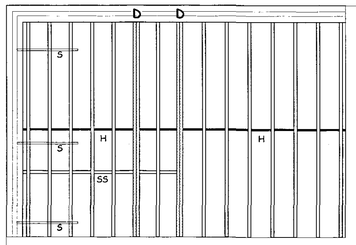
Contractor to check all Dimensions on site prior to ordering materials / commencing work.Do Not Scale from this Drawing - If in doubt then please ask

Double up joists (D) undernearth studwork wall and solid strutting (SS) reg'd where studwork wall runs at right angles to joist span.

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

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

Provide 100mm insulation within floor zone.



175 (min) 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

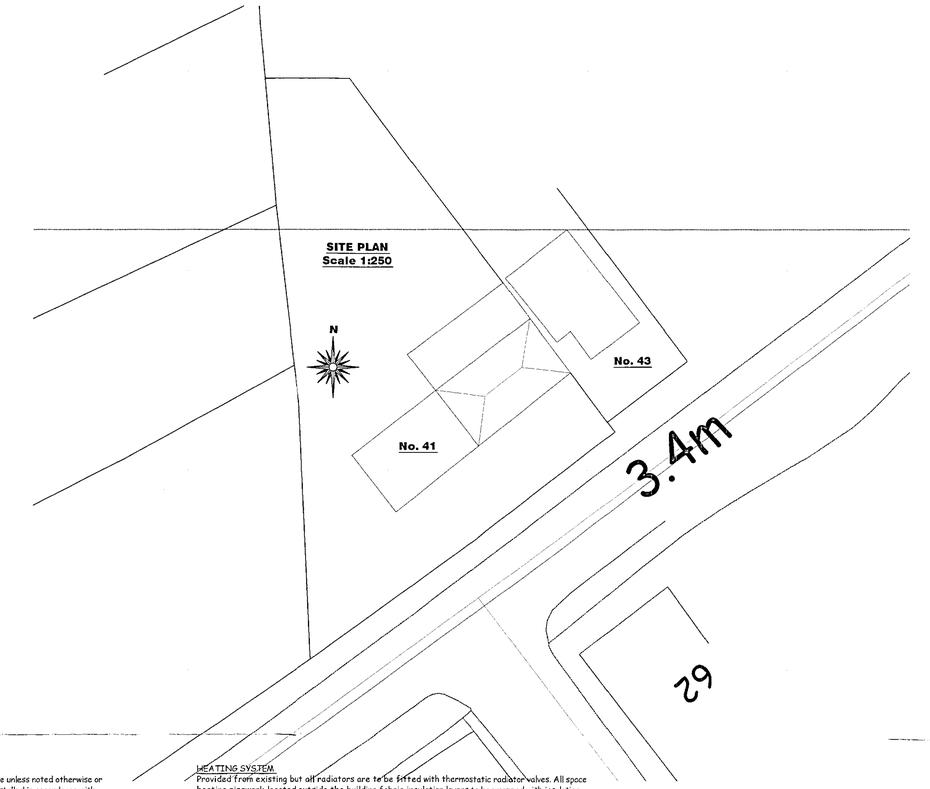
30x5 m/s anchor straps (S) @ 2m ctrs with solid strutting beneath.Notch straps into minimum 3no. joists and fix with two nails.

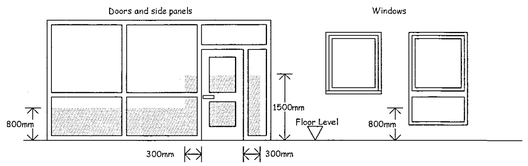
First and last joist to be clear of wall by 25-50mm to aid floor and services installation.

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

PROPOSED JOIST PLAN
Scale 1:50

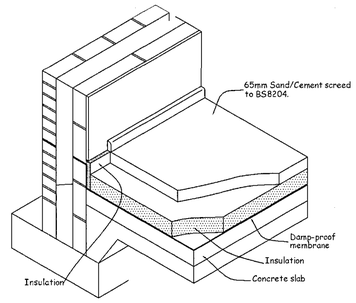
NOTE: Proposed flat roof joist plan to be as floor joist plan but with a Polyroof 185 or similar approved glass fibre roofing system on 19mm quality plywood of the minimum standard BCX (American Plywood Association Standard)applied strictly in accordance with manufacturer's recommendations on 80mm Celotex tuff-R TD3080Z on 500 gauge vapour control layer on 19mm exterior grade plywood decking on tapered firrings to give c min.1:80 fall on timber SC3 grade joists as proposed plan all to achieve min. 'U' value of 0.25w/m²K. Provide 19mm exterior grade plywood up feet of trusses to achieve a min. 150mm felt upstand at roof junctions. Soffit and fascia boards to match existing.





Shaded areas show critical locations to which requirement N1 applies.

(ie. glazing in areas numbered 2,4,5,6,7,8,11)



NOTE: Damp-proof membrane can also be positioned below the concrete slab.

TYPICAL ISOMETRIC SLAB DETAIL
Not to Scale

FOUNDATIONS
Existing building area to be stripped of all vegetable matter and rubbish to a min.depth of 150mm before excavation commences.Concrete mix for foundations to be GEN3 in accordance with BS5328:1981.Foundations to external wall to be min.700mm wide x 225mm deep.Excavate down to solid firm strata i.e 750mm deep (min.1000mm if soil is of a shrinkable nature).Exact depth to suit conditions on site and to the strict approval of the L.A Building Inspector.Any irregularities in subsoil during excavation to be brought to the immediate attention of the Building Inspector & advice to be sought from a Chartered Structural Engineer.

WALLS BELOW D.P.C
1no.Course of Class B brickwork & 2no. courses of Red Engineering brickwork below D.P.C on outer face and 1no.coarse of 7N/mm2 on inner skin of cavity face.Elsewhere to be either 7N/mm2 concrete blockwork or full width trench blocks.Both to be within 225mm of DPC level.Cavity to be filled to within 225mm min. of below DPC with lean concrete mix.

GROUND FLOOR
65mm mortar screed with a light gauge reinforcing chicken wire on 500 gauge polythene separating layer on a 60mm Celotex Double R GA3000Z rigid insulation board or similar approved, provide 30mm thick perimeter insulation between screed and floor insulation upto d.p.c level on 100mm thick GEN3 concrete sub-floor on a 1200 gauge DPM lapped onto DPC within walls on min.150mm clean and well compacted hardcore.Depth of hardcore must not exceed 600mm and must be compacted in 150mm thick layers.All service entries to be sealed with pressure sensitive tape. Floor to achieve a min 'U' Value of 0.25w/m²K.

Floor Insulation Installation guidelines (under screed)
1. Install a Damp Proof Membrane (DPM) below the slab OR apply a liquid waterproofing material to the top surface of the slab.
2. The DPM must provide continuity with DPCs installed within the surrounding walls.
3. Level the surface of the slab; it should be smooth and free of projections.
4. Use a thin sand blinding on a rough tamped slab to ensure that boards are continuously supported. Cut strips of board as upstands to fit around floor perimeters to eliminate heat bridging at screed edges.
5. Upstand depth should equal the sum of the slab insulation and screed thickness.*
6. The upstand thickness should not exceed the combined thickness of wall plaster and skirtings.
7. Lay boards directly onto the prepared slab, cutting infill boards as required. Joints must be tightly butted. The use of a polythene vapour control layer over the insulation is recommended by the BRE to minimise the risk of condensation forming at the insulation/slab interface.
8. Apply a sand/cement screed over the GA3000Z boards to a minimum thickness of 65 mm. Use scaffold boards or other protection to prevent wheelbarrows and other traffic damaging boards.
9. Allow screed to dry thoroughly before an impermeable surface, such as a vinyl floor finish, is applied.
10. These recommendations are suitable for normal domestic floor loadings. If higher loadings are required it may be necessary to increase screed thickness and provide reinforcement within the screed
See "Limiting Thermal Bridging and Air Leakage: Robust construction details for dwellings and similar buildings" ISBN 0 11 753 638, published by HMSO.

Installation guidelines (under slab)
Insulation under the slab must have: Level and well blinded hardcore. DPM (Damp Proof Membrane) placed under insulation. Insulated upstand = thickness of slab + screed. DPM contiguous with the DPCs. Vapour control layer (e.g. 1000g polythene) laid directly over insulation.

DAMP PROOF COURSE (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 DPM in ground floor.Provide perforned cavity wall trays above windows & doors with weep vents at a max.of 2m centres with a min.of 2no.per opening.

EXTERNAL WALLS
All external walls to be 275mm overall thickness comprising of:
-100mm Thermalite Shield insulating blockwork with 20mm two coat sand / cement render 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 ...mm 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.

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.

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 drought 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.

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.

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 parellel to blockwork walls.Also fit at max 1.8m ctrs to anchor wallplate to blockwork wall with min 3no. fixings per strap.

CEILINGS
All ceilings to be 15mm plasterboard to BS1230.
Ceilings to be have Coving and a skim 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 a 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.

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.

ELECTRICAL INSTALLATION
To be in strict accordance with the latest I.E.E 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.

SOAKAWAYS
All rainwater to discharge into soakaways and to be min.of 5m from any building & a min.of 1m ³ 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.

HEATING SYSTEM
Provided from existing but all radiators are to be fitted with thermostatic radiator valves. All space heating pipework located outside the building fabric insulation layers to be wrapped with insulation material having a thermal conductivity at 40°C not exceeding 0.035 W/m²K and a thickness equal to the outside diameter of pipe upto max. of 40mm.It should be noted that central heating and hot water pipework in unheated areas may need increased insulation thicknesses for the purpose of protection against frost, refer to BRE Report No. 262 2002 Edition.

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.

GENERAL CONDITIONS
Contractors are resonsible for checking all dimensions on site when work commences and before ordering any materials.Any discrepancies should be brought to the attention of the Client for remedial action before commencing further.

All details shown are based on typical site conditions for that area, any abnormal conditions should be brought to the attention of the Client and Local Authority.

The notes shown are mainly to cover the requirements of Building Regulations and should not be treated as full specification.

No allowance has been made for any Structural Calculations,a "SAP" calculation, Soil Investigation or Flood Risk Assessment.If deemed necessary then these will be a chargeable extra.All steel beam sizes shown on drawing are all subject to confirmation from Structural Engineer.

All materials not specified to be of a standard suitable for the work proposed and be fit for purpose.All work to be in accordance with good building practise and all necessary BS codes for Workmanship on Building Sites.

DETERMINED PLAN

SHDC
Planning & Development
10 DEC 2004
Ref: 1628/04

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.

Client :
Mr N Tolley
41 Halmergate
Spalding
PE11 2EQ

Site :
Proposed Two Storey Rear Extension

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 : nov04 | Scale : 1:50 / 1:100

Drawing No:
rem 983 - 02