## Climate & Sustainability Statement: 76 Royd Lane, Huddersfield

**Proposal:** Demolition of a poorly insulated outbuilding/WC and replacement with a modern, compliant structure; internal reconfiguration to integrate the kitchen and living areas; installation of a lobby skylight, high-efficiency boiler, and PIR lighting.

### Sustainable Design & Thermal Performance

The proposed works focus on replacing inefficient building fabric and optimizing the internal layout for passive thermal management:

- **Demolition & Upgrade:** The existing outbuilding room and WC, which currently suffer from severely deficient insulation, will be demolished. The replacement structure will be built using modern construction methods and high-performance insulation within the walls and roof, ensuring full compliance with current energy standards and eliminating a major source of heat loss.
- **Thermal Layout Integration:** By knocking through and integrating the kitchen and living room into a single, open-plan space, the property capitalizes on internal heat gains. Waste heat generated from cooking activities will naturally assist in warming the adjacent living area, reducing the reliance on excessive space heating.

### Daylighting & Energy Mitigation

- **Passive Solar & Daylighting:** A new skylight will be integrated into the lobby area. This maximizes natural daylight penetration deep into the floor plate, reducing the psychological and physical reliance on artificial lighting throughout the day.
- **System Upgrades:** A new, highly efficient boiler system will replace older, less economical plant equipment. Coupled with PIR sensor lighting in the hallway to prevent accidental energy drain, the project significantly reduces the property's lifecycle carbon emissions.