

All new drainage pipework to be installed and sized in accordance to the latest Building Regulations and laid to fall to suit existing ground levels and invert levels. Where drains pass under building, support structure with a lintel. Any structural work to be consulted and approved with Structural Engineer. Allow minimum gap between pipe and structure of 50mm. Drains to be tested on completion to satisfaction of Building Control. All traps to be accessible to clear blockages.

RAINWATER GOODS & EXTERNAL PIPEWORK

All rainwater goods, external pipe work and guttering is to be black painted metal (such as Alumasc, as per approved samples). Materials for rainwater goods to be to be approved by client. Supplier to provide rainwater calculations for sizing of hardware. Contractor to provide final rainwater layout for Building Control approval. The works shall be carried out in strict accordance with the approved details.

PART J - COMBUSTION APPLIANCES AND FUEL STORAGE SYSTEMS

Where fixed combustion appliance is provided, appropriate provision shall be made to detect and give warning of the release of carbon monoxide. Combustion appliances and flue pipes shall be so installed, and fireplaces and chimneys shall be so constructed and installed as to reduce to a reasonable level the risk of people suffering burns or the building catching fire in consequence of their use. Where a hearth, fireplace, flue or chimney is provided or extended, a durable notice containing information on the performance capabilities of the hearth, fireplace, flue or chimney shall be affixed in a suitable place in the building for the purpose of enabling combustion appliances to be safely installed.

A copy is requested of the commissioning certificate for any new or replacement heat producing appliance. Any work is to be carried out by a registered and competent person. Contractor to check any accreditation before work is carried out. All new chimneys, flue exits, flue sizes, fireplaces should be built in accordance to the latest Building Regulations. All fuels storage systems (e.g. oil tanks) must be sited in a safe location, weather proofed and designed and built by a competent person(s) in accordance to the latest Building Regulations. Provide an operation and maintenance certificate for the boiler. Provide a commissioning certificate for the boiler and space heating system signed by a suitably qualified person.

Any new or altered gas, oil or stove installations shall be installed and commissioned by a competent person and be self - certified, including carbon monoxide detection in accordance with BS EN 50921.2. (J)

COOKING, HEATING & UTILITIES - TO CONTRACTORS FINAL DESIGN

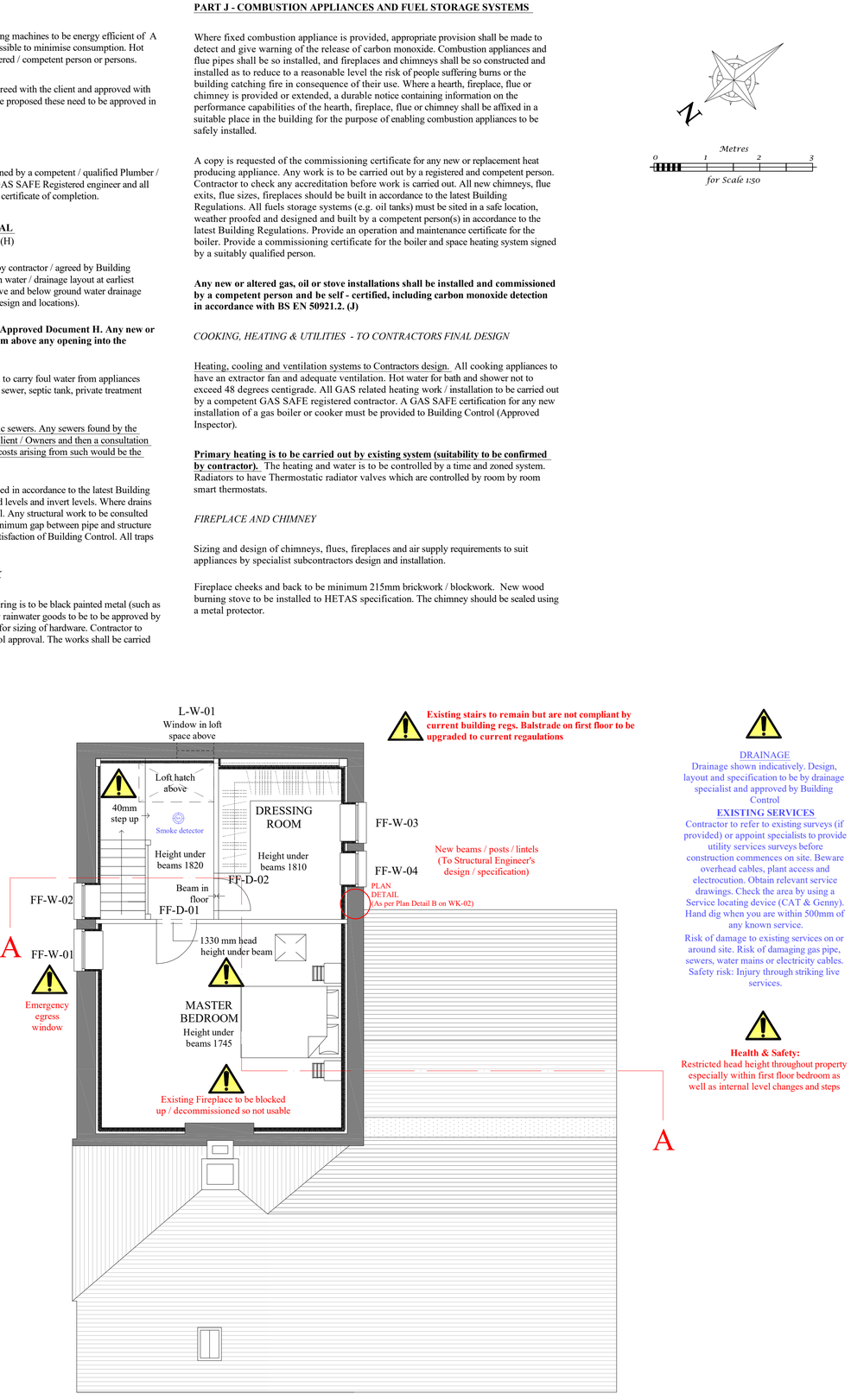
Heating, cooling and ventilation systems to Contractors design. All cooking appliances to have an extractor fan and adequate ventilation. Hot water for bath and shower not to exceed 48 degrees centigrade. All GAS related heating work / installation to be carried out by a competent GAS SAFE registered contractor. A GAS SAFE certification for any new installation of a gas boiler or cooker must be provided to Building Control (Approved Inspector).

Primary heating is to be carried out by existing system (suitability to be confirmed by contractor). The heating and water is to be controlled by a time and zoned system. Radiators to have Thermostatic radiator valves which are controlled by room by room smart thermostats.

FIREPLACE AND CHIMNEY

Sizing and design of chimneys, flues, fireplaces and air supply requirements to suit appliances by specialist subcontractors design and installation.

Fireplace cheeks and back to be minimum 215mm brickwork / blockwork. New wood burning stove to be installed to HETAS specification. The chimney should be sealed using a metal protector.



PROPOSED FIRST FLOOR PLAN

DO NOT SCALE FROM DRAWINGS EXCEPT FOR PLANNING PURPOSES.

Check and verify all dimensions on working drawings before commencing work on site. All measurements are to structural elements unless otherwise stated.

Report all discrepancies, errors or omissions between drawings, site conditions and all other documents to Stephen Langer Associates Ltd.

Please read this drawing in conjunction with all other architects', consultants' and subcontractors' drawings.

Materials, components & workmanship are to meet or exceed the requirements of current Building Regulations, British Standards codes of practice, and the appropriate manufacturer's recommendations.

Sanitaryware is indicative only. Drainage is indicative and final design by contractor. Final electric design by contractor and to be installed by NICEIC registered contractor. Plumbing and heating final design by contractor and should only be installed by a registered contractor. Gas connections to be installed by a Gas Safe engineer and any stoves, fires and Agas etc by a HEATAS registered body. All above to be reviewed by Stephen Langer Associates Ltd (not approved) prior to installation.

Listed Buildings may need underpinning and this will require Listed Building Consent.

Please ensure drawings are printed to correct scale (check against scale bar on drawing) - Stephen Langer Associates Ltd are not responsible for printing errors.

This drawing is issued on condition that it is not copied, reprinted or disclosed to a third party without the prior written consent of Stephen Langer Associates Ltd.

No work to commence until all planning or listed building conditions have been approved. All work to be carried out in accordance with the approved drawings / planning and listed building consent.

Clients, Designers and Contractors must be aware of their duties under the Construction (Design and Management) Regulations 2015 (came into force on the 6th April 2015).

Rev.	Description	Date
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STEPHEN LANGER ARCHITECTS
RIBA CHARTERED PRACTICE

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Project :
The Pest House,
Claygate Road, Yalding,
ME18 6BB

Drawing Description :
House - Proposed First Floor Plan

Date : November 2019
Drawn by : DAW
Scale : 1:50 @ A1

Drawing Number : 19045 - WK - 03
Rev. A