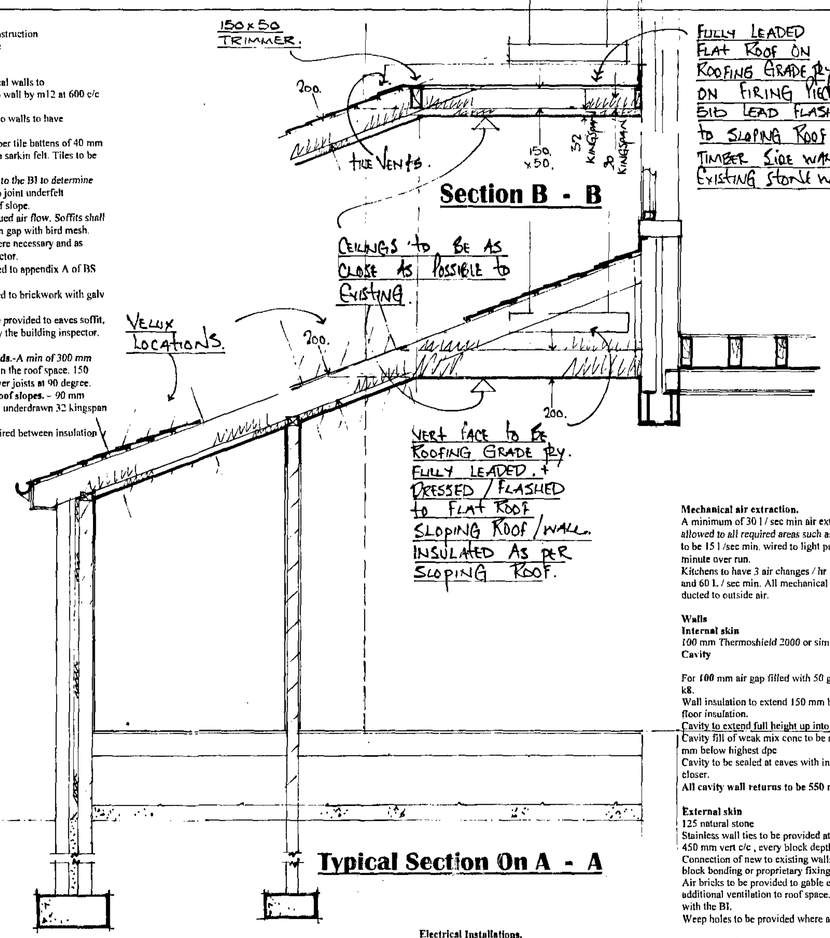
Roof design.
The roof shall be of timber construction
50 x 200 rafters at 600 mm c/c

Roof design.
50 x 200 rafters at 600 c/c
Fixing of roof timbers to vertical walls to
8 x 2 timber wall plate fixed to wall by m12 at 600 c/c or to horizontal wall plate
Valleys or connection of roof to walls to have
5 lb lead flashing.
Tiles to match existing on timber tile battens of 40 mm x 19 mm c/c to suit tile type on sarkin felt. Tiles to be chosen to suit roof pitch.
Tile technical info to be given to the BI to determine the necessity for corrugated no joint underfelt depending on type of tile / roof slope.
All roofs shall ensure a continued air flow. Soffits shall be fitted with vents or a 25 mm gap with bird mesh.
Ridge vents shall be fitted where necessary and as directed by the Building Inspector.
Roof to be suitably wind braced to appendix A of BS 5268 PT 3.
100 x 65 sw wall plates secured to brickwork with galv steel straps @ 1800 c/c
Roof ventilation. - Vents to be provided to eaves soffit, and tile vents all as directed by the building inspector.
Roof Insulation.
Above ceiling joists/ roof voids.-A min of 300 mm rockwool to be provided within the roof space. 150 between joists and 150 mm over joists at 90 degree.
To rafters on flat roof and roof slopes. - 90 mm kingspan k7 between rafters + underdrawn 32 kingspan k18 under rafters
Min 50 mm min air flow required between insulation and roof covering.



Existing garage.
Build up front / rear gables in brickwork to suite new roof profile.
Brick up existing side doorway.
Form new rear doorway. Catnic lintol required over.
Modifications to existing concrete flat roof.-
Place 100 x 65 wall plate to exist conc roof packed up level.
The roof trusses shall be of timber construction all as *per supplier's calculations.* Calculations to be supplied to building control for approval a min of 28 days prior to commencement on site.
Trusses to be at 600 mm c/c
Fix roof timbers to wall plate
Tiles to match existing on timber tile battens of 40 mm x *19 mm c/c to suit tile type on sarkin felt.* Tiles to be chosen to suit roof pitch.
Tile technical info to be given to the BI to determine the necessity for corrugated no joint underfelt depending on type of tile / roof slope.
All roofs shall ensure a continued air flow. Soffits shall be fitted with vents or a 25 mm gap with bird mesh.
Ridge vents shall be fitted where necessary and as directed by the Building Inspector.
Roof to be suitably wind braced to appendix A of BS 5268 PT 3.
100 x 65 sw wall plates secured to brickwork with galv steel straps @ 1800 c/c
Roof ventilation. - Vents to be provided to eaves soffit, *ridge* and new gabl ends, all as directed by the building inspector.

Plumbing and Drainage.
Hepworth or similar 112mm UPVC gutters, brackets and fittings down pipe to be 75 mm dia. **Surface / Foul *water drainage***
The existing drain locations are assumed. The builder to expose on site and agree any necessary amendments with the building Inspector.
Any manhole enclosed by the extension to have a double seal mechanically screwed cover.
All external drains to be 100mm Osma plastic pipe bed and surround in gravel to falls 1:80 to Foul – 1:100 for Surface Water
All new drainage and protection details to existing shall be agreed with the Building inspector.
All internal drainage to connect into new
s & v pipe. In turn which is connected to the exist drain run as shown.

sizes-Basin 32mm up to 1.7m run, Sink 40mm up to 3m run 50mm up to 4m run
WC – 100 mm. Separate connections and 75 mm deep seal traps to 100 s & vp terminating internally with non return valve. External stacks vented traditionally terminating 900 mm above any open light within 3 m with suitable cage. All joints push fitted & access panels provided at all changes in direction.
All internal s&vp to be insulated with min 50mm rockwool.

Electrical Installations.
All installations to be subject to certification under the *"competent persons scheme"*

Means of escape.
1 No self contained operated smoke alarm to BS 5446 Part 1to be installed on each storey smoke detectors as Indicated on the drawing and upper floor common passage landings
Interconnected & wired to a separated fused circuit. Battery back up required.

Heating.
All habitable rooms to have a suitably sizes radiator extended from the existing system. Existing boiler capacity to be checked for adequacy.
All installed by a cergi reg contractor.
All hot water pipes shall be insulated with foam equivalent to the outside dia of the pipe. Radiators to *have thermostatic* valves.

General
Any structural steel supports to have full half hour fire protection encasement comprising 2 layers of 12.5 mm plasterboard / skim.

Lateral Restraint to floors / gable roof
Galvanised mild steel strap 38 x 5 @ 2m c/c to joists and rafters spanning 3 joists with solid noggins at 450 c/c down cavity.

U Values
The builder shall ensure that the following values are achieved.

Roof	0.20w/m2k
Walls	0.27w/m2k
g.f.	0.22{with P/a 09}
Windows / doors	1.8w/m2k

All roof and wall insulation to be continuous.

External Decking / landscaping.
All to be carried out as per the suppliers calculations / drawings that shall be submitted for approval to Building Control a min of 28 days prior to erection. All steps to be min 24 deg having min goings of 225 mm and risers of 200mm with handrail 900 mm high from nosing.
Horizontal handrail to be 1100 mm high with spindles a *max of 100 c/c*

Mechanical air extraction.
A minimum of 30 l / sec min air extraction to be *allowed to all required areas such as utility rooms. WC* to be 15 l /sec min. wired to light pull cord with min 15 minute over run.
Kitchens to have 3 air changes / hr
and 60 L / sec min. All mechanical ventilators to be ducted to outside air.

Walls
Internal skin
100 mm Thermoshield 2000 or similar blockwork
Cavity

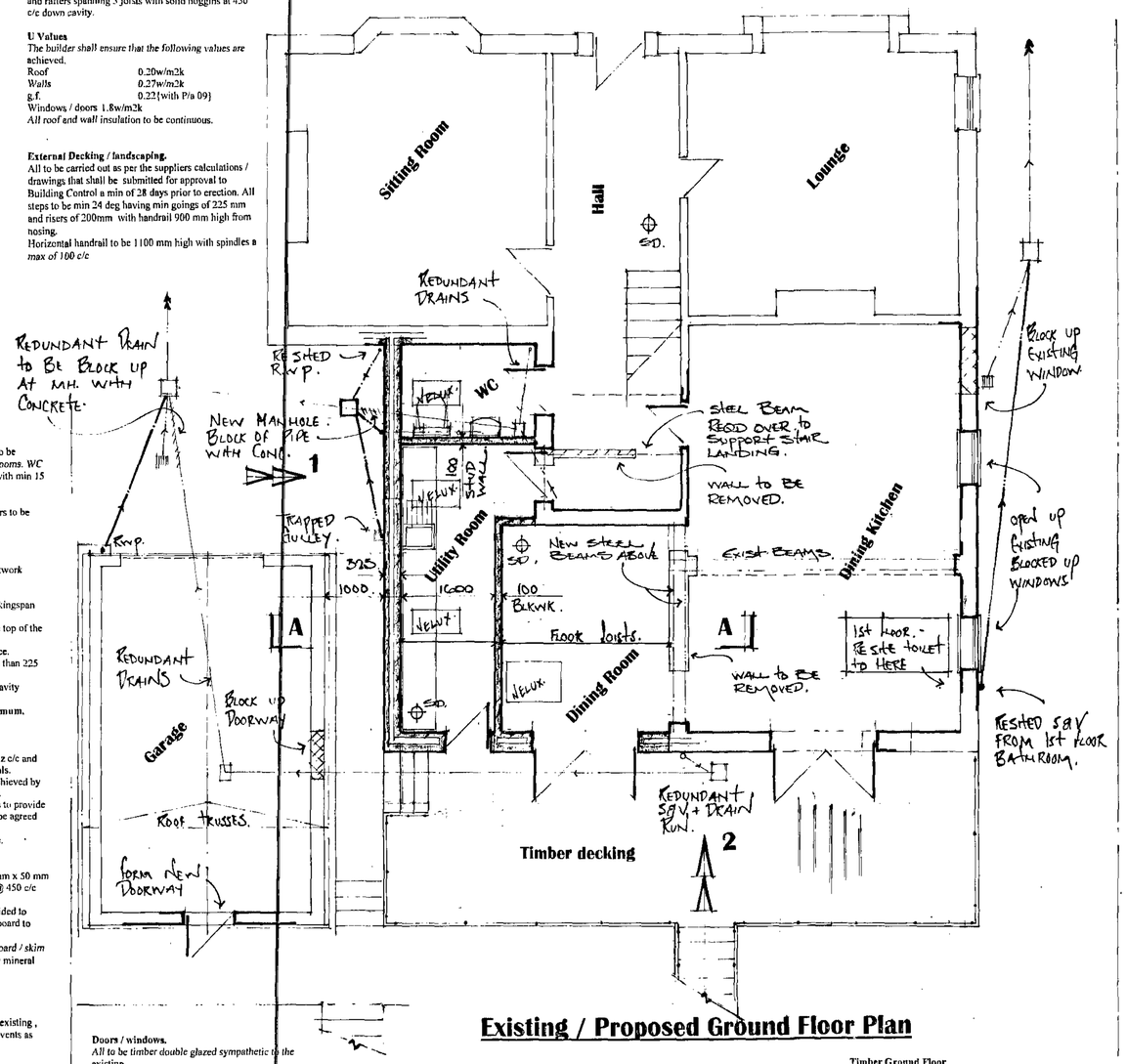
For *100* mm air gap filled with *50 gap + 50* kingspan k8.
Wall insulation to extend 150 mm below the top of the floor insulation.
Cavity to extend full height up into roof space.
Cavity fill of weak mix conc to be no higher than 225 mm below highest dpc
Cavity to be sealed at eaves with insulated cavity closer.
All cavity wall returns to be 550 mm minimum.

External skin
125 natural stone
Stainless wall ties to be provided at 750 horiz c/c and 450 mm vert c/c , every block depth to reveals.
Connection of new to existing walls to be achieved by block bonding or proprietary fixing systems.
Air bricks to be provided to gable elevations to provide additional ventilation to roof space. This to be agreed with the BI.
Weep holes to be provided where applicable.

Internal walls
To be as shown - from timber studding 75 mm x 50 mm with 12 mm plaster board and skim. Studs @ 450 c/c horiz and noggins at 900 vert c/c
A minimum of 50 mm insulation to be provided to bathroom walls, with double skin of plasterboard to inside face of WC.
Ceilings to be finished with 12 mm plasterboard / skim
WC wall to have a min of 10 kg /m2 density mineral felt insulation.
Or 100 mm blockwork

Facia / soffit boards
From 25 mm x 250 mm or similar to match existing , timber or pvc to match existing, provide air vents as described.

Radon Barrier
Where Radon Barrier is required visqueen to be 2000 g with all joints taped and all penetrations thro to be *sealed. This to continue thro the external leaf.* On suspended timber floor visqueen to be placed under oversite conc.

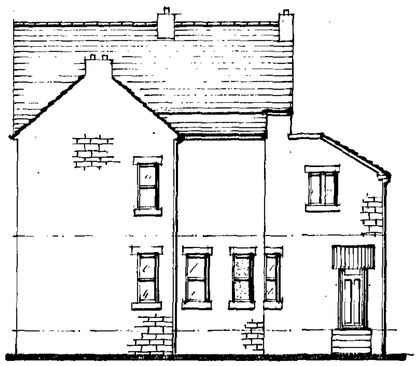


Doors / windows.
All to be timber double glazed sympathetic to the existing.
(min 16 mm gap between panes) glazed with Pilkington K glass with soft low "E" coating.
Style and colour of all to match existing.
All windows to have 1/20 th floor area as open light.
Safety glass(stamped accordingly) to be provided to all critical areas.- Door and panels 1.5 m from fl. Or windows within 800 mm from fl.
Obscure glass to be fitted to new WC velux window.
Trickle vents to be provided to all new windows 8000 mm2 min.

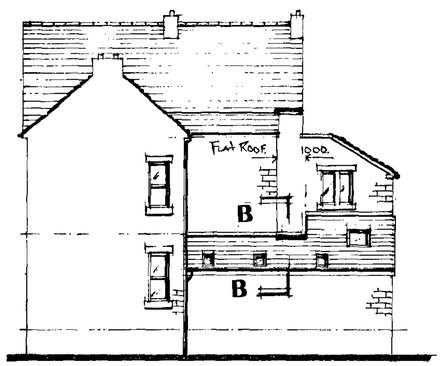
DPC's
To be provided to
External walls 150 mm above fgl.
All door and window jamb / heads
Tray dpc's required to exist walls at new wall abutments.

Construction (Design and Management) Regulations 1994
Applicable to all projects except work to a persons own house other than that carried out by the developer.
The client shall be advised that all projects lasting for more than 30 days or include more than 4 people engaged on the construction on site at any one time shall be subject to the above regulation.
The client shall take all reasonable steps to ensure that the appointed contractors have the competence and adequate resources sufficient to manage the construction work and comply with the above *regulations.*
If the project is subject to the above regulation the client shall appoint a planning supervisor and ensure *that notice is served on the health and safety executive* at tender acceptance stage using form 10.

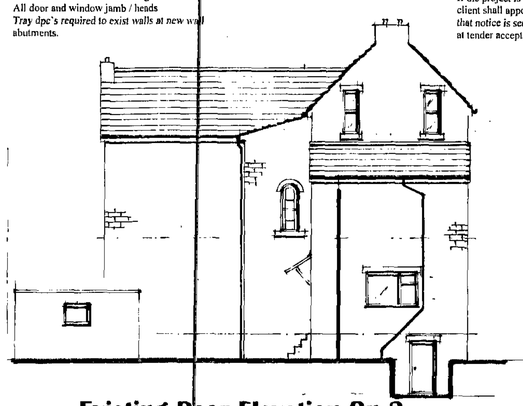
Timber Ground Floor
150 x 50 {sc 3 } softwood joists at 400 c/c with herringbone strutting at mid span. *19 mm T & G floor* grade particle board {EN 312-5} screwed to joists or 19mm T&G floorboards {BS 1297} 150 mm fibre insulation to be provided between joists.
Joists to be built into walls or attached to joist hangers.
Ends of joists where built in to be treated.
Joists to be doubled up under bath and stud wall locations.
Provide oversite concrete on 1200 g visqueen. Provide 150mm between conc and u.s. of joists.
Airbricks required to all sides of extension at 900 c/c



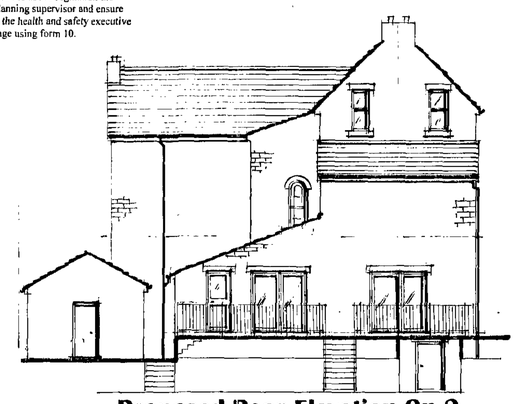
Existing Side Elevation On 1



Proposed Side Elevation On 1



Existing Rear Elevation On 2



Proposed Rear Elevation On 2

Existing / Proposed Ground Floor Plan

NOTES:
All dimensions must be checked on site and not scaled from this drawing.

Scope of Works

General.
Construction of a single storey side / rear extension creating separate dining room, utility and wc.

Notes.
General
These plans and details have been prepared for the purpose of providing information to the local authority to assist them in determining approval or rejection of planning / building regulations.
These notes and details indicated on these drawing drawings are to be checked and verified by the contractor at the time of pricing and prior to *commencement, the builder shall satisfy himself that all* details and dimensions are correct.
Any discrepancies shall be identified at the time of *tendering and the client notified in writing of such* changes required.
All dimensions to be taken to the nearest brick size.
His price shall be deemed to include for:
Any additional calculations as required by building control and as a result any additional building works that may be required..
Satisfying all current relevant codes of practices and British Standards shown or omitted from these drawings.
When appropriate it is the owners responsibility to *serve notice on the adjoining / adjacent neighbours for* the proposed works under the Party Wall act 1996 . The explanatory booklet can be obtained free of charge from ODPM free literature PO Box 236 West Yorkshire LS23 7NB. Tel 0870 122 6236

Foundations
All concrete to be grade C35
Foundations to be 600mm x 225 mm deep. Placed 1000 mm below fgl. Or as directed by the Building inspector.
Where foundations cross existing drainage services the foundations to be taken down below the I.L. of the pipe.
A concrete lintol to be placed over to bridge the pipe.
Provide rocker pipes either side of the wall and a 50mm space between masonry and pipe with flexible seal.
Any eccentric foundations to be 750 x 450 thk reinforced with 2 layers B783 mesh 50mm cover to all faces.

Lintols
All door/ openings / window lintols to be "Catnic" . Size and type as agreed with the Building Inspector.
Stone door head lintols to be used to match existing.
If galvanised lintol is to be used with stone, provide tray dpc and dpc under lintol at supports to resist corrosion.
End bearing for all lintols to be 150 mm.
For details of support beams refer to structural calculations.

E		
D		
C		
B		
A		
	Date	Revisions

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53 Huddersfield Road
Barnsley
S75 1DR

Client
Carl Snaith

Job Title
Single Storey Side / Rear Extension

Barnsley Metropolitan
31 OCT 2008

Drawing Title
General Arrangement / Elevations

Scale **1 : 25 1 : 50 1 : 100**

Date **24.10.08** Drawn by

Checked. **date**

Drg. No. **CS / 01** Rev.

594 x 841mm A1