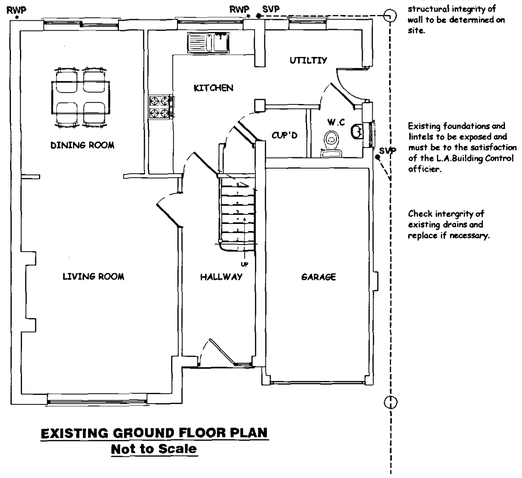
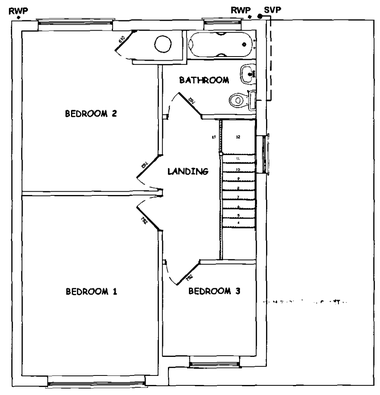


Construction and structural integrity of wall to be determined on site.

Existing foundations and lintels to be exposed and must be to the satisfaction of the L.A.Building Control officier.

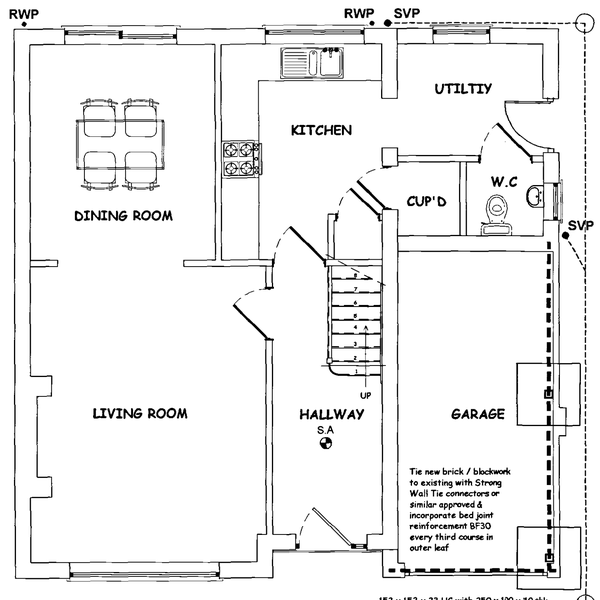
Check intergrity of existing drains and replace if necessary.

EXISTING GROUND FLOOR PLAN
Not to Scale



Remove all existing 125 x 38 timber flat roof joists and replace with new as proposed plan. Ceiling height to be lifted to 2350mm as existing house. Contractor to ensure flat roof joists above Utility are of a min. depth as shown on proposed plan.If not, provide additional joists as remainder beetween existing which will enable finished ceiling to remain in utility.

EXISTING FIRST FLOOR PLAN
Not to Scale



Existing foundations and lintels to be exposed and must be to the satisfaction of the L.A.Building Control officier.

Construction of wall unknown so therefore wall build up and structural integrity of wall to existing Utility area to be determined on site and confirmed with B.C officier.

2no.203 x 203 x 47 UC with 250 x 100 x 10 thk bearing plates welded to u/side of beams on 8.0N/mm² engineering brickwork both ends to support extension wall.Beams to have a fire resistance of 30mins min.

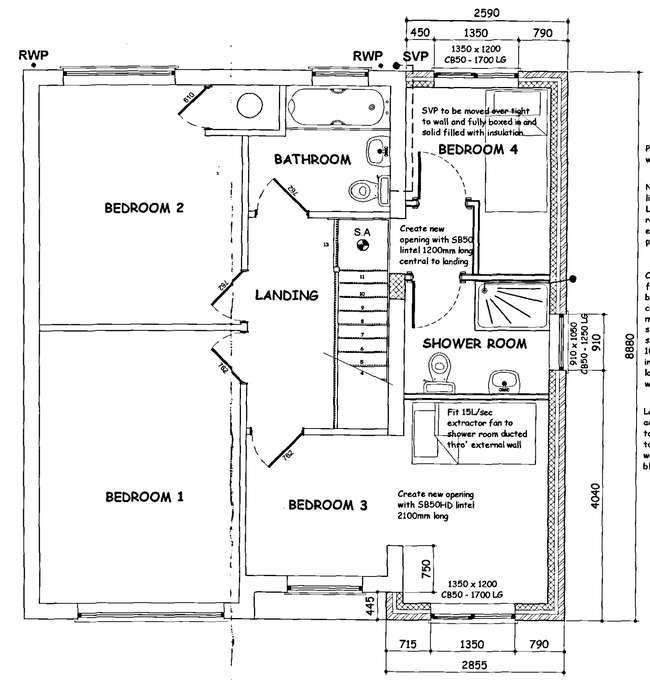
80 X 80 X 3.6 SHS vertical post with 130 x 10 flat x 250 long cap plate.Fix to beam with 2no. M16 grade 8.8 bolts @ 70mm ctrs.Provide 250 x 10 Flat x 250mm long baseplate fixed to 1000 x 1000 x 300thk RC35 pad foundation with 4no. M20 resin anchors @ 170mm ctrs

Fit 12.7mm Gyproc fireline board or 2no. sheets of plasterboard to garage ceiling only with 200mm insulating mineral fibre quilt insulation laid between joists to provide 30mins fire protection.

Tie new brick / blockwork to existing with Strong Wall Tie connectors or similar approved & incorporate bed joint reinforcement BF30 every third course in outer leaf

152 x 152 x 23 UC with 250 x 100 x 10 thk bearing plates welded to u/side of beams on 8.0N/mm² engineering brickwork both ends .Weld 250 x 10 continuous plate to top of beam to support cavity wall.Beams to have a fire resistance of 30mins min.

PROPOSED GROUND FLOOR PLAN
Scale 1:50



SVP to be moved over-tight to wall and fully boxed in and solid filled with insulation.

Create new opening with S850 lintel 1200mm long central to landing

Fit 15L/sec extractor fan to shower room ducted thro' external wall

Create new opening with S850HD lintel 2100mm long

Provide 100mm insulation within floor zone

Note: Provide energy efficient light and bulb to Bedroom & Landing.The light fitting is to only receive a bulb that has a luminous efficacy greater than 40 lumens per circuit-watt.

Construct new studwork walls from 75mm x 50mm softwood battens at max.400mm centres with noggings at max.1200mm centres.Fix room sides 15mm plasterboard and skim finish.Solid fill wall with 100mm mineral fibre insulation.Exact studwork layout to be confirmed on site with client

Lateral restraint to wall to be achieved via fixing 12.5mm plywood to studwork and then p/board on top to shower room / bedroom wall.Mechanically fix studwork to blockwork with fixing straps.

PROPOSED FIRST FLOOR PLAN
Scale 1:50

DAMP PROOF COARSE (D.P.C)
Horizontal heavy duty polythene DPC "Hyload" or similar approved to all walls in accordance with BS 6515 and set min.150mm above all external ground levels.DPC in walls must be linked / lapped with D.P.M. in ground floor.Provide performed cavity wall trays above windows & doors with weep vents at a max.of 2m centres with a min.of 2no.per opening.

WALL TIES
Stainless steel cavity wall ties to BS1243:1978.To be built into cavity wall as works proceeds and spaced at 750mm centres horizontally,450mm centres vertically and 300mm staggered around all openings.Ensure wall ties are level or at least sloping to the outside leaf.Bed ties a minimum of 50mm into each leaf and ensure wall ties are completely free from mortar droppings.

LINTELS
All lintels to cavity wall to be factory insulated Birtley Supergalv range unless noted otherwise or equalled approved.All lintels must have a min.150mm endbearing and installed in accordance with manufacturer's instructions.Do not allow masonry to overhang lintel by more than 25mm. Note: lintels are not to have a continuous baseplate.

TIMBER WALLPLATES
All timber wallplates supporting roof trusses to be 100mm x 50mm bedded on top of wall.Timber to be SC3 grade and use a min. length of 3m and half-lap plates at joints and corners..Provide anchor straps as described in notes elsewhere.

NOGGINGS
Fix 38x38mm timber noggings to all potential loose plasterboard ceiling edges and light fittings.Position of light fittings to be advised by client on site.

INTERNAL JOINERY SKIRTING & ARCHITRAVES
All internal finished timber to be free from all defects and to clients approval prior to ordering any materials.

LATERAL RESTRAINT STRAPS
Tie roof structure to blockwork wall with 30X5 galvanised mild steel straps at max 1.8m ctrs where rafters and ceiling joists run parallel to blockwork walls.Also fit at max 1.8m ctrs to anchor wallplate to blockwork wall with min 3no. fixings per strap.

EXTERNAL WALLS
All external walls to be 275mm overall thickness comprising of:
-100mm Brickwork to match existing
-75mm cavity filled with Crown Dritherm (or equal approved) built in as work progresses.Insulation batts should be kept clean and free from mortar droppings, all joints should be closely butted. Any cutting and fitting should be neatly done and not distort the layers of glass wool which comprise the material. All DPC's should be installed to ensure that penetrating water is directed only to the outer leaf.
-100mm Thermalite Shield insulating blockwork.
Continue wall insulation at least 150mm below top of perimeter floor insulation and support off wall ties.
External wall to achieve a min 'U' value of 0.35w/m²K.

CAVITIES
Close all cavity walls at jambs with Thermabate or similar approved Insulated cavity closers fitted strictly in accordance with manufacturers instructions. Roof insulation to be continuous with wall cavity insulation.Install Insulated Cavity Closers by Thermabate or equal approved, 25mm thick x 75mm wide (to equal cavity width) at jambs and cills of all openings in masonry cavity walls. Secure with the proprietary clips provided at maximum 500mm centres. Ensure that closers fit tightly to each other and to the lintel. The closer at the jamb must completely lap the closer at the cill.

MORTAR
All mortar to be 6:1:1 sand/cement/lime or equally approved and to be a consistent colour throughout duration of contract.Finish mortar joints as agreed with Client on site.

WINDOWS & DOORS
All windows to be White uPVC to clients requirements based on styles shown on elevations.Fit with 4000mm² trickle ventilators to Kitchen, Utility,Bathroom & En-Suite windows and 8000mm² elsewhere all in accordance with manufacturer's recommendations.Patio doors to be fitted with 10000mm² ventilators.Opening vents to give 1/20 th of floor area rapid ventilation to all rooms.All glazing within 800mm of floor level and within 300mm of a door to a height of 1500mm of ground level to have toughened glass in accordance with Section N of the Building Regulations and BS6206 class B.All double glazed units to be installed in accordance with BS 6262 and to have a 16mm Air gap with a soft Low 'E' coating on glass inner pane to achieve a min 'U' value of 2.0 w/m²K.Note all windows to have a perimeter weatherseal both internally and externally and to be fully draught sealed.Provide frosted glass to all Bathroom, W.C's and En-suite windows.Ensure windows & doors are fitted within masonry reveal to overlap cavity closer by min.10mm to avoid cold bridging.

ROOF INSULATION
The whole area of the ceiling to be insulated with two layers of Crown Wool Mineral Fibre Insulation or equal approved of a total thickness 300mm to achieve a 'U' value of 0.16w/m²K. Width of first layer of insulation to be appropriate to the joist spacings and of a thickness equal to joist depth (100mm) . The insulation to be laid between the joists to finish over the wall plate on external walls and pushed up tight to roofing membrane. The second layer (200mm) of Crown Wool to be laid at right angles to the first layer.All joints between the rolls of insulation to be close butted.

BLOCK COMPARSION TABLE(to achieve a 'U' value of 0.35W/m²K)		
Manufacturer	100mm thk Block type	Full Fill Cavity insulation thickness
Thermalite	Shield	65mm
Plasmor	Fibolite	85mm
	Aglite	85mm
	Stranlite	85mm
	Plascon	100mm
Tarmac Topblock	Hemelite	85mm
	Lignacite	85mm
	Topcrete	100mm
	Durox Supabloc	65mm

CEILINGS
All ceilings to be 15mm plasterboard to BS1230. Ceilings to be have Coving and an Artex finish to clients requirements.Plasterboard sheets to be fixed with joints staggered and must be layed perpendicular to all joist runs.Fix boards at a min.150mm centres.

SMOKE ALARMS
To be self contained,interconnected and wired to a separately fused circuit with a battery back up.Smoke alarms to be fitted to u/side of plasterboard ceiling to the ground floor max 7m from the kitchen / lounge and to be max. 3m from any bedroom door. All alarms to be strictly in accordance with BS 5446 and to be wired that when one alarm is triggered all alarms are activated.

WASTE SIZES FOR NEW PLUMBING
All new plumbing to have the following waste sizes:
W.C=100mm ø Multikwik or similar approved
W.H.B=32mm ø uPVC with 75mm Deep sealed trap
SINK:=40mm ø uPVC with 75mm Deep sealed trap
SHOWER=:40mm ø uPVC with 75mm Deep sealed trap
Provide access points to all changes in direction.Provide anti-siphon traps where pipe runs exceed 3m and W.H.B pipe run exceeds 1.8m.

MASONRY WALL CONNECTORS
Provide Simpson Strong - Tie or similar approved wall connectors to connect new & existing brick / blockwork.Use all specified fasteners.Fasteners must be spaced evenly, unless otherwise specified, and installed into the existing bricks or block and not into mortar joints.Insert wall ties provided at maximum 300 mm centres, bedding the ties into the mortar joints.Detailed site work instructions are provided with each wall connector system and must be adhered to at all times.In exposed locations it may be necessary to incorporate additional protection, for example the insertion of a vertical dpc.

ROOF FINISH
Concrete Interlocking Roof tiles to match existing& fixed in accordance with manufacturers attructions and in accordance with BS 5534:Parts 1 ad 2.Set out to give true lines and regular appearance,fitting neatly at all edges, junctions and featureFix tile roofing to make the building sound and wethertight at the earliest opportunity.Repair any defits as quickly as practicable to minimise damageand nuisance & keep gutters and pipes free ofdebris and clean out at completion.Provide 50x25 preservative treated timber battens.Tiling battens shell be not less than 1.2m long and continuous over atleast 3 trusses.They should be fixed to every rafter member which they cross, or on which they are joined with nails in accordance with BS5534: Part 1. The ends of the battens should be sawn square and but jointed centrally on a rafter member so that adeate bearing and nailing can be provided for eah end of each batten.Butt joints in battens shouldbe arranged so that not more than one batten in fours joined on any one rafter.Generally all tiles at perinter of roof to be clipped and nailed. Use Code 4 Leaf lashing to all abutments with min.75mm upstand.

HEATING SYSTEM
Provided from existing but all radiators ne to be fitted with thermostatic radiator valvesAll space heating pipework located outside the buiing fabric insulation layers to be wrapped with insution material having a thermal conductivity of0°C not exceeding 0.035 W/m°K and a thicknessequal to the outside diameter of pipe upto max. of 44m.It should be noted that central heating and hot wer pipework in unheated areas may need increased inktion thicknessees for the purpose of protecti against frost, refer to BRE Report No. 262 200Edition.

ROOF VENTILATION
Install Tyvek® or similar approved Breathable Membrane in accordance with manufacturers instructions which are briefly described below & BBA certificate 99/3635 (fourth issue) breather membranes in non-ventilated pitched roofs of any plan, any shape or any size under all types of roof coverings including tight jointed and fully interlocking tiles and synthetic slates.
Installing Tyvek® underlay in accordance with the above certificate will enable a roof to meet all the requirements of the Building Regulations.
Installation Guidelines
Tyvek® SUPRO should be installed with min. 150mm overlaps as a standard bituminous felt underlay and secured with stainless steel staples or large headed galvanised clout nails.
Eaves:
There is no need to provide any vents into the loft at eaves, because a Tyvek® non-ventilated roof system does not rely upon air movement beneath the membrane to avoid damage by condensation.To avoid water ponding behind the fascia of closed eaves and to prevent prolonged exposure of the membrane to ultra-violet radiation, use a Tyvek® Eaves Carrier. Stop the membrane short of the fascia and lap it onto the Eaves Carrier.Pack closed eaves with fibrous insulation to reduce thermal bridging.
Verge detail:
Lap the Tyvek® underlay 50mm onto the gable or flying rafter.
Ridge/ hip detail:
Extend the Tyvek® underlay 150mm from each slope and overlap it at the ridge/ hip line. There is no need to provide vents at the ridge.
Valley detail:
Extend the Tyvek® underlay from each slope by 150mm beyond the valley centre line and seal the lap using Tyvek® Butyl Tape to form a watertight seal.
Abutments:
Turn up the Tyvek® underlay beneath flashings not less than 50mm.
Penetrations:
Seal around all penetrations using Tyvek® Butyl Tape.

ELECTRICAL INSTALLATION
To be in strict accordance with the latest IEE Regulations and Engineer to advise if any appliance or position of appliance does not conform to regulations. Contractor to seek advice from Client with regard to lighting requirements.

ROOF / LOFT ACCESS
Provide insulated roof access trap door with a fully weathered sealed frame and a 38mm brass bolt or to clients requirements.

SOAKAWAYS
All rainwater to discharge into soakaways and to be min.of 5m from any building & a min.of 1m³ filled with rubble to within 450mm of external ground level.Overlay rubble with polythene sheet and backfill with clean topsoil.Note the soakaway inlet pipe must discharge to the centre of the soakaway in all directions.

RAINWATER DRAINAGE
White uPVC guttering and downpipes to clients approval.Falls for guttering to be 1:600 and brackets fixed at max. 2m ctrs.Downpipes to be connected into underground drains via reducing adapter.Underground drains to be 110mm Ø Osma uPVC or similar approved with flexible joints laid on 100mm peagravel and min 150mm surronds laid to 1:100 falls to new soakaway.Soakaway specification detailed elsewhere.

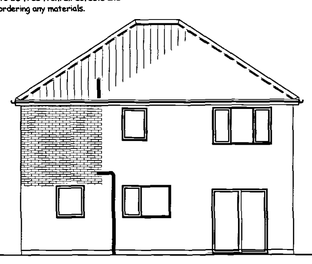
FOUL DRAINAGE
Underground drains to be as rainwater drainage but with min.1:80 and max.1:40 falls.Fall of drains from gullies to be 1:40.All drains passing thro' walls to have concrete lintel over with 50mm space around filled with compressible material and opening masked with durable rigid sheet to prevent ingress of vermin or back fill.Drain runs must not be any lower than foundation depth unless min.of 1m from any building.Provide roddable access to all change in bends and junctions.Contractor to ensure no live drains run beneath proposed works.New I.C less than 650mm deep and only one branch connection to be 225mmØ and I.C between 600mm & 1000mm deep to be 300mmØ uPVC Osma or equal and approved. Provide 900x900x750 deep I.C with 150mm C20P concrete base with 215mm thick brick walls with Grade B engineering brick cover.

All new window opening vents to first floor to allow means of escape in an emergency situtation.Opening vent to be min.450 wide in each direction with an area of 0.33m².Cill level to be within 800mm & 1100mm of FFL and fitted with egress hinges.



Provide Cavity tray above proposed steel beam.



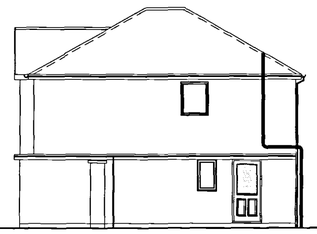


PROPOSED FRONT ELEVATION
Scale 1:100

PROPOSED SIDE ELEVATION
Scale 1:100

PROPOSED REAR ELEVATION
Scale 1:100



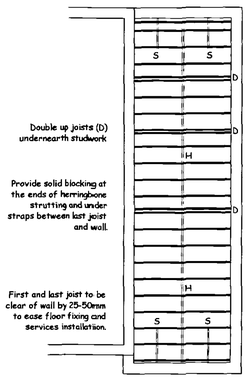




EXISTING FRONT ELEVATION
Scale 1:100

EXISTING SIDE ELEVATION
Scale 1:100

EXISTING REAR ELEVATION
Scale 1:100



Double up joists (D) underneath studwork

Provide solid blocking at the ends of herringbone strutting and under straps between last joist and wall.

First and last joist to be clear of wall by 25-50mm to ease floor fixing and services installation.

30x5 m/s anchor straps (S) @ 2m ctrs with solid strutting beneath.Notch straps into minimum 3no. joists and fix with two nails.

Lay 22mm Weyroc Tongue and Grooved flooring grade wood particle boarding or equal approved on top of first floor joists with staggered joints

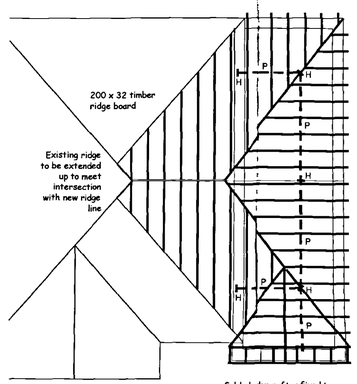
150 x 50 joists @ max.400mm ctrs. Solid herringbone strutting @ mid point to spans over 2m. Strutting at third points to span over 4m. Joists to be supported at all junctions with approved Joist Hangers with 75mm min. bearing on masonry and joist.Joist to be cut accurately for a tight fit in hanger with max.6mm gap. Joist bottom to be notched to keep ceiling line level.

All cut ends of joists to be sealed with suitable preservative

ALL TIMBER TO BE SC3 GRADE,DRY GRADED TO BS4978 AND MARKED "DRY" or "KD"

PROPOSED JOIST PLAN
Not to Scale

ALL TIMBER TO BE SC3 GRADE,DRYGRADED TO BS4978 AND MARKED "DRY" or "KD"



Gable lader rafter fixed to last rafte at max.400mm ctrs

In order to minimise movement of the wallplate caused by the hip rafter, fix a 1200mm long galvanised steel angle restraint strap around the outside of the wallplate.

225 x 75 timber hip rafters

New 150 x 50 rafters @ 400mm ctrs double-up at positions shown and birdsmouthed over wallplate

Support purlin connections directly over a rafter / strut or connection to be made with a "Scarf" joint near strut so that the joint supports the longer span.Provide metal plate under scarf joint.

White uPVC soffit and fascia profile to match existing.

All cut ends of joists to be sealed with suitable preservative

Dotted line shows 225 x 75 continuous purlin (P)birdsmouthed to 150 x 50 rafters at 450mm ctrs and built into gable wall with 175 x 38 collar & 100 x 50 vertical hangers at positions shown (H) in positions shown.Supply 150 x 50 ceiling joists / collars @ 100mm ctrs with strutting / lateral straps as floor joists specification and double up at vertical hanger positions.

PLEASE NOTE:
Due to areas of the structure being covered, unexposed or otherwise inaccessible the notes / specifications of existing materials are subject to confirmation of site when it is feasible to expose the relevant areas of construction.

PROPOSED ROOF PLAN
Not to scale

SHDC
Planning & Development
05 NOV 2004
Ref: 1488/04
APPROVED PLAN

Client :
Mr P Cooper
113 Cradge Bank
Spalding
PE11 3AF

Site :
Proposed First Floor Extension above existing Garage

remway design Ltd
3, Rembrandt Way
Spalding
Lincs
PE11 3HX
Tel: 07815 112 058
Fax: 01775 768 921
e-mail: jason@remwaydesign.co.uk

Date : sept04 | Scale : 1:50 / 1:100

Drawing No:
rem 942 - 01