

DRAWING KEY

- Duct and through wall vent with cowl (to clients specification)
- Extract Cooker Hood
- Ceiling mounted extract fan
- Wall mounted extract fan
- Ceiling mounted smoke detector
- Ceiling mounted heat detector
- Carbon monoxide detector
- Span of Cut Rafter
- Span of engineered joists
- Span of Beam & Block floor
- Span of Structural Beam
- AOV Smoke Vent
- Primary Means of Escape
- Secondary Means of Escape
- Class B Partition
- Sheathed Wall (Structural)
- Rigid Insulation Board
- Mineral Fibre / Glass Wool
- Blown Insulation
- A1 Rated Cavity Barrier
- Soil Vent Pipe
- Stub Stack
- Drainage Duct
- Foul Drainage 1:40 Fall
- Storm Drainage 1:80 Fall
- Man Hole
- Inspection Chamber
- Rainwater Pipe
- Incoming Services
- Meter Box

Revision Notes:
Drawing Status:

BUILDING REGS

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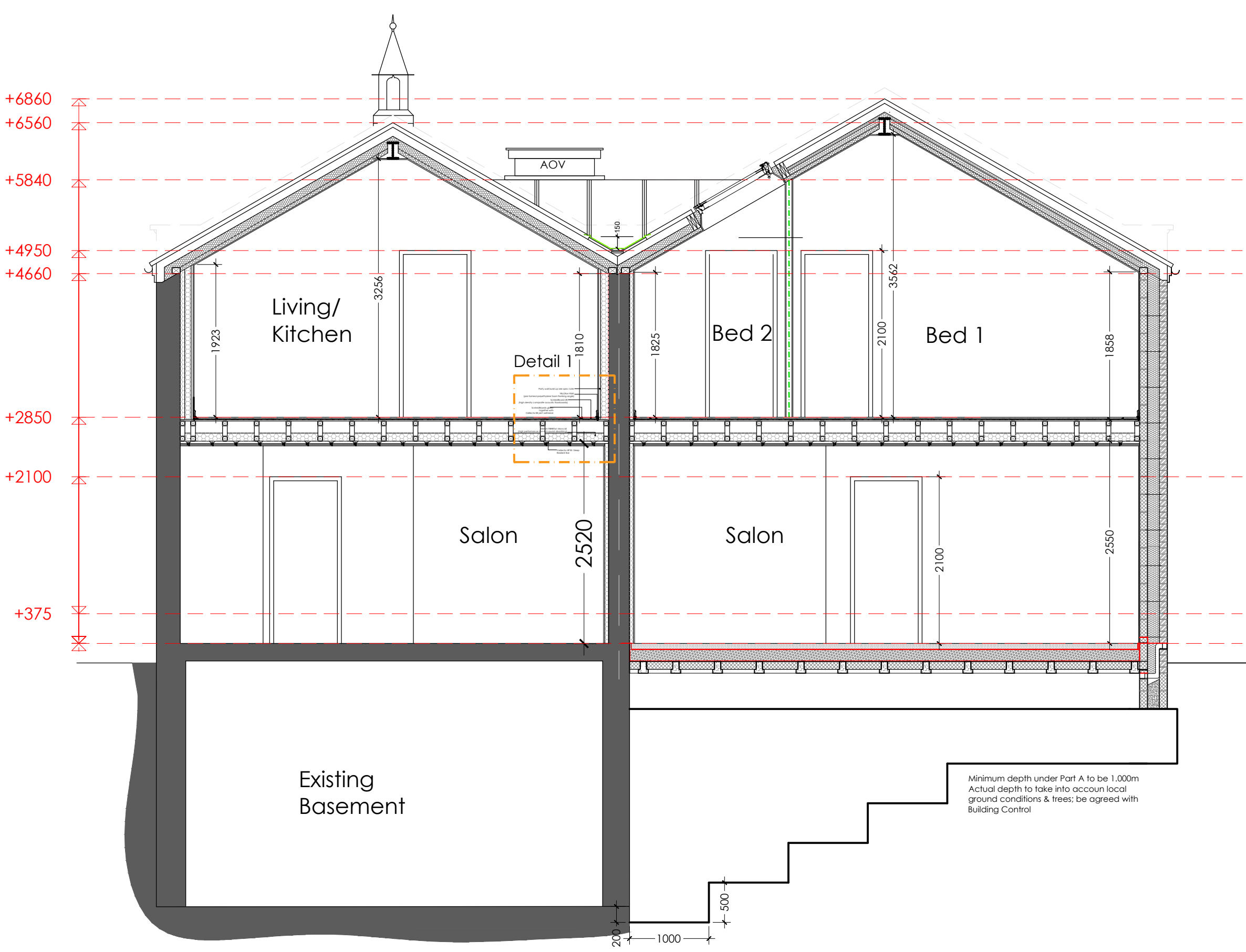
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Project:
Proposed mixed use development
2 Southfield Road,
Hinckley
Holdback

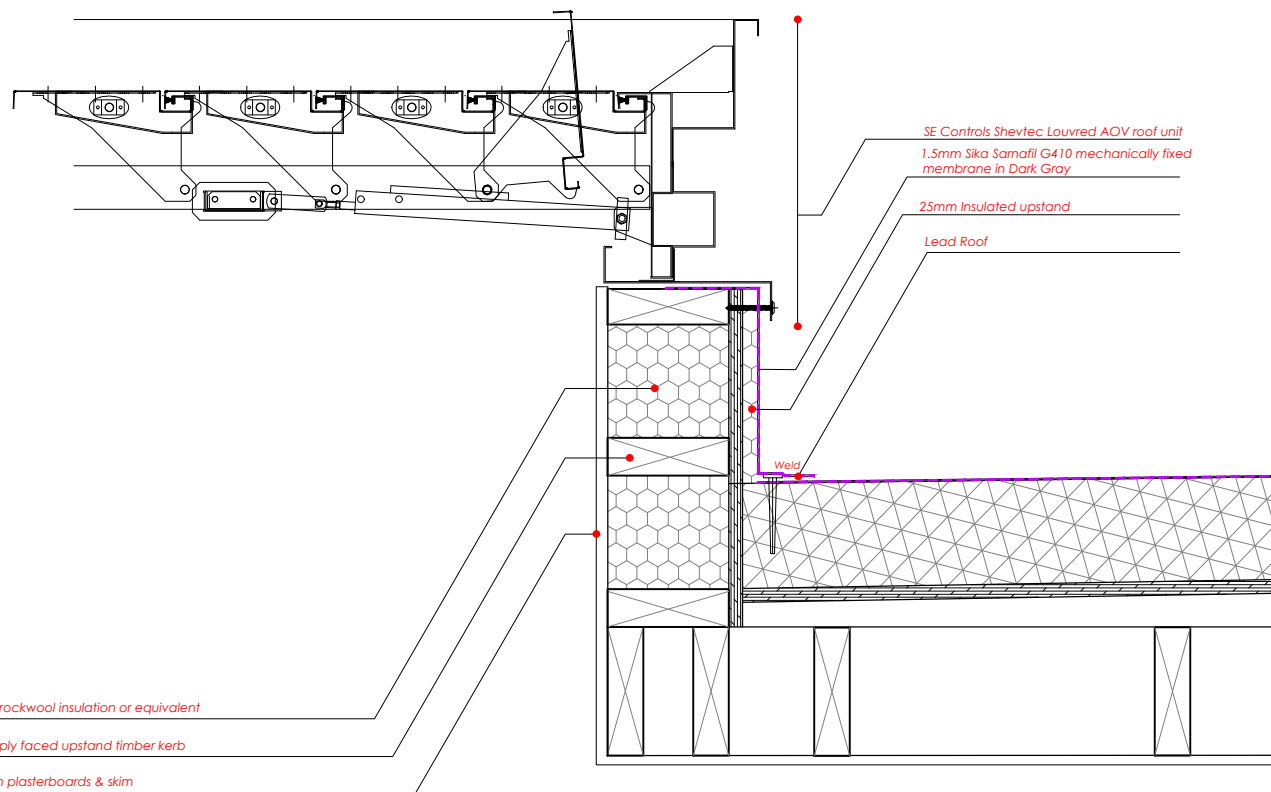
Title:
Sections A and B

Scale: 1:50 Drawn: DCW Checked: - Date: 08/03/22
Drawing No. 8470-04-03 Revision: BR1

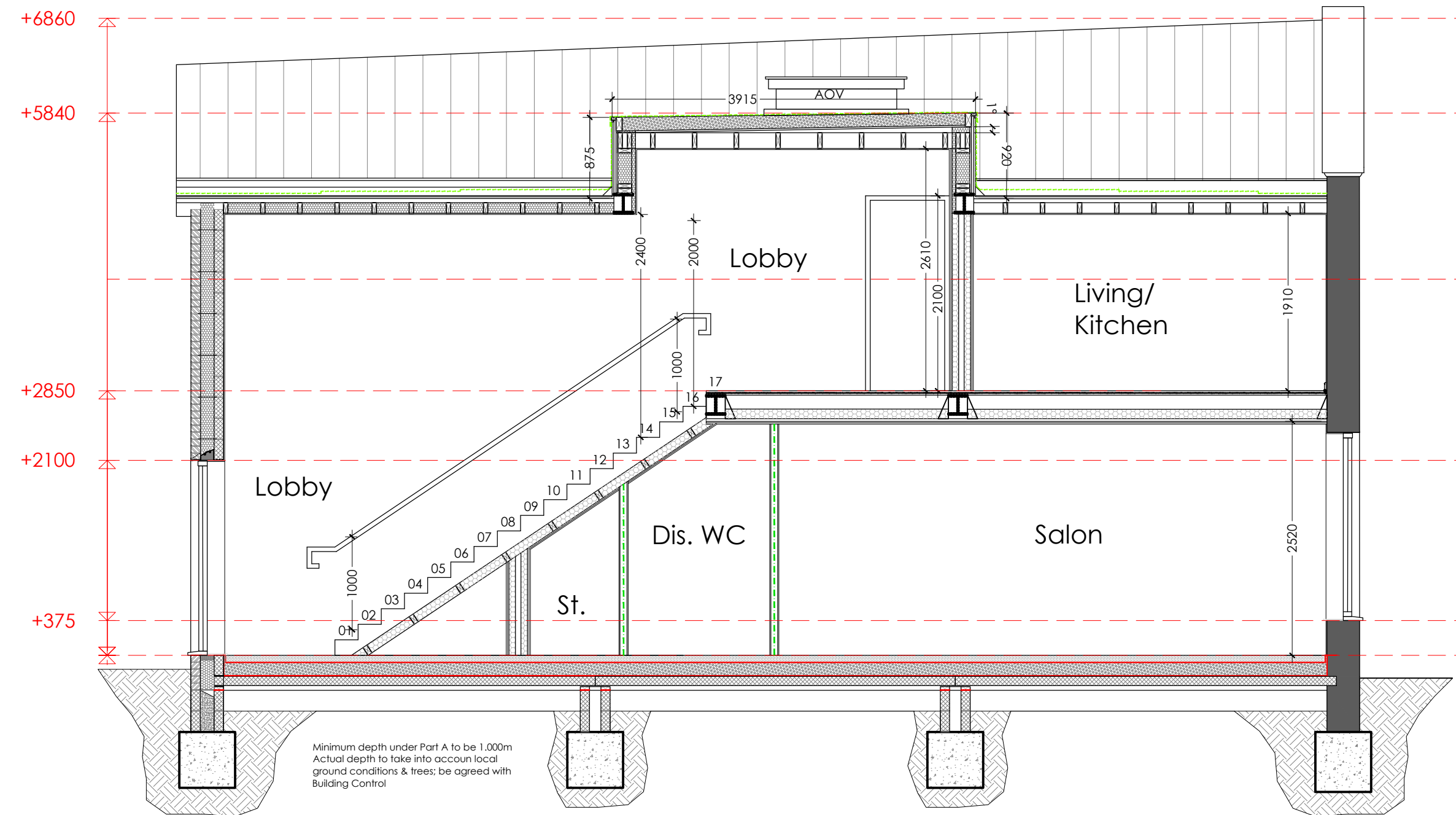
HSSP A1



Section A



AOV TYPE 1 (Smoke vent) 1:10



Section B

FIRE & NOISE PROTECTION OF SVP PIPES

Soil and vent pipes passing through other rooms of the dwelling are to be enclosed in a timber stud frame supporting 15mm British Gypsum Wallboard or 12.5mm British Gypsum Wallboard 12.5 & 3mm, with 25mm unfaced and wire reinforced mineral wool around pipes. Seal junction of casing to ceiling/floor where they penetrate. Fire collar rated at 60 mins to be provided.

ABOVE GROUND DRAINAGE

Guidance for the design of sanitary pipework can be found in BS EN 12056.

All points of discharge into the system should be fitted with a trap to prevent foul air from entering the building, with a minimum seal of 25mm of water or equivalent.

Minimum trap sizes are detailed below:

Appliance	Diameter of Trap	Depth	of
Seal			
Washbasin	32mm	75mm	
Bath/Shower	40mm	50mm	
Sink/Washing Machine/	40mm	75mm	
Dishwasher			
WC Pan	75mm	50mm	

All pipework should discharge into a stub stack or discharge stack with care taken to prevent cross flow into any other branch pipe. In accordance with ADH Diagram 2.

Waste pipe diameters :
wash hand basin and bidet 50mm minimum.
sink, bath and shower 40mm minimum.
WC 100mm minimum.
All sanitary fittings to have 75mm minimum deep seal traps.

Condensate pipe from the boiler can connect into sanitary pipework if necessary, with a minimum diameter of 25mm with a 75mm condensate trap. Installation should be in accordance with BS6798. Bends in branch pipes should be avoided.

All waste pipes to connect internally to the Discharge Stack separately. Discharge Stacks should be ventilated and must terminate with a suitable durable cage 900mm minimum above window heads. Discharge Stacks connected to drains liable to surcharge require a 50mm ventilation pipe above the likely level of flood. Discharge bend must be of minimum radius 200mm at centreline of stack.

Workmanship to be in accordance with BS 8000 pt 13: Code of practice for above ground drainage

BELOW GROUND DRAINAGE

The foul drainage is to connect to the existing public foul or combined sewer. This is to be fully detailed and confirmed by the contractor/drainage designer and agreed with the Building Inspector. should a gravity system not be feasible, a suitable pumping installation should be provided with adequate storage and alert system

storm drainage should be to soakaways. If this is not possible then an outflow to a public water course may be used, or connection should be made to a public storm sewer. If this is not possible a combined sewer may be connected to. Flow restriction when connecting to a public watercourse or sewer should be agreed with the Water Authority prior to construction.

The sewerage undertaker should be notified at least three weeks before it is intended to connect to the public sewer. Should this not be possible please discuss alternative options with the building control body before works commence.

The likelihood of surcharging should be discussed with the sewerage undertaker and the relevant action taken if necessary. Where the risk is considered low, building protection may be acceptable in the form of julleys.

Changes in direction and gradient should be minimised and access joints provided where required. Connections should be made in the direction of flow and using prefabricated components.

When connecting to existing, repair couplings should be used to ensure a watertight joint and the junction packed to avoid differential settlement with adjacent pipes.

The system should be ventilated, pipes laid to even gradients and straight lines. Slight curves are acceptable subject to any blockages being accessible

Where pipes are laid within 1m of the building, backfill with concrete to a level below the lowest of the building, equal to the distance from the building less 150mm. Concrete encasements to have expansion joints at 1m maximum intervals

Where pipes pass through walls or substructure, provide bridge movement joints and structural lintels. Openings to be masked with suitable rodent barrier to prevent entry of vermin or fill material. All in accordance with ADH1, Section 2, Diagrams 7 and 8. Pipe gradients and rises should be in accordance with ADH1, Section 2, Diagram 9.

The sewer should have a minimum diameter of 100mm with a minimum low rate of 3.5 l/s. The drain carrying foul water should have a minimum internal diameter of 75mm. Drain gradients should be laid in accordance with ADH1, Section 2, Table 6.

Manholes and inspection chambers are to be constructed using precast units fixed in accordance with manufacturers instructions. Access fittings shall be not less than 225 diameter, where depth is less than 600mm, inspection chambers to be not less than 450 diameter, where not greater than 1200 deep, and manholes 1000 diameter, where depth is not more than 1500mm. Covers are to be appropriate duty, and must be crew fixed.

1/1 foul drainage to have minimum falls of 1:40
1/1 Storm Drainage to have minimum falls of 1:80

*pipes may be rigid or flexible, suitable materials for pipework include:
1/1 fired clay to BS 65, BS EN 295, concrete to BS 5911, Copper (to BS 416
1 BS EN 877) PVCu (to BS EN 1329), ABS (to BS EN 1453), Galvanised Steel
to BS 3868), others may be appropriate for use, note that not all are appropriate for trade effluents

Materials for pipes and jointing should be appropriate to the material of the pipes. Joints should be flexible and remain watertight.

1/1 general, rigid pipes, to bed onto 100mm of Granular material conforming to BS EN 14610, with minimum 150mm selected fill over top, flexible pipes to bed onto 100mm granular material and surrounded, with 100mm of granular fill free from stones larger than 40mm, with 300mm selected fill over top.

Where pipes are laid at shallow depths, encase in granular surround with compressible material overlap and reinforced concrete slab 300mm bearing on ground each side) over top. Dependent on ground conditions bedding may need to be increased

sufficient and suitable access points should be provided in accordance with Table 11.12, 13, 14 and text 2.46 - 2.54. These are to be confirmed by specialist.

Workmanship to be in accordance with BS8000, care taken to prevent entry by rats and protected from trafficking.

1/1 air or water test should be undertaken as described in BS8000

DWELLINGS VENTILATION - SYSTEM 1

Background Ventilators and Intermittent extract fans

Refer to Approved Document Part F section F1

Note: For air permeabilities of less than 3 m³/h/m³ at 50Pa a whole building Mechanical Ventilation system is required

General Principles:

total area of background ventilators to be equal to 30000 (ref table 5.2a)

Purge Ventilation to all habitable rooms may be achieved by a window or door on the external wall where the openable area is 1/20th of the floor area of 30° opening or more, less than 30° but more than 15° opening should be 1/10th of the floor area. Less than 15° opening should be discounted (this requirement may be split over several offices) Note: A habitable room with no openings on the external walls may be purge ventilated through another room or conservatory.

Ventilation extract locations through the fabric are to be confirmed. This drawing is for indicative purposes only. Penetrations through the roof and facade must be kept to a minimum and agreed on site prior to works commencing.

Ensure good Air Transfer throughout the dwelling by undercutting all internal doors to an area equivalent 7600mm² (e.g. An undercut of 10mm above floor finishes)

Intermittent Extract systems may be operated manually or automatically (eg linked to lighting)

Extract Rates:

Kitchens	- 30 l/s (adjacent hob)
	- 40 l/s (elsewhere)
Utility Rooms	- 30 l/s
Bathroom	- 15 l/s
Sanitary Accommodation	- 6 l/s

INTERNAL LIGHTING - 100% Fixed Fittings Energy Saving

In areas affected by building work, 100% of light fittings to be low energy.

Low energy lighting must have a lumens efficiency equal to or greater than 45 lumens per circuit-watts and a total output greater than 400 lamp lumens, eg. fluorescent lamps and LED lamps (tungsten spot lights and halogen lamps are not low energy).

Fittings are to be agreed with Building Inspector.

EXTERNAL LIGHTING

Where fixed external lighting is installed, all lamps to be compact fluorescent and automatically controlled so as to switch off when daylight is sufficient and to have the following characteristics either:

- lamp capacity not greater than 100 lamp-watts per light fitting and all lamps automatically controlled so as to switch off after the area lit by the fitting becomes unoccupied.

or:

- lamp efficacy greater than 45 lumens per circuit-watt and light fittings controllable manually by occupants.

HIGH SPEED COMMUNICATIONS INFRASTRUCTURE (PART B)

Provide infrastructure to allow for future connection to High Speed Electronic Communications Networks.

At least one network termination point should be identified within each dwelling or building unit. Suitable ducting should be provided to connect all such network termination points to an appropriate access point most likely on external wall.

Exceptions are:

- Isolated dwellings where it is unlikely that physical connection to networks can be made
- Where listed or planning status preclude

ELECTRICAL WORK

Small power to be designed by the contractor and approved by the client.

All electrical work required to meet the requirements of Part P (Electrical Safety) must be designed, installed, inspected and tested by a person qualified to do so, and an appropriate BS7671 electrical installation certificate issued on completion.

Note:

Electrical cables give off heat when in use and special precautions may be required when they are covered by thermally insulating materials. See BRE BR 262, Thermal Insulation: avoiding risks, section 2.3

ELECTRIC VEHICLE CHARGING - PILLAR MOUNT

Allow for pillar mounted electric vehicle charging station: one per dwelling. Specification and type to be confirmed by the developer.

Suitable armoured cable with sufficient amperage to be used feeding from MCB in the dwelling, underground to pillar location.

DOMESTIC SOLID WASTE STORAGE

Provide suitable hardstanding as indicated on plan. Capacity to be in line with Local Authority collection scheme and Recycling scheme. Location should not exceed 30m from collection point.

COMMERCIAL SOLID WASTE STORAGE

Provide suitable hardstanding as indicated on plan. Commercial waste to be stored on site.

FIRE ALARM

Fully addressable fire alarm to be designed by third party specialist.

General Principles

- Flats to have independent detectors and alarms.
- Fire detectors in common areas are to be interlinked to flat alarms and to trigger full evacuation.
- Fire detection in the Retails units to be interlinked to flat alarms and to trigger full evacuation.
- AOV smoke vent linked to fire alarm to open when fire alarm activated

Notes

Detectors/Alarm heads for dwellings should be positioned in circulation spaces between sleeping spaces and living accommodation

All do so that:

- there is at least one smoke detector/alarm head per storey
- Smoke detector/alarm heads are positioned in the circulation spaces to habitable spaces are within 7.5m of a detector/alarm head.
- They are positioned more than 300mm from any walls or light fittings. (If this is not possible in the case of light fittings, it must be proven that the light fitting will not adversely affect the operation of the detector).

The smoke alarms should be connected to the mains supply either on a single independent circuit or a single regularly used local lighting circuit. There should be a means of isolating the power to the smoke alarms without isolating the lighting.

The electrical installation should be in accordance with approved document P.

The fire detection and alarm system should be properly maintained and an installation and commissioning certificate provided to the building control body and building owner. Occupiers should receive the relevant information concerning the operation and maintenance of the alarm system.

CARBON MONOXIDE ALARMS - FOR SOLID FUEL APPLIANCES (UP TO 50kW) & OPTIONALLY FOR GAS APPLIANCES

Where providing new or replacement fixed solid fuel fired appliances, a carbon monoxide alarm must be provided. Carbon Monoxide detectors may optionally be provided for gas fired appliances. Locations shown on HSSP drawings are indicative for building control purposes

Specification

The detector/alarm should be:

- Battery operated and compliant with BS EN 50291:2001 with a warning device to alert users that the alarm is nearing the end of its life.
- Mains-powered type A alarm to BS EN 50291 (hard wired, not plug type) with sensor failure warning device.

Carbon Monoxide detector/alarm heads should be located in the same room as the appliance, at least 1.00m but not more than 3.00m from the appliance, if located on the ceiling, then 300mm from any wall or light fitting, if located on the wall, then above window/door head height, but more than 150mm from the ceiling line.

FIRE ESCAPE STRATEGY

Dwellings provide secondary means of escape at windows to front and rear along with protected stair core. Retail units have clear escape to front and rear.

FIRE PROTECTION TO LOAD-BEARING STEELS

Load-bearing Steelwork to be intumescently coated to provide 60 minutes fire resistance alternatively, Fully Encase exposed elements of load-bearing steel in 150mm Firecase boards to provide 60 minutes fire resistance

ACCESS TO AND USE OF BUILDINGS

Retail unit to provide disabled threshold and level access to front door, gradient not to exceed 1:20. Paths to be not less than 900mm wide.

Main entrance door must provide min clear opening width of 800mm between face of open door and face of stop. Depending on type of door to be fitted, contractor must check overall opening dimension required to achieve this. NOTE: timber mobility frames usually require a 932mm overall opening, and PVCu 1023mm. Rear door to be 910mm overall opening, unless used as principal entrance. Surface to be firm and even and any path to be not less than 900mm wide.

Dwelling staircase to be suitable for ambulant disabled part K compliant