Energy Statement

Energy-Efficient Design

The new home is being designed using the Passivhaus standard as a guiding principle, ensuring a fabric-first approach to energy efficiency. This includes high-performance insulation, excellent airtightness, and careful detailing to reduce thermal bridging.

The dwelling will significantly exceed minimum Building Regulation requirements, aiming for a 20% improvement in energy performance through passive solar design and efficient orientation.

Renewable Energy Strategy

The current design includes plans for solar photovoltaic panels to provide on-site renewable electricity generation.

This technology has been chosen to work in harmony with the high-performing building fabric, reducing operational carbon emissions and aligning with Mid Sussex Policy DP38, which encourages renewable energy integration and low-carbon development.

Ventilation and Lighting

A Mechanical Ventilation with Heat Recovery (MVHR) system will be incorporated into the design, ensuring a consistent supply of fresh air while retaining internal heat. The layout of the building has been coordinated to accommodate ductwork within ceiling voids.

The home will also feature dedicated low-energy LED lighting throughout, and all appliances specified will be A+ rated or better to minimise internal heat gains and reduce electricity use.

Internal view of proposed scheme

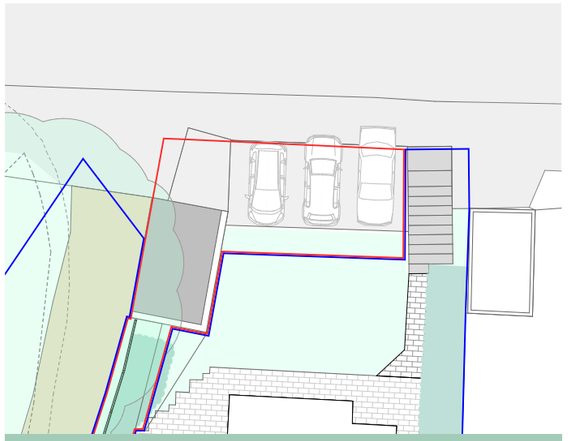
Access

11.1 Access and Parking

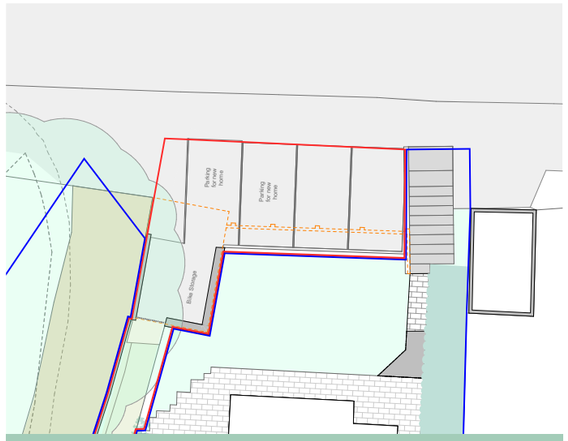
On arrival at the front of the property, you arrive at a paved space with a timber-faced retaining wall with 3 parking spaces and a garage for the existing 4-bed home.

The existing parking space can handle 4 cars being parked to the front but does occasionally have an overhang for longer cars when they are parked there. The current parking delineation is identified by the posts of the retaining wall symbolising the bays for parking.

Our proposal looks to move the existing retaining wall in front of the parking lot back by a metre and demolish part of the existing garage. The rest of the garage will be used as external storage for the new dwelling for bicycle and paddle board storage.



Existing Parking Plan, Ecotecture.



Proposed Parking Plan, Ecotecture.

Image of existing parking space from street, Google Maps.

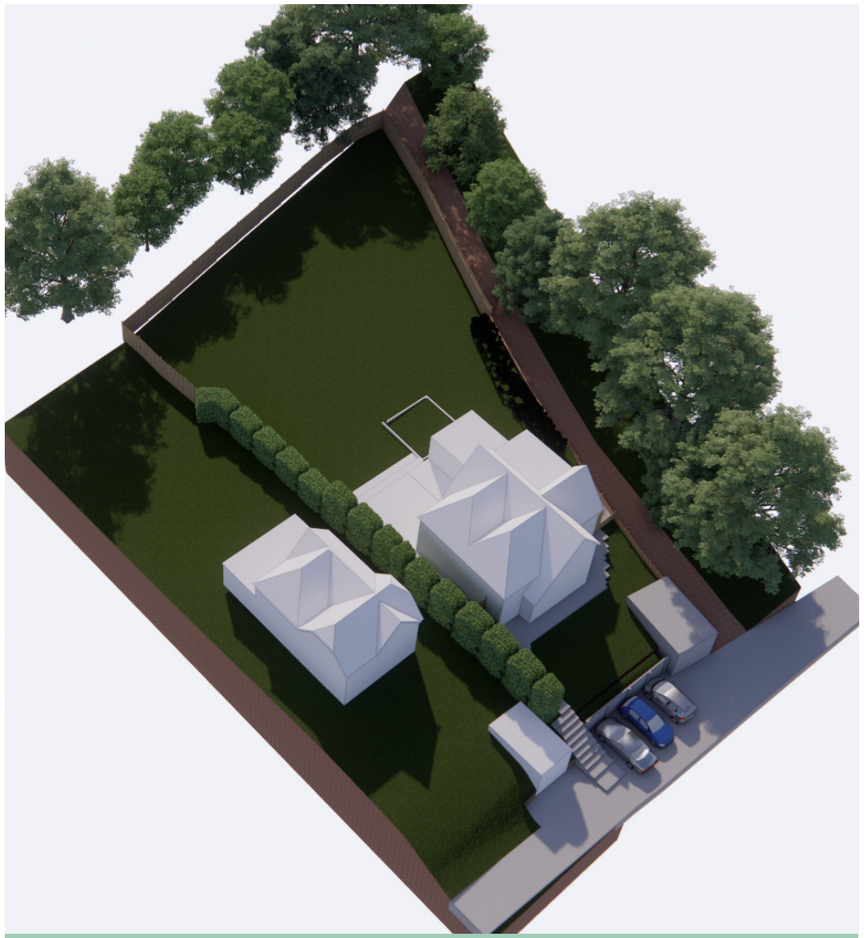


Image of current access from street, Ecotecture.

Image of current access from street, Ecotecture.

Conclusion

12.1 Conclusion

The proposed new dwelling at 2 Keymer Road has been carefully designed to respond positively to both its immediate setting and the wider character of Hassocks. It represents a thoughtful and well-considered form of infill development that aligns with the spatial strategy of the Mid Sussex District Plan and the sustainability goals set out in the Hassocks Neighbourhood Plan.

The design takes inspiration from local architectural precedents and materials found within the South Downs context, while adopting modern construction techniques and Passive House principles to deliver a highly energy-efficient and environmentally responsible home. Natural materials, low-carbon technologies, and a clear fabric-first approach underpin the scheme's ambition to exceed regulatory standards.

In summary, the proposal makes efficient use of previously developed land in a highly sustainable location, enhances the appearance of the site and street scene, and delivers a modest, future-proofed home that respects its surroundings and contributes positively to the local housing mix.