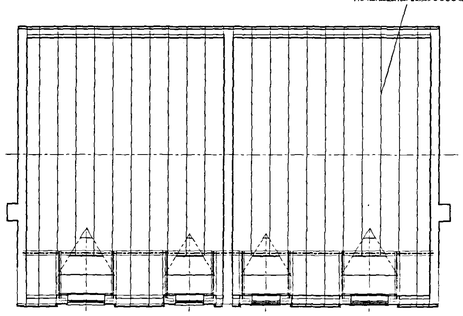
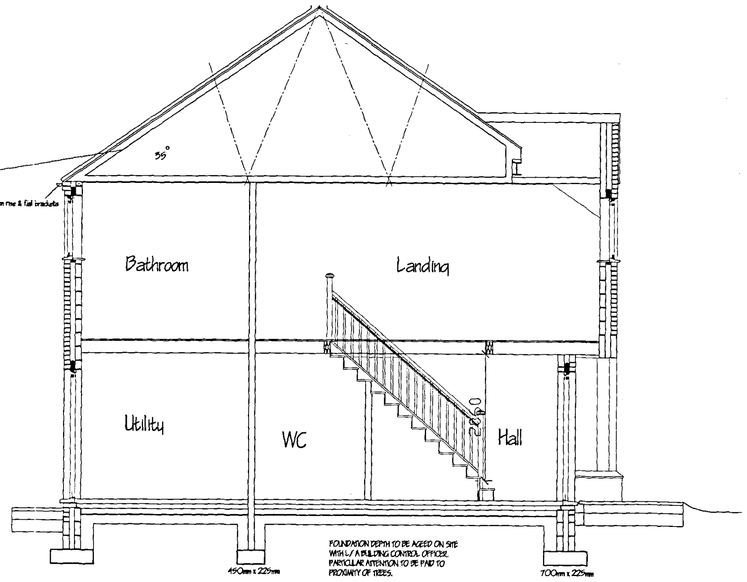
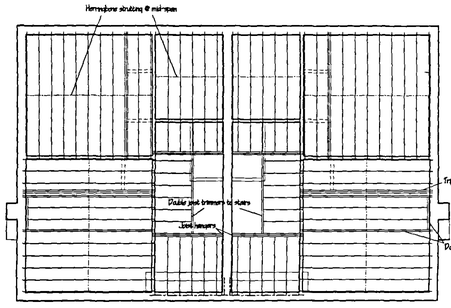


ROOF PLAN



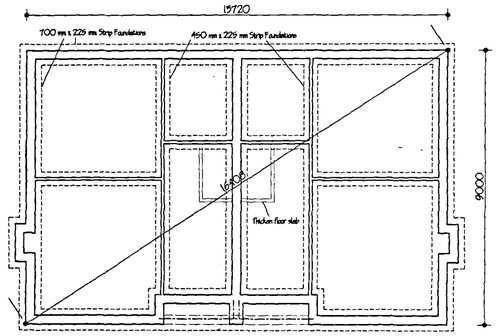
FOUNDATION DEPTH TO BE AGREED ON SITE WITH L/A BUILDING CONTROL OFFICER. PARTICULAR ATTENTION TO BE PAID TO PROXIMITY OF TREES.

TYPICAL SECTION



FIRST FLOOR PLAN

200 mm x 50 mm Joists @ 400 mm centres SC3 timber.



FOUNDATION PLAN

NOTE:
An archaeological investigation needs to be carried out on site which will entail trenches dug across the footprint of the dwelling to a maximum depth of 1.0 metre below ground level, therefore, an allowance to be made for additional stone, etc.

Additional imported stone, after archeaological investigation to be layed & compacted in maximum 300mm layers.

Preparation: -
Excavate site down approximately 100mm to remove topsoil and vegetation.

Foundations: -
Provide generally, GEN 3 concrete strip footings under walls as shown on drawing, 700 wide x 225 deep under cavity walls and 225mm thick walls (if any) and 450 wide x 225 deep under 100mm thick walls. Widen foundations at chimneybreast accordingly. Non-loadbearing walls to be built off ground floor slab thickened to 200mm over 450mm wide. Foundations taken down to an approved firm base approximately 900mm below ground level, subject to (recommended) soil test reports, NHBC and Local authority specifications.

Sub-structure Walling: -
100mm thick class A dense concrete blocks (7N/ mm2) made upped 150mm above ground level with PL quality, splash course brickwork (common internally, engineering or facing brickwork externally). Provide weak mix concrete infill to base of cavities to terminate 225mm below lowest DPC level.

DPC's: -
All openings to be formed with vertical and horizontal polythene DPC's in cavity, DPC minimum 150mm above ground level to be lapped to ground floors DPM minimum 50mm. To lintels above openings on external walls provide suitable DPC cavity tray over lintel with stopends and at least 2no. catnic or see, Weepholes in brickwork per opening not more than 450mm apart.

Underground drainage: -
To be 110mm diameter UPVC pipes by approved manufacturer to be laid at a minimum fall of 1:70 bedded and surrounded in 100mm thick pea gravel. Where drains pass through walls provide over wall pre-cast concrete lintel, also leave 50mm opp around pipe and fill with compressible sealant, also mark both sides of opening with rigid sheet material to prevent entry of fill or vermin.
Inspection chambers to be either 300 or 450mm diameter UPVC base and risers with cast iron frames and cover (same manufacturer as pipes) . Covers to be: Grade C- light duty covers (to be screwed down) unless IC's are in driveways where Grade D - medium duty covers are to be used. Inspection chambers not to exceed 1.00mm below ground level (any deeper and a manhole will be required constructed to latest local authority specifications) . Back inlet gullies to be roddeable type. Protection to underground pipes as follows; where pipes are not under a road and have less than 600mm cover, concrete paving slabs should be laid on brickers above the pipes on minimum 100mm pea gravel. If under a road and have less than 900mm cover, reinforced concrete brickers should be used in lieu of paving slabs. In both cases a layer of compressible material needs to be placed under the brickers. All underground drainage to BS 8301.
Ground floor beam: -
Lay on reduced ground level minimum 150mm maximum 600mm thick well compacted (in 150mm layers) and graded hardcore. Over lay 1200 opaque DPM then 100mm thick GEN 4 concrete oversite.

Wallings: -
215 cavity wallings to consist of face brickwork to BS 5628: 1974 for clay bricks and BS 187: 1978 for calcium silicate bricks; 65 cavity build into cavity Rockwall cavity wall batts insulation boarding in accordance with makers instructions and approved certificate no. 85/ 1087. 100mm Tarmac Hemelite solid insulation blocks or similar. Cavity walls tied together using suitable stainless steel wall ties set 750 horizontally and 450 vertically to BS 1243: 1978 wall ties positioned at 300 vertical centres at all unbonded closures of cavity (within 225mm) ; close cavities with "Thermabate" preformed closer and provide between Foil DPC to CP 121: Internal walls of 100mm Tarmac Hemelite solid insulation blocks to receive 10mm sand / cement render and 5mm skim. Movement joints to be installed in brickwork and blockwork. In accordance with BS 5628, part 3, 1985 and manufacturers own design considerations.

Plasterwork: -
Walls to be plastered cement:lime:sand render with skim finish a total of 15mm thick including reveals and lintel soffits.

Flashings: -
All roof and wall abutments provide code 4 lead flashing and dress up wall in 150mm steps and over tiles all in accordance with BS 1173. Connect to patent stepped cavity tray system within cavity to stop the passage of water.

Lintels: -
All lintels to be manufactured by Messrs. IG and to be installed in accordance with makers instructions and to have minimum end bearing of 150mm and at external positions to have cavity tray DPC to CP 121. (See separate note) . Internal lintels not specified are either 80X 100 for load bearing walls and INTERNAL 100 lintel for non load bearing.

Studwork partitions: -
Form stud walls in 95 x 69 CLS softwood studs at 600mm centers with 95 x 69 CLS head and sole plates and noggins at 1200mm centers. Clad with 12.5mm Gyproc SoundBloc, scrim, tape joints and skim finish. Pack 25mm thick loosed Acoustic partition roll between studs.

Rainwater goods: -
Black PVC 115mm half round gutters on raw & fall brackets and 68mm dia down pipes to match including all bends, outlets, clips, brackets, connectors etc. and connect to underground drain to soakaway.

Soakaways: -
To be a minimum 5000mm from any building and to be 1m3 rubble filled with inlet pipe discharging to centre of soakaway.

Roof construction: -
Concrete interlocking tiles on 25 x 38 softwood treated timber battens on underfelt to BS 747 (type IF) lapped 150mm horizontally and vertically. On prefabricated trusses at centres and pitches stated on drawings all in accordance with BS 5268 part 3 (1985) . All bracing to be 25 x 100 softwood and positioned all in accordance with manufacturers instructions. Bracing to be fixed to gable wall. Trusses to be well secured to 50 x 100 wallplate. Provide 30 x 5 galvanized mild steel anchor and lateral restraint straps along line of wall plate, rafters and ties at 1800mm centres. Strap to be fixed to gable wall + span 3no. trusses. Provide pack and noggins to trusses at strap position. Roof truss design and certificate to be supplied to building control prior to erection on site.

Smoke alarms: -
Provide mains operated self-contained smoke alarms that confirmes to BS 5446 Part 1. Provide at least one on each floor positioned within 7000mm of living room, kitchen doors and 5000mm of bedroom doors. More than one smoke alarm to be interconnected and wired to a separately fused circuit. See drawing for positions.

Ceilings: -
Provide and fix 12.5mm Gyproc wallboard to all new roof ceilings. Provide and fix 12.5mm Gyproc SoundBloc to all new non-roof ceilings (i.e. Ceiling between two floors) and within floor provide 100mm thick fiberglass insulation. Nog all perimeters and board joints prior to fixing plasterboard to be fully support sheeting. Fix Gyproc coving and artex or skim finish to ceiling. To upstage ceiling provide 2no. layers of 12.5mm Gyproc wallboard layed with staggered joints. If room above provide to floor void fill fill of fiberglass insulation.

First floor construction: -
Provide and fix 19mm tongued and grooved flooring grade wood particle board on 50 x 200 SC3 grade softwood floor joists at 400mm c/ c. All stair trimming & trimmer joists to be 2no. 75 x 200 SC3 grade fixed together. Provide trebled up joists under partitions in addition to normal joist spacing, which will also take floor decking either side. Provide doubled up joists local under bath. Joists supported by internal walls to full bearing width of wall. At external wall positions joists to be supported by internal leaf of cavity construction which is then to be sealed around with silicone sealant or similar to the blockwork. At the party wall positions joists to be supported on suitable approved galvanized mn hangers fixed directly to walls. Alternatively, fix a 150 x 200 timber plate to the wall using 12mm dia zinc plated threaded bar sunk into wall 700mm and chemically anchored in place then bolted plate to wall using nut and oversize washer. Provide three flanges top and bottom of plate (400mm ac) at 800mm centers along plate. Joists then to be fixed to plate via speedy joist hangers or similar (hangers fixed to plate first before fixed to wall) . Provide solid strutting as shown on drawing. Provide 50 x 5 galvanized mild steel lateral restraint straps along line of joist parallel with wall at 1800mm centers. Strap to be fixed to wall + span 3no joists. Provide pack and noggins to joists at strap position.

Loft hatch: -
Size approx. 550 x 700, to be insulated, draught stripped and fitted with suitable fastening to compress draught seal.

Doors and Windows: -
To be softwood, hardwood or UPVC by specialist manufacturer. Style as shown on elevations. All to be fitted with double-glazed sealed units (at least 12mm cavity) using low-E glass (0.05) .

Above ground drainage: -
To be UPVC push fit, by an approved manufacturer. 40mm diameter waste from wash hand basin, shower, sink, 50mm diameter from bath and 110mm diameter from WC. All traps to be 75mm deep seal. All pipework etc. to be accessible throughout their runs for cleansing, repair and replacement. Shower floors to be raised minimum 150mm. Provide anti-siphon traps to appliances if the pipe run exceeds limit shown in diagram 3 page 9 of approved document H. Provide 110mm diameter soil and ventilating pipes as shown to terminate 900mm above window heads with a suitable ventilating terminal. Internal soil and vent pipes to terminate through roof void with flexi-ducting to suitable vent ridge or tile by the manufacturer. Any internal stub-stacks fitted with a pressure relief valve vent to be at least 1000mm above finished floor level. Drainage from condensing boiler to discharge into mon via a minimum pipework of 22mm diameter through a 75mm condensate trap. If an additional trap is provided externally to the boiler to provide the 75mm seal, an air gap should be provided between the boiler and the trap.

Protected glazing areas: -
Provide toughened glass to BS 6206 (1981) to following areas. To all windows within 800mm of finished floor level. To all door glazing within 1500mm of finished floor level. This also applies to side screens within 500mm of door. Protected glazing to be permanently marked with BS kite mark.

Hot water and heating etc.: -
Wet radiator system. Boiler to be Oil fired condensing boiler (SEDBUK 86%) . Install hot water heating pipework to provide hot and cold water supplied to all new appliances in the building and provide space heating to all new areas. Radiator positions to be as directed, all radiators to be fitted with thermostatic valves. It is not recommended to have thermostatic radiator valves fitted on the radiators in the room served by the room thermostat. Heating controls: Room thermostat, Cylinder thermostat and Programmer. Heating and hot water system to be fitted with flow controls e.g.: motorized valves, electrically interlocked with boiler and pump to prevent unnecessary boiler cycling. Heating engineer to provide a suitable commissioning certificate in accordance with that published as part of the benchmark code of practice upon completion (which is to be forwarded to the Building Control) .

Ground floor finish: -
Off oversite provide Celotex double-R GA2000 board (1no. GA2045 board) or similar approved product, then 900 gauge polythene vapour barrier then 75mm sand / cement screed with 1no. layer of chicken wire reinforcement.

Open Fire: -
To be capable of burning smokeless fuel. Hearth to be constructed of non-combustible material minimum 125mm thick. To project from face of wall by minimum 500mm and pass rounds by minimum 150mm, all in accordance with approved document part J. (part C 1-25) . Provide fireplace components as shown in diagram 2.15 of approved document part J. Provide lowered pavement vent in external wall to give minimum 50% of the appliance throat opening area positioned 150mm above floor level. Provide 65 x 100 pre-stressed concrete lintel over chimney opening. Durable notice detailing performance capabilities to be affixed in building by installer.

Decoration: -
Allow for decorating all new surfaces; ensure full and proper preparation of all surfaces in accordance with the contrac manufacturers specification.
Feature brickwork: -
Provide corbel brickwork to eaves at gable ends to project 160mm from face of brickwork (4no. 40mm per course projections) , with top projection being 3no. courses deep. Also to project from gable side brickwork, minimum of 20mm. Provide to rake of gable 2no. course deep feature, projecting 20mm from face canoeing 1no. course stretcher bond with snap header course under.

Flue construction: -
225mm internal diameter clay flue liners to BD EN 1457: 1999 and to be laid socket uppermost. Minimum 100mm face brickwork surround to flue and to extend past the rake of the roof by 290mm or 600mm past ridge line and to terminate in corbeled brickwork and clay pot. (part Chimney Corner and 6 pots) Vermiculite infill around flue as work proceeds (or similar approved system) . 1mm roof timbers around not to be within 40mm. At roof / flue intersection provide code 4 lead flashing and 2 course engineering bricks. Durable notice detailing performance capabilities to be affixed in building by installer.

Fascia and bargeboards (if any) : -
All to be 52mm thick treated PSE softwood timber, depth to be determined on application. Provide a 6mm groove near bottom of boards to accept 6mm thick plywood or masterboard soffit.

Roof insulation: -
Insulation to roof space to be 250mm thick fibreglass laid 100mm between and 150mm over ceiling ties.
If insulation is required to a rafter section of the roof i.e.: attic trusses, then provide in between rafters Celotex double-R GA2000 board (2no. layers of GA2045) or similar approved product, maintaining 50mm air gap between insulation and underfelt. Ensure there is a spacer fitted in the eaves so that the insulation can be installed over and beyond the wall plate.

Roof ventilation: -
Provide ventilation to roof space at eaves we patent system gives the required air circulation as follows: -
1) On a pitched roof of 15 degrees or more provide at eaves ventilation equal to a 10mm continuous opp running along eaves.
2) On a roof where pitch is less than 15 degrees or where the ceiling follows the line of the roof i.e.: attic trusses, provide at eaves ventilation equal to a 25mm continuous opp running along eaves.
3) Also on roofs where ceilings follow roofline ventilation is required at ridge/line with suitable ridge vent (by the manufacturer) , to give ventilation equal to a 5mm continuous opp running along ridge.
4) At roof/ wall abutment ventilation required in form of a tile vent or similar to give ventilation equal to a 5mm continuous opp along abutment.
Ensure 50mm opp between insulation and underfelt.

Wall tiling: -
Provide and fix in new bathroom to walls and window cill, kitchen window cill and over work tops ceramic wall tiles with waterproof fix and grout. Tiles to be selected and areas to be tiled to be determined later.

Electrical installation: -
All electrical work required to meet the requirements of Approved Document Part P (Electrical Safety) - 1st January 2005 must be designed, installed, inspected and tested by a person competent to do so. Prior to completion of the works the Council must be satisfied that either
a) an electrical installation certificate issued under a competent person scheme has been issued, or
b) an appropriate electrical installation certificate has been issued for the work, and that it has been signed by a person competent to do so.

Fire escape windows: -
All habitable rooms in the upper story's of a house should have a window with an unobstructed openable area that is at least 0.35m2 and at least 450mm x 750mm (the route through the opening may be at an angle rather than straight through) . The bottom of the openable area should be not more than 1100mm above the floor.

Feature brickwork: -
Project brickwork at eaves and gables as shown on drawing. Rainwater goods to fix directly to brickwork.

Ventilation: -
Natural ventilation area of windows to offer at least 1/ 20th of room floor area. All windows to have trickle ventilators fitted to head to give 8000mm2 ventilation to habitable rooms and 4000mm2 to all others.
Mechanical extractor fans to be provided to: -
1) Kitchen offering 60 litres per second or cooker hood offering 30 litres per second.
2) Ensuite / Bathroom offering 15 litres per second.
3) WC offering 15 litres per second.
4) Utility offering 30 litres per second.
Where mechanical extractor fans are fitted in rooms with no natural ventilation. Provide fans that have 15 minute overrun that may be operated intermittently. Also ensure 10mm opp underneath door to floor finish.

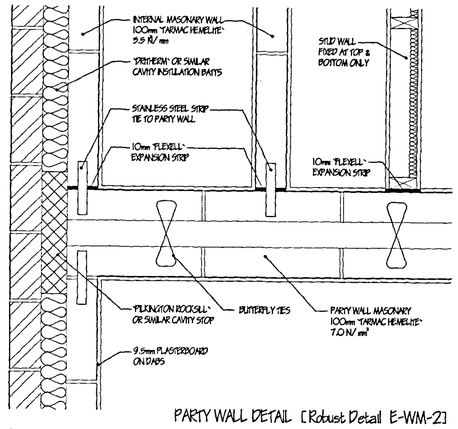
Lighting: -
In new dwellings provide internal efficient lighting to a third of the overall rooms (not including caravans) to achieve a luminous efficacy greater than 40 Lumens per circuit-watt (not using GLS tungsten lamps with baspnet cap or Edison screw bases) . Provide external lighting which can be in a porch but not a canopy or carport which automatically extinguish when there is enough daylight, and when not required at night or have sockets that can only be used with lamps having an efficacy greater than 40 lumens per circuit-watt (such as fluorescent or compact fluorescent lamp types, and not GLS tungsten lamps with baspnet cap or Edison screw bases).

Joinery: -
Doors, frames, linings, skirting, architrave's, window board and timber mildings etc. to be of standard manufacturer
Access for all part 'M': -
Obstructions in corridors on the ground floor will be satisfied if a short length (no more than 2000mm) of local permanent obstructions, such as a radiator, would be acceptable provided that the unobstructed width of the corridor is not less than 750mm for that length, and the local permanent obstruction is not placed opposite a door to a room if it would prevent a wheelchair user turning into or out of the room.
Also doors to habitable rooms and a most contains a w.c. on the ground floor have a minimum clear opening of 775mm when accessed by corridors or passageways whose width is not less than 1050mm.
Drives to be hard surfaced (not gravel unless suitably designed) with concrete, tarmacadam or block paving and to be laid level at some point with footpath (around most dwellings) for total accessibility.
The principal entrance to be over a minimum 775mm clear opening width. See separate detail for level entry threshold access.
Provide switches and socket outlets for lighting and other equipment in habitable rooms at appropriate heights between 450mm and 1200mm from finished floor level.

Staircase: -
To be private stairway, ovins 900mm unobstructed clear width. Handrail to be 900mm above pitch line of the staircase and 1000mm above finished floor level on landing. Balusters to be of vertical type and are not to be able to permit passage of a 100mm diameter sphere between them. Ensure 2000mm headroom above pitch line of stairs. All balustrades to be capable of withstanding 0.36 kn/ m horizontal force. Going 222mm 13no. risers 200mm pitch 42 degrees.

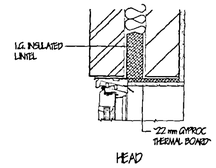
Dormer wall construction: -
Ex. 19mm thick treated tilig boarding on 25 x 38 treated counter battens on building paper on Celotex double-R GA2000 board (1no. layer GA2029) or similar approved product on 9mm thick OSB/ 3 board on on 38 x 89 treated CLS vertical timber studs at 600mm centres (bulk-fill compound trans either side) . To inside provide vapour barrier then 12.5mm Vapor edge plasterboard and drylined. Fix 100mm fibreglass insulation between studs.

Porch roof construction: -
Tiles felt and battens as per main roof on cut roof consisting 50 x 100 SC3 rafters and ceiling ties at 600mm centres (pitch to match existing) with exposed gable end in turn supported at eaves by 2no. 50 x 100 SC3 timber beams fixed together in turn supported via brickwork and by 100 x 100 structural timber posts (set in piers) . All timber to be celcure treated.

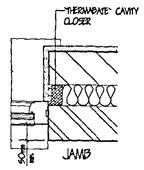


PARTY WALL DETAIL [Robust Detail E-WM-2]

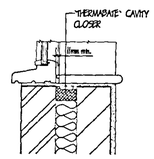
PARTY WALL. [Robust Detail E-WM-2]
225mm cavity wall to consist of 2No. leaves 100mm Tarmac Hemelite 7N/ mm2 solid insulation blocks with normal dry density of 1950 Kg/ m3 Stainless steel twist wall ties positioned at 450mm vertically and set 750mm horizontally. 225mm block coursing. Both faces to receive 13mm lightweight plaster (min. mass per unit area 10 Kg/ m2) . Party walls to receive no insulation. All floor joists perpendicular to party wall to be supported in galvanised steel hangers. All party walls to be taken up to under side of roof coverings and fire stopped using 300mm wide "Pilkington Rockwl" insulation matt or similar. Void between fascia board and wall to be similarly fire stopped. At junction of cavity with flank wall cavity provide 400mm wide "Pilkington Rockwl" insulation matt or similar to full height. All masonry joints to be filled and sealed with mortar. 150mm high Code 4 lead flashing and cavity trays at all roof/ wall abutments. All Electrical socket positions to be staggered on opposite side of the party wall



HEAD



JAMB



CILL

REVEAL DETAILS

P	CONDITION COMPLIANCES	MAY '06
A	BUILDING REGULATIONS AMENDMENTS.	MARCH '06.
ref:	revision	date

G. R. MERCHANT B.Eng AMICE FIWO

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Project
PROPOSED SEMI-DETACHED DWELLINGS.
HALLGATE.
FLEET.
SPALDING. LINC'S.

Client
H. WALTHAN & CO.

Drawing
FLOOR PLANS & DETAILS.

Job Ref.	Drawing No.
1123-06.	02D.
Date	Drawn
JAN '06.	GRM.

Scales
1/ 50. 1/ 100.

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All materials to be new unless otherwise stated and all components and materials etc. to be used fixed and installed etc. in strict accordance with manufacturers instructions and relevant codes of practice. Materials and services to approximate British standard specifications or BBA certificate or Agrement body equivalent. The Employer / Client shall ensure that the selected contractor is familiar with and adopts all measures necessary to achieve compliance with Health and Safety legislation to the satisfaction of the Client and Work planning. The Employer / Client is advised that should the works need to comply with the Construction Design and Management Regulations an Independent Planning Supervisor will be required. The Contractor shall check all details as shown on the drawing and details. Work that may not specifically be mentioned but is reasonably inferred as necessary to carry out the works shall be deemed to be included.

27 MAR 2006
04331166

Party wall etc. act 1996: -
It is the owners responsibility to be aware of the above act which protects the owner and adjoining neighbors when building in close proximity to an adjoining neighbors boundary. Information regarding the above act can be found on the Office of the Deputy Prime Minister website: www.safety.odpm.gov.uk/ bregs/ walls/ htm

DETERMINED PLAN