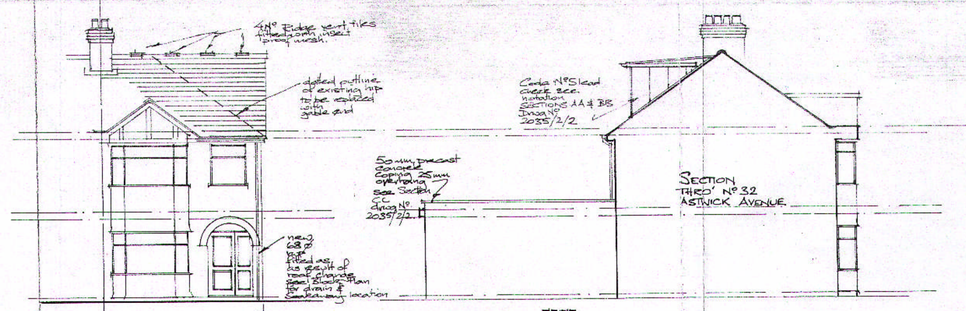
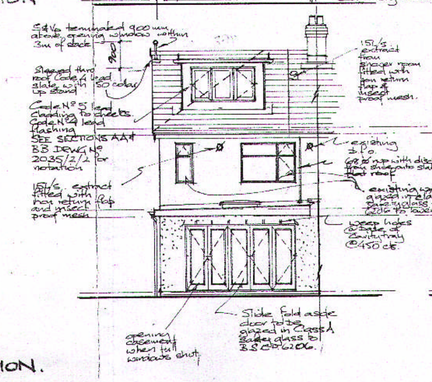
STRUCTURAL BEAM SCHEDULE.

REFER	LOCATION	SIZE	NOTES
Beam A	Over family room.	152×152×30 UC	Left and right hand side pad stones 2 courses of engineering bricks. See engineering sheets 3, 11 & SK01
Beam B.	Over door opening family room/ garden.	180×90×26 PFC with 9mm bottom plate. or Messrs T.G. L6/75.	Left and right hand side bearings to be 3 courses of eng. brick. Beam to have min. bearing of 150mm onto padstones c/w 9mm plate. Continuous plate continuous welded to bottom flange of channel with triangular gussets at 900 c/s. to coincide with vertical block joints. see engineering sheets 3, 11 and SK01
Beam C	Apex beam @ main roof Ridge.	152×152×23UC	Left and right hand side padstone. 2 courses of engineering bricks. see eng sheets 04, 11 and SK02
Beam D	Over bed 1 in the attic space.	203×203×46 UC	Left and right hand side padstones 560 long x 1200 wide x 20mm thick m.s. bearing plates. min 100mm end bearings to beam. see engineering sheets 07, 08, 11 and SK02.
Beam E	Over family bathroom & bed 2 in attic space.	203×203×46 UC.	as above note.
Frame F	Over Kitchen supporting back wall of main house.	203×203×52 UC with 152×152×37 UC support columns.	Left and right side columns to have 20mm thick cap plate. Continuous weld to flanges & web of column. Bolted connection between columns and bottom flange of beam using 4 No M16 g.8.8 bolts. 20mm thick bottom plate at base of columns 2 no resin anchor bolts as above set into existing footings - footings to be checked for adequacy of carrying redistributed loads. min 450×220×220dp. padstone area. SEE ENG CALS SHEETS 09, 10, 12 (detail of frame+fixings & SK01.
In addition see engs cals			sheet. 02 trimmers to flat roof lights. 05 Floor joist design. NB variation to spacing distances to attic rooms 06 Support to dormer cheeks
Beam G.	Over bathroom and existing stairs within the floor thickness of attic room floor	3 No 200×50 C16 grade joists	Left and Right side trimmers to be heavy duty galv. joist hangers mechanically fixed to top flanges of Beam D & E - (Short fixed). Bolting together of timbers M6 bolts with dog toothed connector washers @ timber to timber interfaces spacing 600/800 min. see engineering sheet 6, 7 & SK02.

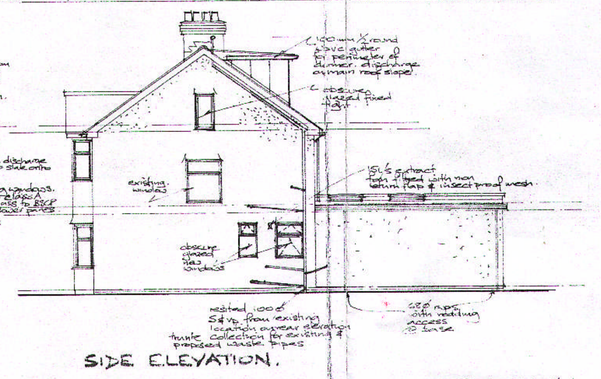
FRONT ELEVATION



SIDE SECTIONAL ELEVATION.

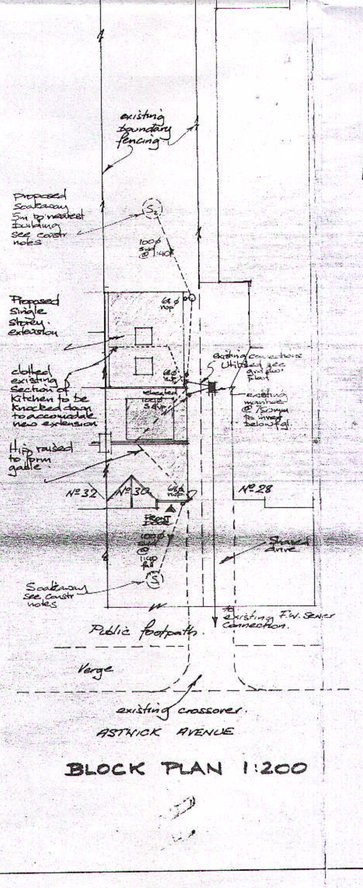


REAR ELEVATION.

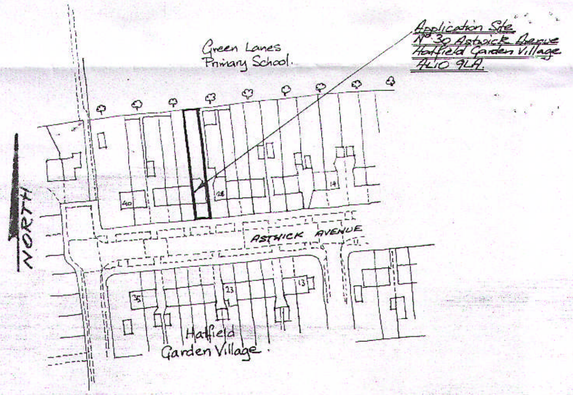


SIDE ELEVATION.

All new windows to be double glazed with toned glass to be fitted with trickle vents providing 5000 mm² to each new room fitted insect proof mesh to vent. (16 mm gap between panes $E_n = 0.05$) Argon filled sealed units fitted with energi kare glass U value = 1.5 W/m² °K. All windows & doors to be draught proof sealed.



BLOCK PLAN 1:200



LOCATION PLAN 1:1250.

Plumbing.

32 Ø basin wastes
40 Ø bath, shower & sink wastes
100 Ø w.c pan wastes
All fittings in Upvc and fitted with 75mm deep seal traps where straight pipes exceed 4m to the vertical stack increase the length of the 40 Ø pipe by 50mm. Upsize the diameter of the waste pipe to 40 Ø to basins and 50 Ø for remainder to reduce the risk of syphonage

Heating

Existing boiler to be retained but to be inspected/tested
Kitchen/family room to be heated with wet system underfloor heating as addition zone to the current system throughout the house. This zone to have independent thermostatic and timer control.

Existing condensate drain from boiler to be extended to vented Soil & vent pipe location.

Domestic Hot water.

Existing boiler as above note
All new pipes extending the current system from the boiler location to be insulated in Messr Armaflex or similar approved insulation foam min thickness equal to the diameter of the pipe.
Hot water service to be fitted with Blender valve with cold supply to prevent a scalding supply at the draw off point. (48°c)
Direct Cold water mains supply to Kitchen & basin taps. (Drinking supply)
Check valves to be fitted to all hot and cold water services to all fittings & kitchen sink for maintenance of fittings.

Construction Notes.

Foul water drainage

100 Ø soil or underground plastic grade laid @ min 1:40 fall to respect existing manhole (without disjunction) falls and existing invert levels as noted on plans.
Trenches within 300 mm of finished floor level for ground level to be encased in 150 mm bed & surround of concrete maintaining flexible joints with the board cellars or in the case of plastic strip pipes at joints and 3.0 m centres.
Protect drains under load bearing walls with 150 mm D.C. concrete lintels with min 75 mm clearance to crown of pipe. Drains elsewhere to be laid in 150 mm bed & surround of pea shingle.
See notes on ground floor plan for reconfiguration of existing connections

Surface water drainage.

100 mm ø round down pvc guttering to match existing @ 1 in 600 fall to 68 litre dia rhps all fixed in accordance with manufacturers recomm.
Rodding Access points @ base of rhps and on drainage runs as illustrated on ground floor plan.
100 Ø underground plastic pipe in 150 mm bed & surround of pea shingle @ 1 in 40 falls to Soakaways.
Soakaways to be min 1100 mm dia - 2250 mm below pipe invert.
Soakaways to be constructed in accordance BRE Digest 365 September 1991

Electrical Works

All electrical works to meet the requirements of Part P (electrical safety) to be designed, installed, inspected and tested by a person competent to do so. Prior to completion the L.A. Building Inspector should be satisfied that Part P has been complied with, this may require an appropriate B.S. 7671 electrical installation certificate to be issued for the work by a person competent to do so.

All light fittings marked as energy efficient on plans to be for lamps having luminous efficiency greater than 40 lumens per circuit watt i.e. Fluorescent & compact fluorescent light fitting or L.E.D luminaires.

- Mains powered Smoke detector/alarm with battery back up in case of mains failure. All units thro' out the property to be interlinked and wired into lighting ring main.
- Fittings marked thus ① denote location of 2D energy efficient fittings as stated above.
- Rapid heat rise detector linked into smoke alarm circuit.
- M Location of Carbon monoxide detector/alarm.

TO BE READ IN CONJUNCTION WITH DRWG No 2035/2/2 AND STRUCTURAL ENG. CALS. SHEET 1 to 12 and SK01 and SK02.

PLANNING DEPARTMENT 26 FEB 2014

existing openings to rear windows and walls to be filled to match existing

Cannon, Morgan & Rheinberg Partnership
Chartered Architects
38 Holywell Hill, St Albans, Herts AL1 1BU. Tel. St Albans (01727) 861622
53 Broad Street, Chesham, Bucks HP5 3EA. Tel. Chesham (01494) 791066

30 ASTWICK AVENUE
HATFIELD GARDEN VILLAGE

APPROVED PLNG. REF. S6/2010/1377/FP

Contract

WORKING DRAWING.
ELEVATIONS. BEAM SCHEDULE
Title BLOCK AND LOCATION PLANS

Date	Scale	Drg. No.	
APR' 2012	1:100/200	2035/2/3	A