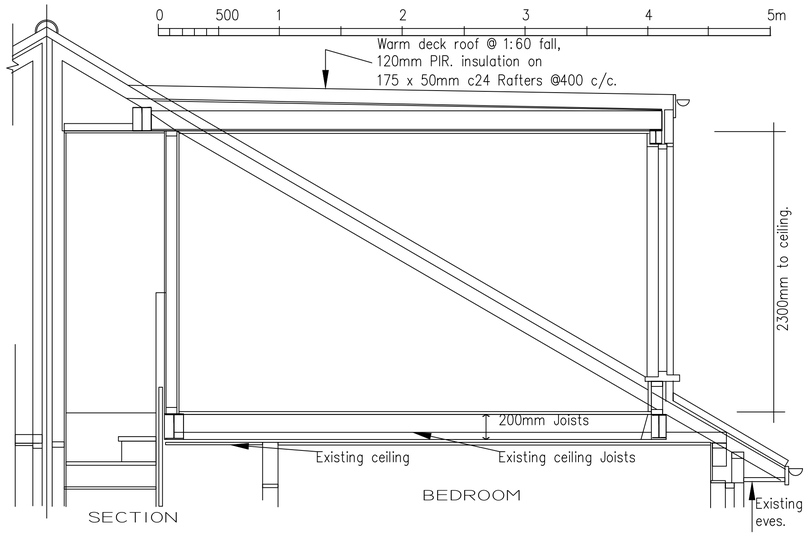
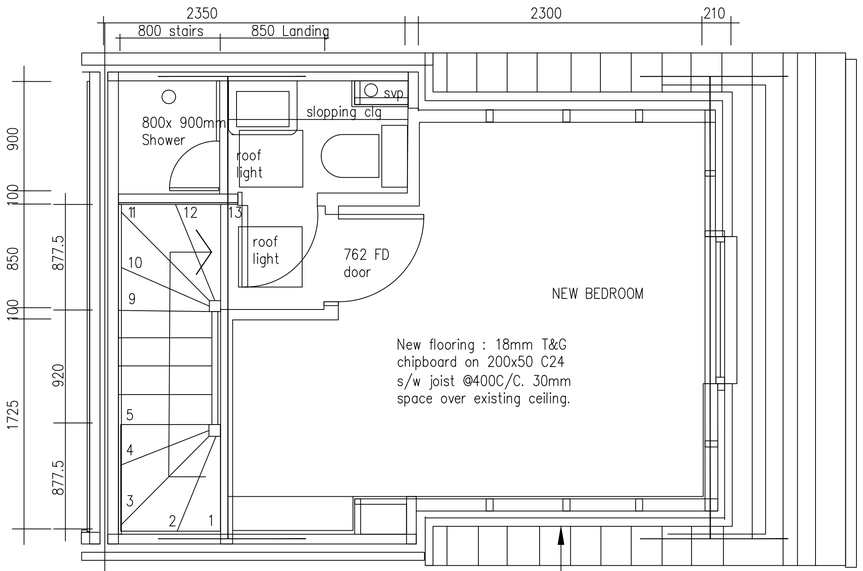


SECTION



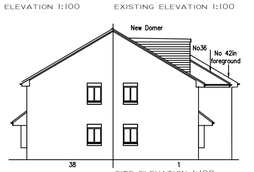
New Staircases, 13 EQL risers @205x230 goings

Existing timber frame & Facebrick cavity walls, 100x50mm Studs @ 600 c/c O/A 260 thick.

Loft extension walls: Plain tile hanging on battens, Breathable membrane OSB Sheating on 100x50mm studs @600c/c foiled faced insulation infill, 12.5 plaster board.

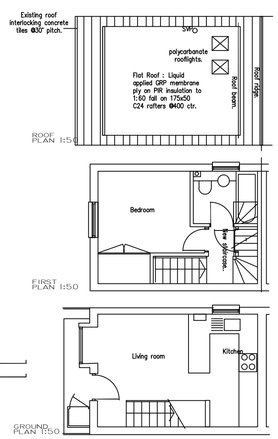
PROPOSED ELEVATION 1:100

EXISTING ELEVATION 1:100



SIDE ELEVATION 1:100

Materials:
Existing: Facebrick,interlocking concrete tiles,Softwood windows 1:100 0 1 2 3 4 5
Proposed : vertical plainconcrete tiles,softwood windows flat GRP roof with polycarbonate rooflights. 1:50 0 0.5 1



DO NOT SCALE THIS DRAWING WORK TO FIGURED DIMENSIONS ONLY.

ALL LEVELS & DIMENSIONS TO BE CHECKED ON SITE. ALL WORKS ARE TO BE CARRIED OUT TO THE SATISFACTION OF LOCAL & STATUTORY AUTHORITIES REQUIREMENTS & IN ACCORDANCE WITH CURRENT BUILDING REGULATIONS & CODES OF PRACTICE.

CONTRACTOR TO CHECK & VERIFY CONSTRUCTABILITY & TO COMPLY WITH BUILDING REGS PRIOR TO COMMENCING WORK AT ALL STAGES.

BUILDING REGULATIONS NOTES

PLANNING NOTE
A loft conversion for your house is considered to be permitted development and not requiring an application for planning permission, subject to the following limits and conditions:

A volume allowance of 40 cubic metres additional roof space for terraced houses*
A volume allowance of 50 cubic metres additional roof space
No extension beyond the plane of the existing roof slope of the principal elevation that fronts the highway
No extension to be higher than the highest part of the roof
Materials to be similar in appearance to the existing house
Side–facing windows to be obscure–glazed; any opening to be 1.7m above the floor
Roof extensions not to be permitted development in designated areas
Roof extensions, apart from hip to gable ones, to be set back, as far as practicable, at least 20cm from the eaves.

EXISTING STRUCTURE
Existing structure including foundations, floor, beams, walls, roof and lintels are to be exposed and checked for adequacy prior to commencement of work and as required by the Building Control Officer.

BEAMS AND STRUCTURE
Engineer's Structural calculations and details are to be provided for all beams, roof, lintels, joists, bearings, padstones and any other load bearing elements before works commence on site. New steel beams to be encased in 12.5mm Gyproc FireLine board with staggered joints, Gyproc FireCase or painted in Nullifire S or similar intumescent paint to provide 1/2 hour fire resistance as agreed with Building Control. All fire protection to be installed as detailed by specialist manufacturer.

DORMER CONSTRUCTION
To achieve minimum U Value of 0.28W/m²K
Structure to engineer's details and calculations. Tiles hung vertically on 25 x 38mm preservative treated battens (vertical counter battens to be provided to ensure vented and drained cavity if required) fixed to breathable membrane (having a vapour resistance of not more than 0.6 MNs/g) and 12mm thick W.B.P external quality plywood sheathing (or other approved). Ply fixed to treated timber frame studs constructed using: 150mm x 50mm head and sole plates and vertical studs (with noggins) at 400mm centres or to structural engineer's details and calculations.
Insulation between studs to be 100mm Kingspan Thermawall TW55, provide a VCL and 22mm Gyproc Thermaline Basic over the studs. Finish with 3mm skim coat of finishing plaster.
All junctions to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally. Dormer walls built off existing masonry walls to have galvanised mild steel straps placed at 900 centres. Dormer cheeks within 1m of the boundary to be lined externally with 12.5mm Supalux and 12.5mm Gyproc FireLine board internally to achieve 1/2 hour fire resistance from both sides.

WARM FLAT DORMER ROOF
(imposed load max 1.0 kN/m² – dead load max 0.75 kN/m²)
To achieve U value 0.18 W/m²K
12.5mm spa solar reflective chippings to achieve aa designated fire rating for surface spread of flame bedded in bitumen on three layer felt to BS 6229:2003 on 22mm external quality ply over 120mm Kingspan Thermarоof TR27. Insulation bonded to 22mm exterior grade plywood on firrings to give 1:60 fall on 47 x 195mm C24 timber joists at 400 centres max span 4.51m (see engineer's details for sizes). Ceilings of 12.5mm plasterboard over vapour barrier with skim plaster finish.
Provide restraint to flat roof by fixing of 30 x 5 x 1000mm ms galvanised lateral restraint straps at maximum 2000mm centres fixed to 100 x 50mm wall plates and anchored to wall.

THIS IS A GENERAL GUIDE BASED ON NORMAL LOADING CONDITIONS FOUND IN DOMESTIC CONSTRUCTION. IT IS YOUR RESPONSIBILITY TO ASSESS YOUR DESIGN TO ASCERTAIN WHETHER ENGINEER'S DETAILS/CALCULATIONS ARE REQUIRED. PLEASE REFER TO THE TRADA DOCUMENT –'SPAN TABLES FOR SOLID TIMBER MEMBERS IN FLOORS, CEILINGS AND ROOFS FOR DWELLINGS' OR ASK YOUR BUILDING CONTROL OFFICER FOR ADVICE.

STUD ASHLAR/DWARF WALL
To achieve minimum U Value of 0.28W/m²K
Construct stud wall using 100mm x 50mm head and sole plates and vertical studs (with noggins) at 400mm centres or to structural engineer's details and calculations. Insulation between and over studs; 100mm Kingspan Thermawall TW55 between plus 22mm Gyproc Thermaline Basic over with VCL.
Finish with 3mm skim coat of finishing plaster. All junctions to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally.

UPGRADING CAVITY PARTY WALL (cold adjoining space)
The existing party walls must be checked for stability and be free from defects as required by the Building Control Officer.
Provide a scratch coat render to existing wall. Mechanically fix 62.5mm Kingspan Kooltherm®K18 insulated dry-lining board to 25 x 50mm treated timber battens set at maximum 600mm centres on to exisitng wall and positioned horizontally at floor and ceiling level.
Fix using drywall screws or galvanised clout nails placed at 150mm centres.
Tape joints and seal perimeter edges with mastic, to provide a vapour control layer (VCL). All work in accordance with BS 8212: 1995 (Code of practice for dry lining).

UPGRADE OF EXISTING FLOORS
Ensure first floor achieves modified half–hour fire resistance.
New second floor –Joists to be 50mm minimum from chimney breasts. (joist size to structural engineer's details and calculations) Provide min 20mm t and g chipboard or timber board flooring. In areas such as kitchens, utility rooms and bathrooms flooring to be moisture resistant grade in accordance with BS EN 312:2010). Identification marking must be laid upper most to allow easy identification. To upgrade to half hour fire resistance and provide adequate sound insulation lay minimum 150mm Rockwool insulating material or equivalent on chicken wire between joists and extended to eaves. Chicken wire to be fixed to the joists with nails or staples these should penetrate the joists side to a minimum depth of 20mm, in accordance with BRE–Digest 208 1988. Joists spans over 2.5m to be strutted at mid span use 38 x 38mm herringbone strutting or 38mm solid strutting (at least 2/3 of joist depth). Provide lateral restraint where joists run parallel to walls. Floors are to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845–1 at max 2.0m centres, straps to be taken across minimum 3 no. joists. Straps to be built into walls. Provide 38mm wide x ¼depth solid noggins between joists at strap positions.

NEW STAIRCASE
Dimensions to be checked and measured on site prior to fabrication of stairs.
Timber stairs to comply with BS585 and with Part K of the Building Regulations. Max rise 220mm, min going 220mm. Two risers plus one going should be between 550 and 700mm. Tapered treads to have going in centre of tread at least the same as the going on the straight. Min 50mm going of tapered treads measured at narrow end. Pitch not to exceed 42 degrees. The width and length of every landing should be at least as great as the smallest width of the flight. Doors which swing across a landing at the bottom of a flight should leave a clear space of at least 400mm across the full width of the flight. Min 2.0m headroom measured vertically above pitch line of stairs and landings. However, if there is not enough space to achieve this height the headroom will be satisfactory if the height measured at the centre of the stair width is 1.9 m reducing to 1.8m at one side of the stair. Handrail on staircase to be 900mm above the pitchline, handrail to be at least one side if stairs are less than 1m wide and on both sides if they are wider. Ensure a clear width between handrails of minimum 600mm. Balustrading designed to be unclimbable and should contain no space through which a 100mm sphere could pass. Allow for all structure as designed by a Structural Engineer.

ELECTRICAL WORKS
All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self certification scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to the Council.

INTERNAL LIGHTING
Install low energy light fittings that only take lamps having a luminous efficiency greater than 45 lumens per circuit watt and a total output greater than 400 lamp lumens. Not less than three energy efficient light fittings per four of all the light fittings in the main dwelling spaces to comply with Part L of the current Building Regulations.

MEANS OF ESCAPE – Fire doors
Form a protected escape stairway by providing half hour fire resistance to all partitions as well as floors and ceilings above and below rooms. Stairway to be protected at all levels – from the loft room/rooms then leading directly to an external door at ground level (no inner rooms allowed). All doors on to the stairway must be FD20 rated fire doors to BS 476–22:1987 (fitted with intumescent strips rebated around sides & top of door or frame if required by BCO). Where applicable, any glazing in fire doors to be half hour fire resisting and glazing in the walls forming the escape route enclosure to have 30 minutes fire resistance and be at least 1.1m above the floor level or stair pitch line.

SMOKE DETECTION
Mains operated linked smoke alarm detection system to BS EN 14604 and BS5839–6:2004 to at least a Grade D category LD3 standard to be mains powered with battery back up to be placed on each storey with an additional interlinked heat detector at ceiling level in kitchens if requried by BCO. Smoke alarms should be sited so that there is a smoke alarm in the circulation space on all levels/ storeys and within 7.5m of the door to every habitable room. If ceiling mounted they should be 300mm from the walls and light fittings. Where the kitchen area is not separated from the stairway or circulation space by a door, there should be an interlinked heat detector in the kitchen.

BACKGROUND AND PURGE VENTILATION
Background ventilation – Controllable background ventilation via trickle vents to BS EN 13141–3 within the window frame to be provided to new habitable rooms at a rate of min 5000mm²; and to kitchens, bathrooms, WCs and utility rooms at a rate of 2500mm²
Purge ventilation – New windows/rooflights to have openable area in excess of 1/20th of the floor area, if the window opens more than 30° or 1/10th of the floor area if the window opens less than 30°
Internal doors should be provided with a 10mm gap below the door to aid air circulation.
Ventilation provision in accordance with the Domestic Ventilation Compliance Guide.

FLAT ROOF VENTILATION
Cross ventilation to be provided on opposing sides by a proprietary eaves ventilation strip equivalent to 25mm continuous with fly proof screen. Flat roof insulation is to be continuous with the wall insulation but stopped back to allow a continuous 50mm air gap above the insulation for ventilation.

RAINWATER DRAINAGE
New rainwater goods to be new 110mm upvc half round gutters taken to and connected into 68mm dia upvc downpipes

ABOVE GROUND DRAINAGE
All new above ground drainage and plumbing to comply with BS EN 12056–2:2000 for sanitary pipework. All drainage to be in accordance with part H of the Building Regulations. Wastes to have 75mm deep anti vac bottle traps and rodding eyes to be provided at changes of direction.

Size of wastes pipes and max length of branch connections (if max length is exceeded then anti vacuum traps to be used)
Wash basin – 1.7m for 32mm pipe 4m for 40mm pipe
Bath/shower – 3m for 40mm pipe 4m for 50mm pipe
W/c – 6m for 100mm pipe for single WC
All branch pipes to connect to 110mm soil and vent pipe terminating min 900mm above any openings within 3m.
Or to 110mm upvc soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting.
Waste pipes not to connect within 200mm of the WC connection. Supply hot and cold water to all fittings as appropriate.

NEW WINDOWS
New windows to be double glazed with 16mm argon gap and soft coat low–E glass. Window Energy Rating to be Band C or better and to achieve U–value of 1.6 W/m²K.

FOUNDATIONS: MASS FILL 600x1500mm TRENCH FOUNDATION AS STRUCTURAL

NOTE:
NEW DORMER VOLUME IS APPROX 40 CUBIC METRES & CONFORMS TO LOCAL AUTHORITY PERMITTED DEVELOPMENT REQUIREMENTS

REV	–	DATE
	–	–

PROJECT: LOFT CONVERSION FOR MR K SONDI

LOCATION: 1 HAWTHORNE CRE, WEST DRAYTON, MIDX, UB7 9PA

TITLE: PLANS, ELEVATIONS & SECTION AS EXISTING & AS PROPOSED

DRAWING NO: KC - 01 REVISION: 0

SCALE: 1:25 / 1:50 / 1:100 DATE: AUG 24