



Lower Stanley Farm

Design Statement

February 2024

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SUMMARY

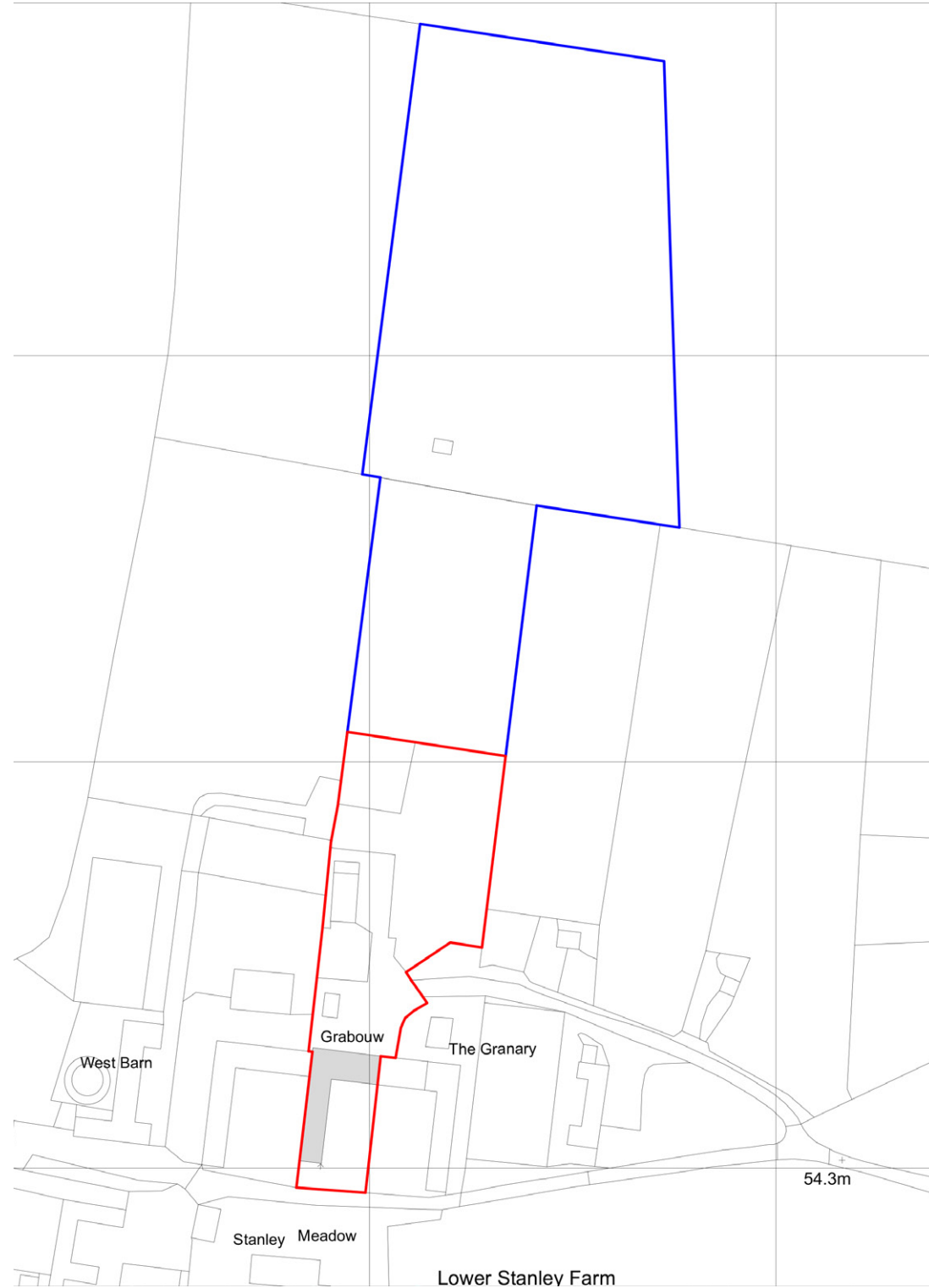
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Artel31 have been appointed by the owners of Lower Stanley Farm, Grabow to improve the existing house through the following measures:

1. Addition of two storey small extension to accommodate lounge and master bedroom to rear of property enhancing connection to garden.
2. Internal renovations throughout property to allow contemporary standard of family living space.
3. Provision of Photovoltaic panels to Southern roof and improving thermal performance of existing fabric.



01 - Location Plan



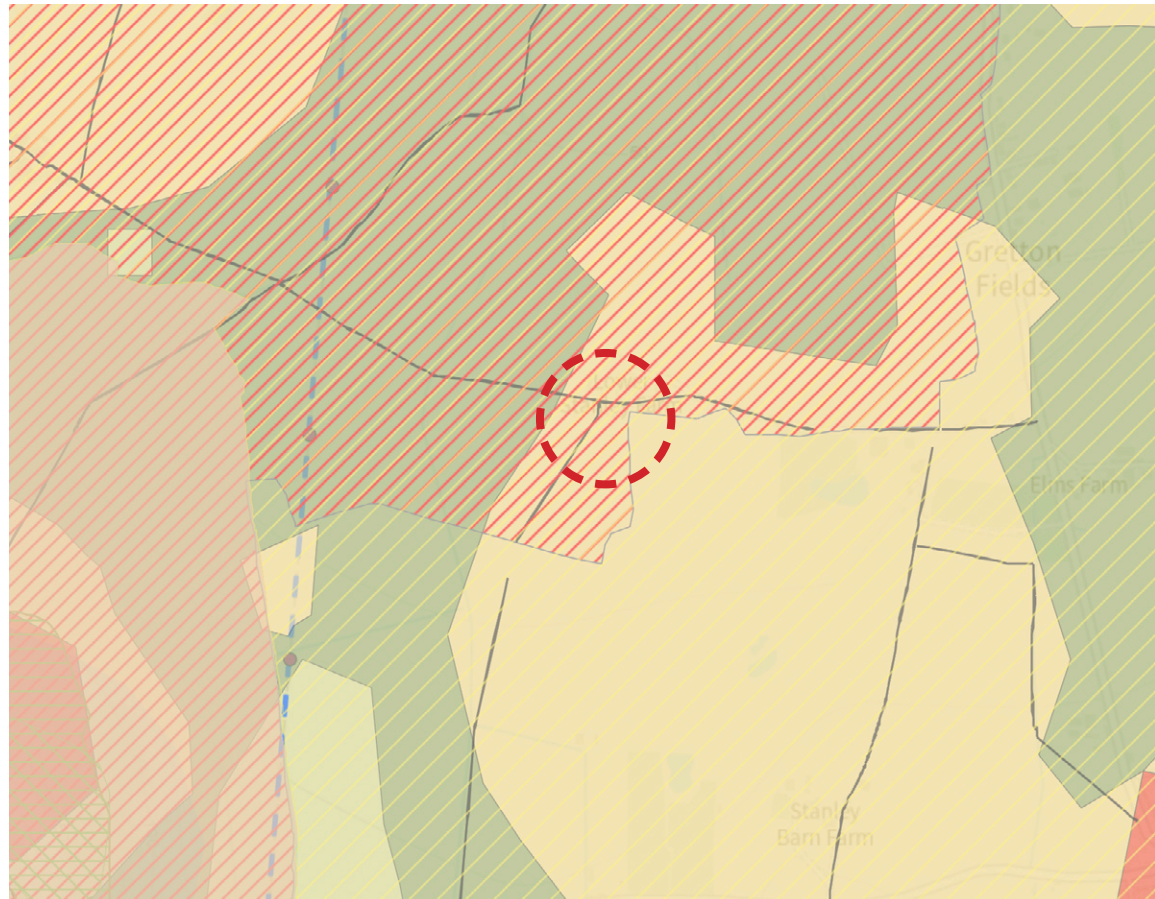
The overall site is made up of four converted agricultural buildings now all primarily used as residential units. This application relates to the middle plot referred to as *Lower Stanley Farm, Grabouw*. The site boundary consist of the dwelling house, outbuildings and a plot of equestrian and agricultural land to the north of the property. The application boundary only extends to the built on area of land with proposed works being confined to the dwellinghouse itself

This application seeks to gain approval to improve the existing property through internal alterations and minor additions as well as improving the long-term sustainability of the dwellinghouse.

Wider Context + Constraints



02 - Planning Site Constraints



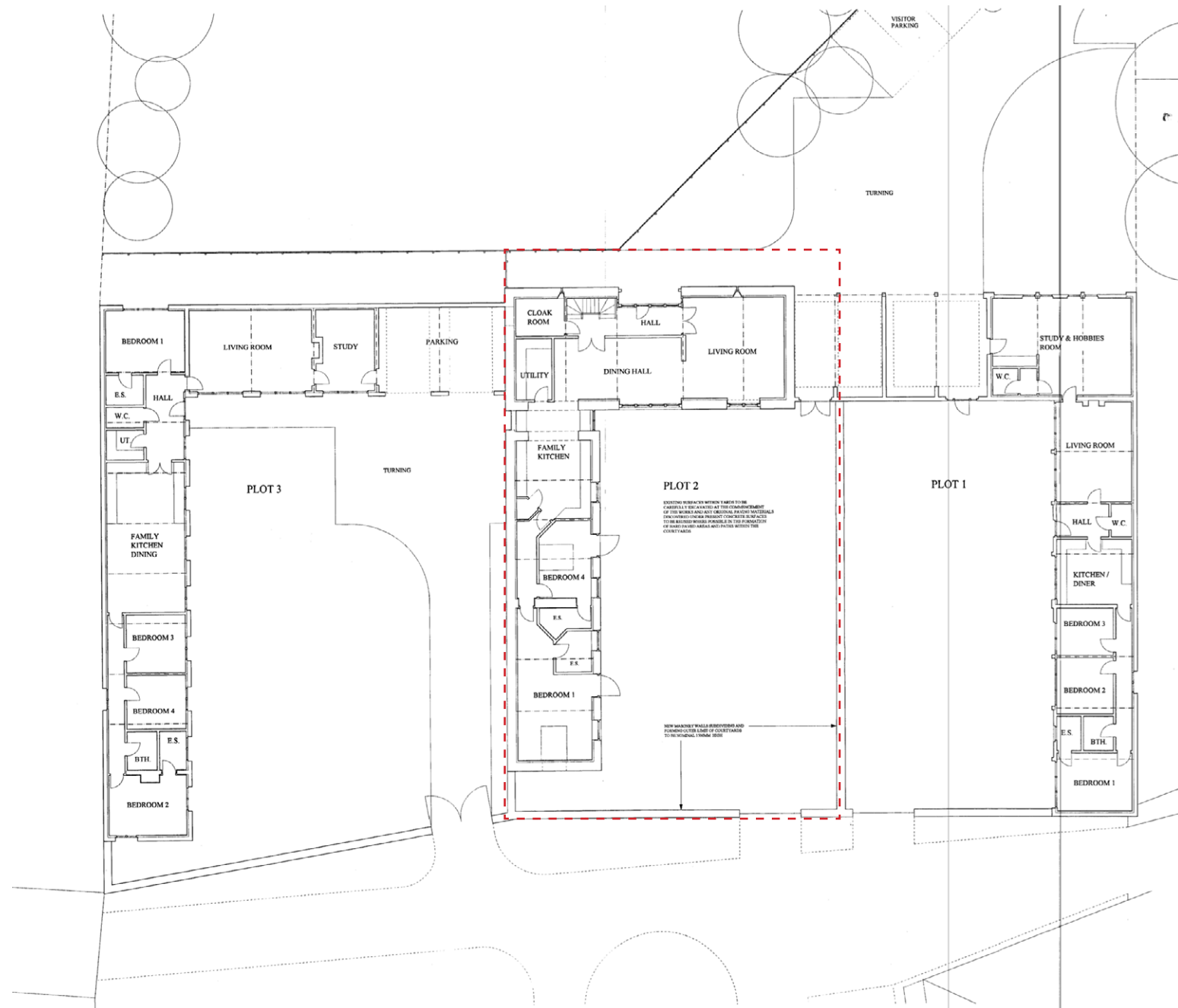
Tewkesbury Local Policy Map 2022 OS 100023417

Lower Stanley Farm is a terraced dwelling between the Alderton and Gretton area. The site is accessed via a private driveway.

The site has no historic or local significance. The existing property is not deemed a heritage asset and is not located within the curtilage of any other listed building. The site also falls outside of the Cotswold's AONB and is not in a conservation area or SSSI. The proposed site does however fall within the Local Tewkesbury Borough Plan; Policy LAN1 Special Landscape Areas.

The site itself is relatively secluded from any surrounding developments, and is characterised by largely open fields and sparsely populated pockets of agricultural developments.

03 - Drawings from 03/01438/FUL



In 2004 Lower Stanley Farm was granted permission to be converted into three residential units as part of application REF:03/01438/FUL. The previously agricultural barns now reside as separate residential dwellings; West Barn, The Granary and Grabouw, the latter of which this application relates to.

Following this another application was submitted in 2005 to amend the previous application to raise the garage pitch roof and provide annexe accommodation REF:05/01624/FUL as well as roof lights to the existing garage. This was refused but on appeal permission was granted to raise the pitch of the garage.

Subsequent permission was granted in 2007 REF:07/00102/FUL for both Grabouw and The Granary to convert the Granary garage into an annexe and turn the Grabouw car port into a fully enclosed garage.

Despite being converted into residential units the property does not meet contemporary family living through poor internal layouts and a weak connection to the garden and fields beyond.



04 - Local vernacular barns



The proposed extension is designed to enhance the provision of living accommodation and utilise existing built and proposed volumes to create more functional space from which to enjoy the private garden.

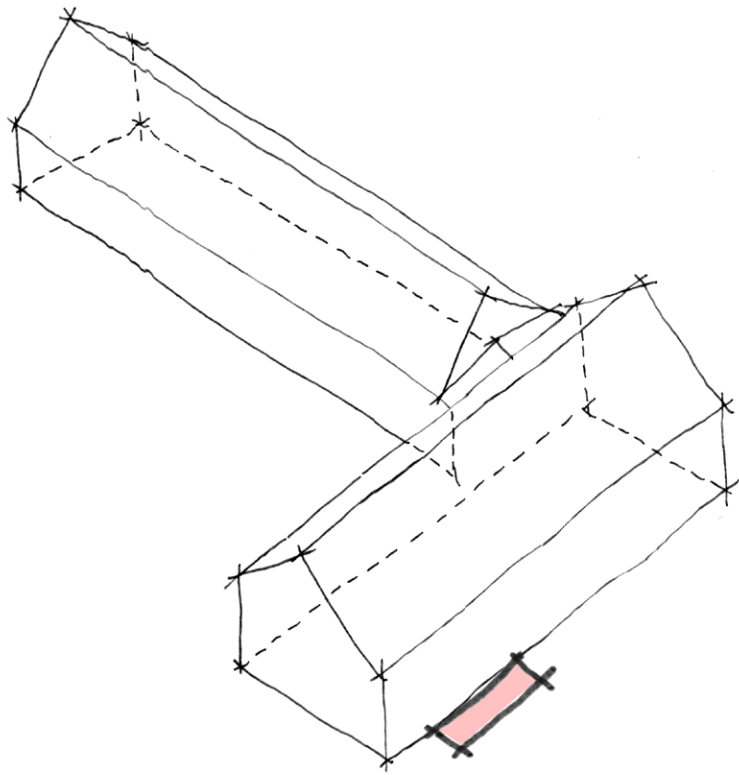
Internal layout alterations to the are focussed to improve flow, view, and connection with the gardens, while landscaping works are proposed to create a more functional external spaces that will enhance and formalise areas for outdoor living. Augmentation of the driveway and introduction of extra parking spaces will also allow the potential to turn cars around within the site, which is currently not possible.

Form

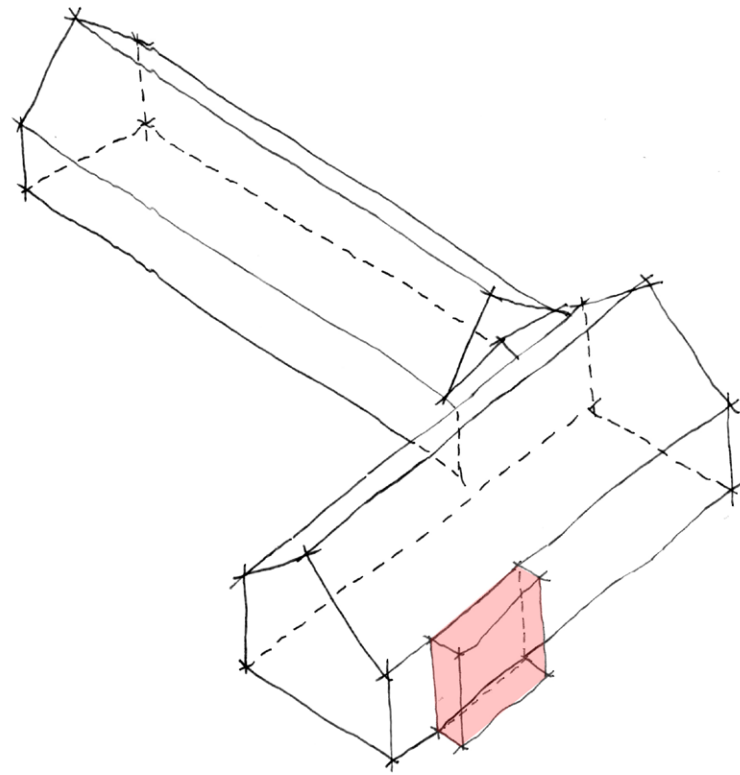
The proposed additions to the existing dwellinghouse will take the form a double height pitched structure. Inspiration has been taken from local vernacular Cotswold stone barns with a strong single pitched gable to the main barn form/



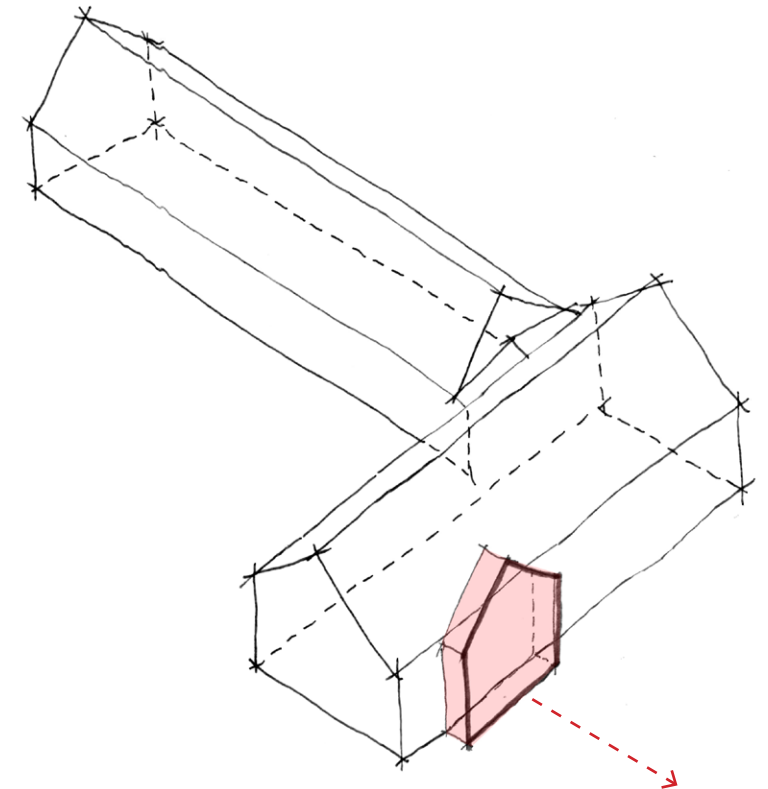
05 - Form Diagram



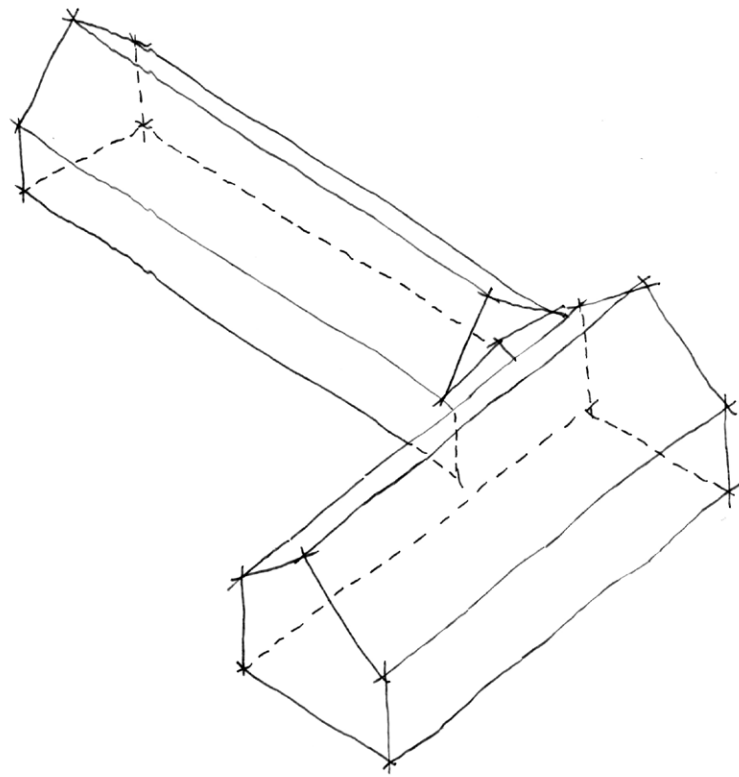
Initial Asymmetric Footprint of Additional Form



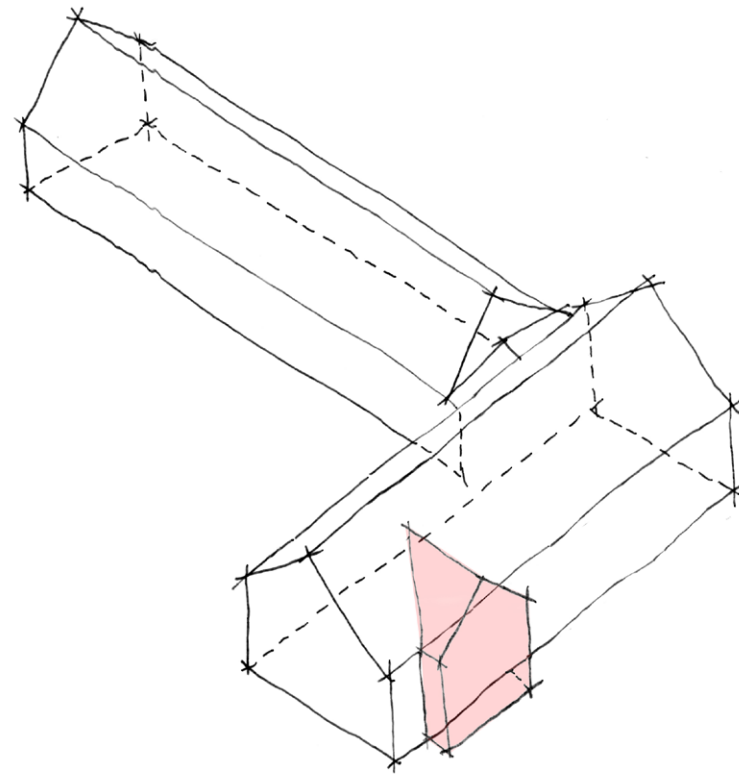
Two Story Mass of Extension



Pitched Vernacular Form +
Connection to the garden



Existing Mass



Proposed Mass

The size & scale of the proposed works have been carefully considered to minimise the impact to the host dwelling and nearby properties whilst allowing for the necessary upgrades to enhance the overall setting of the property.

The double storey volume takes cues from local vernacular barns and the glazing from the existing north and southern facade.

With much of the works being internal the extension will remain subservient to the host dwelling and minimising an overall volume increase.

EXISTING VOLUME: 1241m³

Additional Form: 26m³

INCREASE: 2.1%



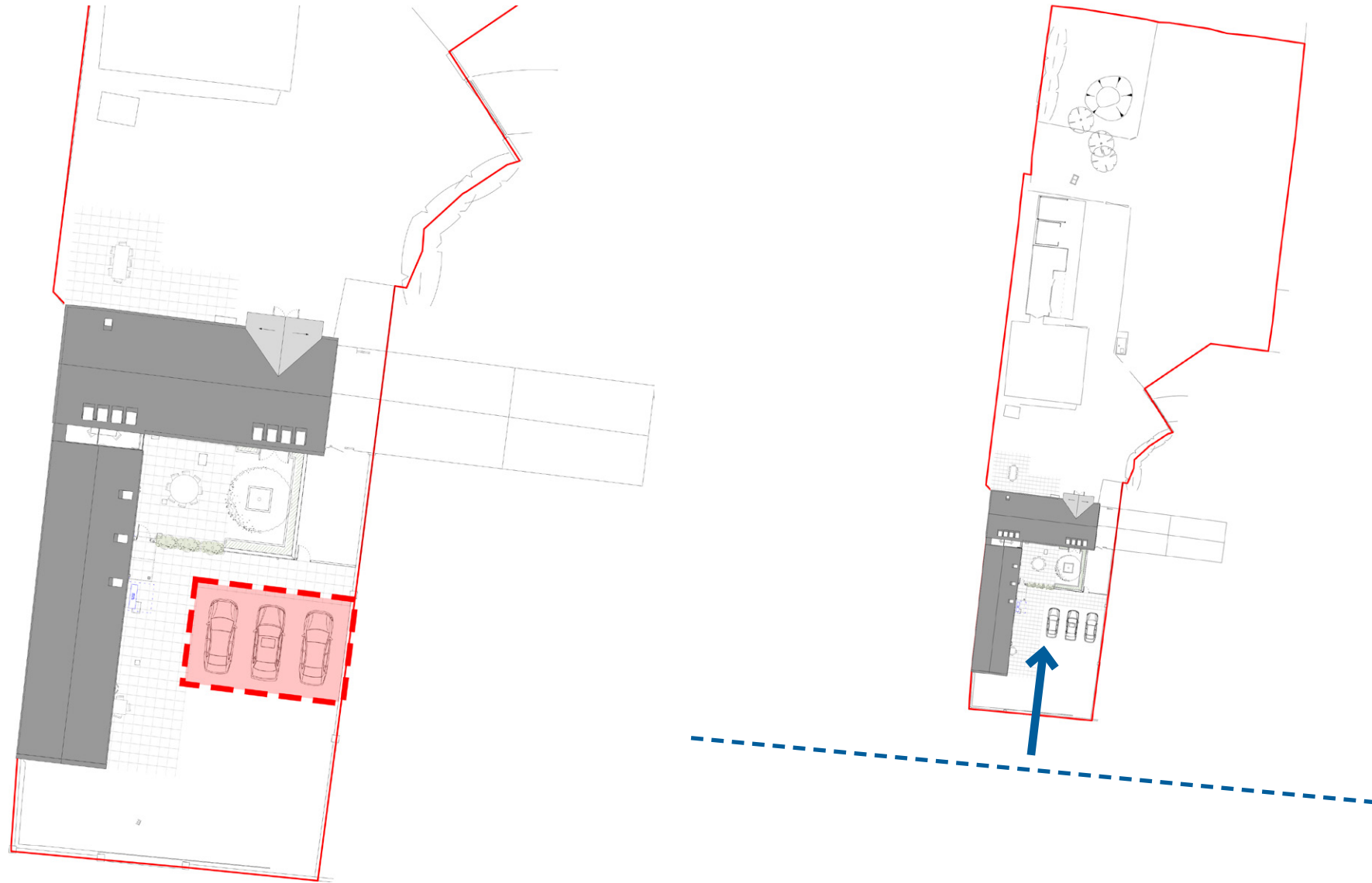
07 - Proposed materials



Proposed new materials are derived from those presently existing on the adjoining sites, to remain in keeping with the surrounding context.

To remain harmonious with the existing property, yet subtly signpost the new extension, natural stone finish is proposed to the new walls, while large format glazing and a slate tile roof also maintain a subtle contemporary appearance. The pallet of materials is intended to allow the original dwelling to be subtle discernible from its proposed extension, while still retaining a unifying feel.

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- 08 - Parking
- 09 - Access



Access

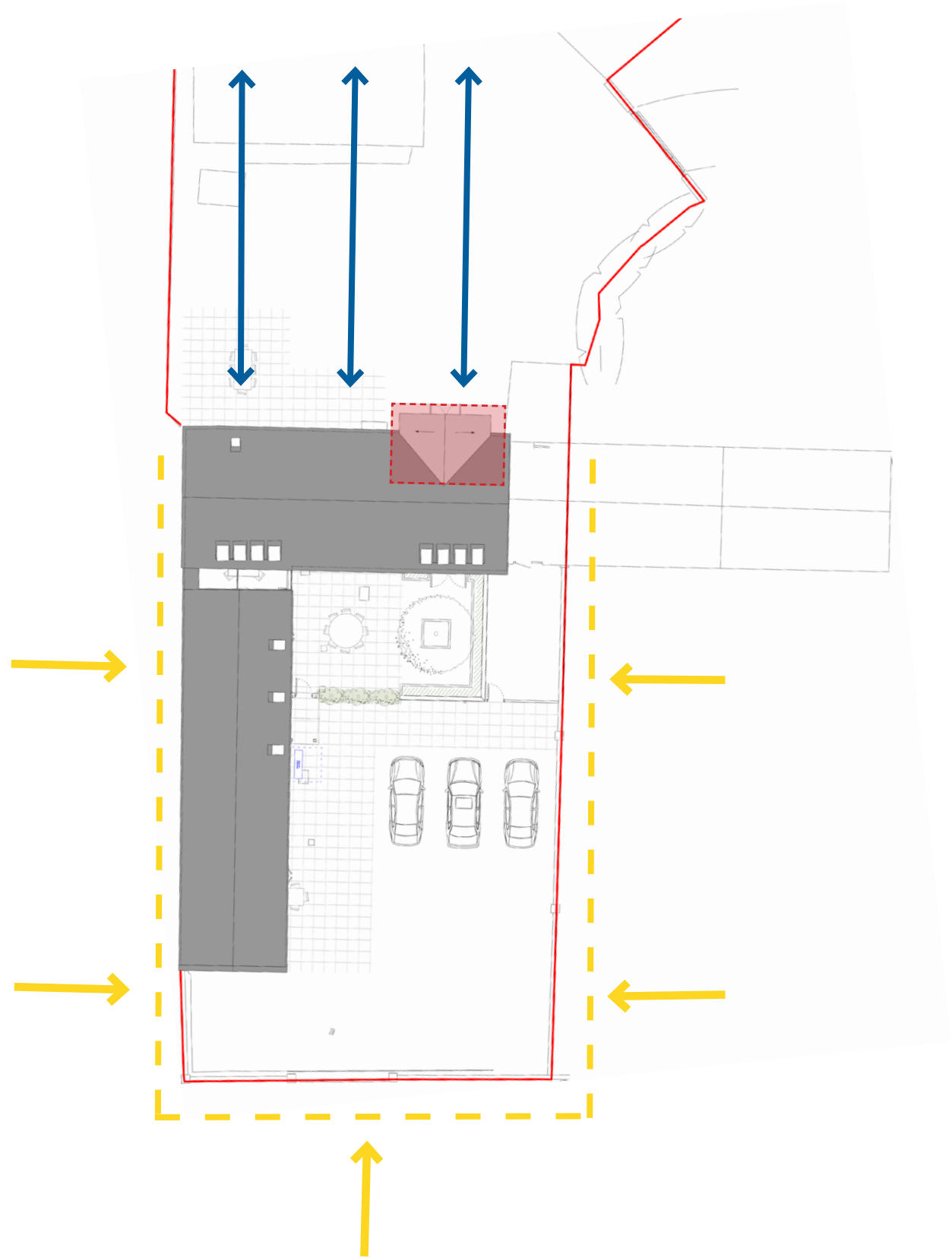
The existing vehicular and pedestrian access from the main private track will remain unchanged. The entrance to the South will also remain unchanged.

Parking

The existing property has no formal parking provision with the courtyard area of hard standing and gravel to allow for parking. External landscaping will be part of the proposed works which incorporate formal parking allowing for a minimum of three spaces.

Waste

The proposed scheme provides the necessary waste storage internally and externally, including recycling and green waste.



The site benefits from its agricultural form and siting. The courtyard nature of the dwellinghouse provides visual barriers from the other properties. Although the design ensures that minimal work is proposed to the southern and eastern elevation that face the courtyard the existing boundary treatments provide suitable visual barrier to neighbouring dwellings.

The most significant addition is the extension to the north elevation which looks out across the extensive garden and fields beyond, providing no overlooking issues to neighbouring properties and reducing any impact upon the site.



Area of external development

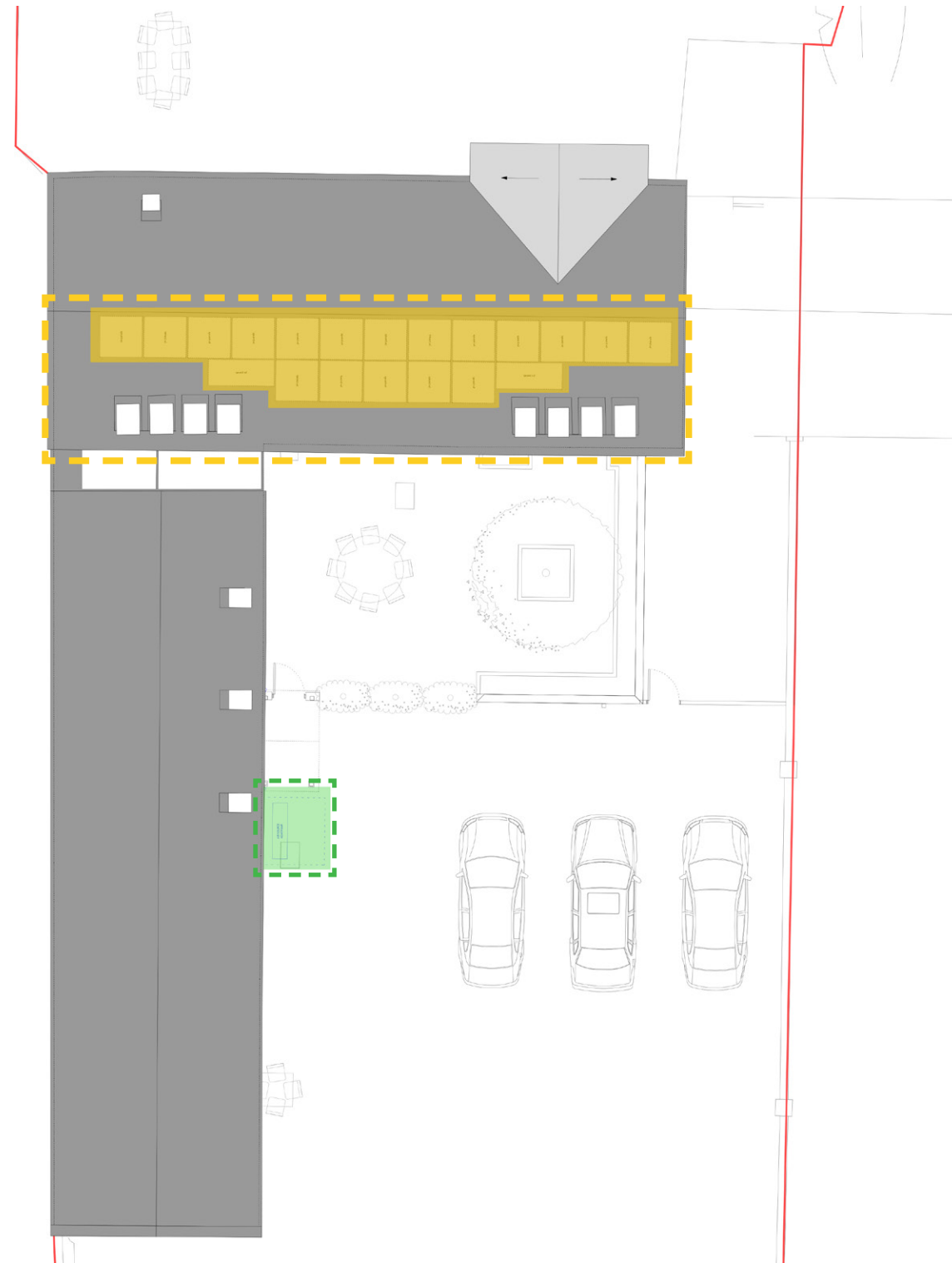


Physical and Visual Boundary between neighbour properties



Area of no impact - garden/field facing

11 - Renewable Diagram



Alongside the proposed changes to the dwellinghouse measures have been included to improve the overall sustainability of the property. A replacement Air Source Heat Pump and photovoltaic panels have been included as part of the proposed works.

The PV panels are estimated to generate 9122 kWh each year against an estimated annual electrical consumption of 8000 kWh. With this array we can estimate that 54% of PV generation will be directly used by the property with the remaining 44% sent to the grid.

The air source heat pump will replace the existing oil fired boiler providing, in combination with the PV panels a sustainable energy source.



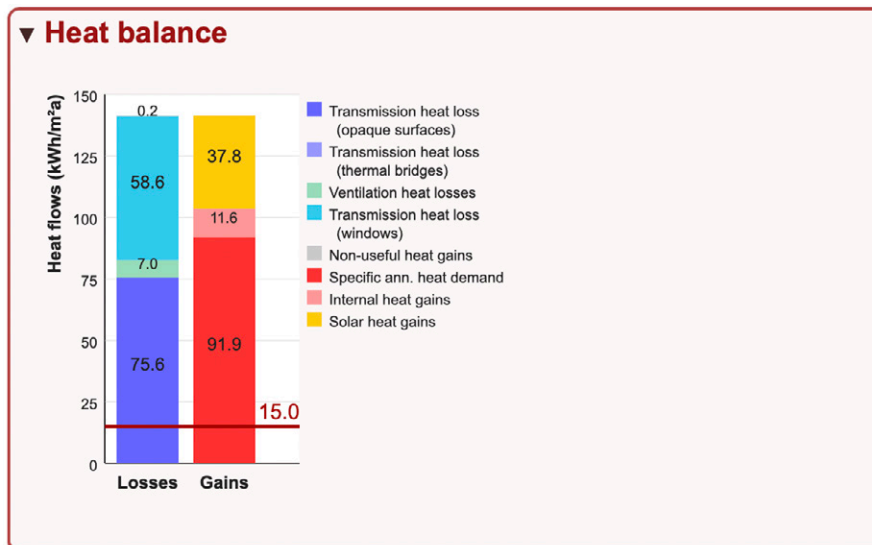
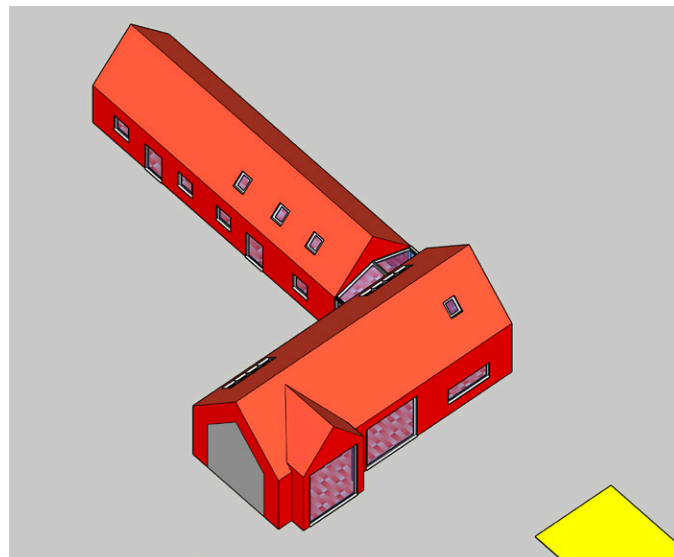
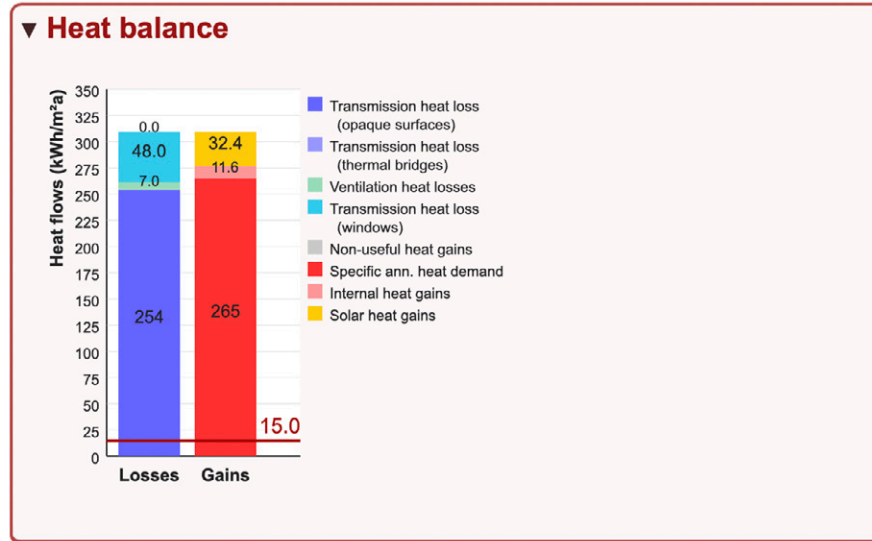
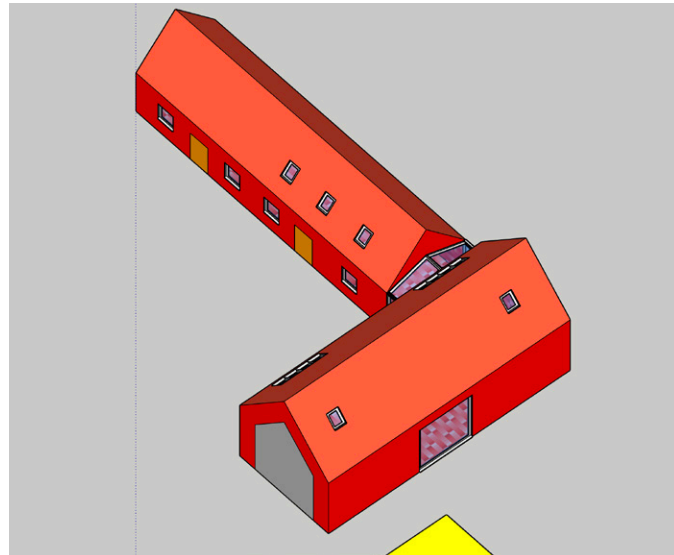
Air Source Heat Pump



Photovoltaic Panels



- 12 - Existing Design PH energy analysis
- 13 - Proposed Design PH energy analysis



Note: the calculations assume the house is being heated at 20 degrees all year round, attributing to a higher annual cost figure than what would be seen in reality.

The current house is very inefficient in terms of energy usage. By using the DesignPH software from the Passivhaus institute, inputting the existing U values of building elements and windows the results show that the property as it stands has an annual energy demand of 265 KWh/m² as shown. This also results in an approximate annual cost of £9,902.52 annual energy cost with the existing oil tank.

The proposed works will include improving the thermal performance of the existing property. This will be achieved through the addition of internal insulation to existing solid stone walls. At present the stone walls achieve a U-Value of 2.6W/km² by adding 50mm of internal PIR insulation we can achieve the Building control retrofit target of 0.28W/km². Furthermore, where possible glazing will be replaced with highly performing units and the new gable extension to the north will be of modern thermally efficient construction.

Re-analysing the dwelling following the improvements the property can achieve an annual energy demand of 92 KWh/m². A reduction of 173 KWh/m². Retaining the oil tank we can reduce the client's annual cost to £3,266 through the proposed measures. By replacing the existing oil fired boiler with an ASHP the greater efficiency (280%) allows theoretically for a total annual cost of £3,180 for the same energy requirement with the added benefit of providing along with the PV panels a total renewable energy source.

The existing property Lower Stanley Farm, Although renovated previously is currently not fit for contemporary family living. The proposed works seek to primarily improve the internal layout and flow of the dwelling and improve connection out the private garden through an addition of a sympathetic extension to the northern elevation.

Further intervention will help improve the long-term sustainability of the property through internally insulating the walls, improving the thermal performance of the dwelling and proposing photovoltaic panels and an air source heat pump for renewable energy generation.

Overall the proposed works will have little impact upon its setting and appearance by virtue of much of the works being to the interior of the house. The extension to the north is minimal in its footprint and its pitched roof takes precedent from local vernacular Tythe barns providing an sympathetic addition which in turns creates a much greater connection out to the garden and fields to the north of the property.