



WINDOWS AND DOORS

All new windows to be white uPVC or PFC aluminium framed with clear glazed double sealed units as required to be provided with factory fitted head ventilators providing min 5000mm² ventilation in habitable rooms and 2500mm² elsewhere. All windows to have operable casements to provide ventilation of min 1/20th floor area of room.

New Bi-fold doors to be 4.0m wide polyester powder coated aluminium framed and fitted with double glazed sealed units with toughened tempered safety glazing.

All glazing to be double glazed sealed units to BS EN 1279 Parts 2 and 3, with 6mm wide Argon filled cavity, with one pane of glass to be Pilkington K glass and one pane Optiwhite, to achieve a minimum U-value of 1.6W/m²K. All glazing to windows within 800mm and to doors within 500mm of the finished floor level is to be safety glazing to BS6262.

Supply and install 2 No. Velux rooflights Ref: CK02 550x780mm and installed in accordance with the manufacturers instructions.

Window and door installation to be undertaken by a competent contractor registered under the Fenestration self-assessment scheme by Fenssa Ltd or CERTASS Ltd or installed in strict accordance with the BS.

STRUCTURAL STEELWORK

Refer to Structural Engineers calculations, specification and details for all steelwork, frames, posts and beams and all connections and details. All structural steelwork to be installed in strict accordance with the Structural Engineers details.

Beam 1 - cranked beam inserted within flat roof level to support beam 2 and supported by 90x90mm SHS posts, built within inner leaf of external wall on splayed corner.

Beam 2 - inserted above flat roof level to support flat roof structure and mono-pitched rafters and supported over Beam 1 and SHS post or block infill down onto 15m long PS PCC Intel built over top of existing side return wall above internal double doors.

Beam 3 - PFC inserted over bi-fold door opening and fixed to side of SHS post.

NEW EXTERNAL WALLS

Extend above level of existing brick cill course with brick and block external cavity walling. Formed in 105m matching facing brickwork outer leaf, tied across cavity of a width to match existing wall thickness to 100mm thick Plasmapore Fibrolite thermal concrete blockwork inner leaf, all laid and pointed in 1:6 cement : lime sand mortar mix. Within cavity, insert 100mm thick Crown Dritherm by Owens Corning or similar with 37.5mm Kingspan Kooltherm K10 insulated plaster internal finish to achieve min 0.28W/m²K U-Value.

Leaves of cavity wall to be tied together using stainless steel vertical twist wall ties at 900mm vertical centres adjacent to openings and abutments. Bond leaves of new cavity wall to existing structure using stainless steel vertical wall starter ties by Furfix or similar.

Adjacent to window reveal of splay on side wall, insert 90x90mm SHS corner restraint post, welded to 100x100x500mm long MS base plate, angled accordingly and bolted down to concrete blockwork below cill level using M8 resin anchors. SHS to provide lateral restraint to splayed brickwork above cill level.

Insert IG LVS cavity Intel over window on side external wall and 90x50mm PFC over window on splayed wall bolted or site welded to SHS posts either side. Close cavity at reveals to windows and doors and insert vertical insulated Cavity Closer by Thermabate or similar.

Over bi-fold door opening insert steel beam 3 - PFC to structural engineer's details.

SERVICES

New installations and all alterations to existing gas fired appliances to be undertaken by a registered GAS SAFE installer and all heating and hot water installations to be undertaken by a person registered under the Building Engineering Services Competence Accreditation Ltd.

Central heating to be provided by wall mounted pressed steel radiators by Stensad or similar approved, extended from existing flow and return and fitted with thermostatic radiator valves throughout. Hot and cold water and central heating to be extended from existing supplies, with all new pipework concealed between floor joists or within boxing and heating / HW pipes to be insulated to limit heat loss.

All electrical services are to be extended from existing mains for small power, lighting etc. New lighting is to be energy efficient type with fluorescent or LED, not tungsten GLS bayonet, Edison screw or tungsten halogen fittings. All wiring and electrical work will be designed, installed, inspected and tested in accordance with the requirements of BS7671, the IEE 17th edition Wiring Guidance and Building Regulations Part P (Electrical Safety), by a competent person registered with an electrical self-certification scheme, authorised by the Secretary of State (BRE, BSA, ELECSA, NAPIT or NICEIC). The competent person is to send to the local authority a self-certification certificate within 30 days of completion of the electrical works. The Client must receive both a copy of the self-certification certificate and a BS7671 Electrical Installation Test Certificate and Forward copies to Building Control.

FIRE PROTECTION AND MEANS OF ESCAPE

If not already provided, install mains operated smoke detection system to BS 5446 Part 1. Install smoke detection units within ground floor hallway and first floor landing. All smoke and heat detectors to be provided with 24-hour battery back up facility. The system is to be tested, commissioned and certified by a Third Party Inspector.

ROBUST CONSTRUCTION

All methods of construction are to be robust to reasonably ensure that there are no caps or voids in the insulation layers and that cold bridging is avoided by the use of insulated thermal barriers at abutments where practicable. Junctions should be suitably sealed to ensure that air leakage is minimised, especially at window/door reveals. Robust construction details should be designed and constructed in accordance with TSO Robust Details Catalogue and executed on site with due diligence. If required by Building Control, construction is to be inspected and verified by a suitably qualified and experienced inspector, providing written verification of robustness in construction.

RAFT STRUCTURE

New flat roof structure to comprise 50x100mm C24 graded SW flat roof joists, fixed at 400mm c/c, built between existing rear external wall and bolted to sides of rafters using M10 bolts and bolted connections. Over top of joists, provide SW firings fixed across top of joists to fall 1 in 40 towards side edge. Overlay with 18mm WBP plywood, vapour control layer and lay 120mm thick Kingspan Thermafof TR2.7 insulation or similar, to form a non ventilated roof to achieve min U value of 0.28W/m². Over top surface of insulation, supply and lay single ply EPDM roofing membrane on primer coat installed in accordance with manufacturers instructions. At abutment to rear external wall, dress felt up brickwork and provide code 4 lead flashing or proprietary flashing trim.

Construct perimeter pitched roof to comprise 50x100mm SW rafters at 400mm c/c, fixed between steel beam 2 and fixed down over 50x100mm SVI wall plate, strapped down over inner leaf of external walls at max 2m c/c or cut over wall plate fixed down to PFC over doors.

Cut and trim joists for 2 rooflight apertures and double up rafters either side. Insert 100x100mm C24 SW hip rafters and on return roof, rafters to be fixed over 2 No 50x100mm SW plates bolted together above steel beam 1.

Provide breathable roofing membrane, Tyvek or similar, with 25x50mm SVI batten and overlaid with Eternit Rivendale Fibre cement roofing slates to include existing pitched roof over dining room, with half round or angular ridge and hip ties in mortar bed.

At eaves, provide white uPVC fascia boards and soffit closer.

SECTION

Outline of BEAM 1

BEAM 2

PCC LINTEL BEAM 3

underpin foundation

SUBSTRUCTURE AND GROUND FLOOR

Existing foundations have been determined to be 850mm deep, with limited 'toe' projection. Subject to the building inspector agreement, the foundations below the side wall and splay are to be underpinned to extend the depth to 12m and to be 450mm in width, extending from the back edge of existing foundation.

Existing ground floor structure to be retained.

RAINWATER DISPOSAL

All rainwater goods to be black plastic RW gutters and circular downpipes, to connect up to existing SW drainage system to be fully identified on site or to discharge into new 1m² rubble filled soak-away, situated min 5.0m from any building at front of dwelling.

EXISTING REAR ELEVATION

PROPOSED REAR ELEVATION

PROPOSED SIDE ELEVATION

0 1 2 3

SCALE 1: 50 @ A1

C		
B		
A		
<p>DATE: 20/08/2020</p> <p>ALL DIMENSIONS SHOULD BE CHECKED ON SITE. ANY DISCREPANCIES TO BE NOTIFIED TO THE ARCHITECT UPON DISCOVERY.</p> <p>David Rowe Dip.Surv</p> <p>D design</p> <p>23 MILL ROAD, BLETCHLEY, BUCKS TEL: 01295 425151 FAX: 01295 425152 E-mail: davidrowe@ddesign.co.uk</p>		
Client	MR AND MRS M. BROWN	
Job Title	DIMMOCKS NUP END LANE WINGRAVE BUCKS	
Drawing Title	ALTERATIONS TO EXISTING CONSERVATORY	
Scale	1: 50,	
Date	AUGUST 2020	Drawn By DRR
Dwg No	20/MB/001	Rev.