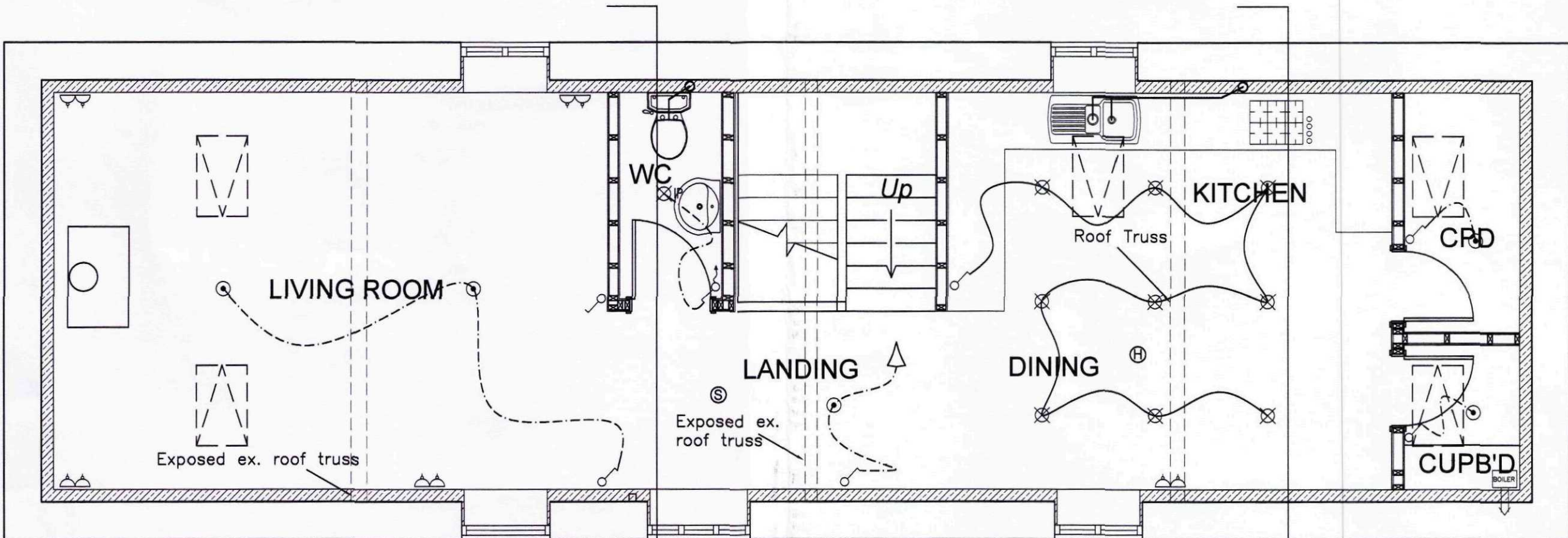




Proposed First Floor Plan (UNIT 1.)
Scale - 1:50

NOTE:
Allow for galv' 1200mm wall straps to be mechanically fixed to existing/ new structure. Installed horizontally at 1500mm cnts to restrain the corners.

GENERAL
All work carried out in accordance with current Building Regulations, LA Approval, Public and Private Utilities regulations and approvals. All materials, construction and workmanship in strict accordance with current relevant Codes of Practice, British and CEN Standards and Manufacturers Specifications. Do not scale from drawings.

STATUTORY SERVICES
Position and route of all electricity, water and telephone to be checked with appropriate Public/Private Utilities and installed / altered in strict accordance with their regulations and requirements.

TRENCH FILL FOUNDATIONS
Trench fill foundations in strict accordance with N.H.B.C. Standard 4.4 'Strip and Trench Fill Foundations' and 4.2 'Building near Trees'. Foundations taken below invert of drains to L.A. Approval. All foundations shown are a designed mix in strict accordance with N.H.B.C. Standard 2.1 'Concrete and its Reinforcement' and the current requirements of B.S. 8500-1 (Grade = Gen 1 Consistence Class = S4).
Ordinary Portland cement to BS 12. Course and fine aggregate to EN 12620.
Aggregate Nominal Maximum Size = 20 mm. Maximum Cement Content = 220kg/m³.
Maximum Free Water/Cement Ratio = 0.80
No additives to the concrete will be allowed unless agreed with the engineer.
Concrete to be compacted by means of mechanical poker vibrator and workability such that a dense concrete free from voids will be produced.
Block masonry in foundation walls to be 7 N/mm² in accordance with B.S. 6073.
Mortar to be in accordance with B.S. 5628 1:3, min below dpc.

INTERNAL WALL LINTELS
Lintels in strict accordance with N.H.B.C. Standard 6.1 'External Masonry Walls' section 6.1-56 Lintels. Strengthened or similar approved pre cast concrete lintels for internal use with min 100mm bearing up to 1.2m span or 150mm bearing over 1.2m span. Lintels should bear only full blocks or whole bricks and be installed on a level, solid bed of mortar. Concrete beams bearing over lintels should be positioned carefully to avoid damage or shock load. Masonry to not overhang lintels by more than 25mm.

EXTERNAL WALL LINTELS
Block to match existing.

CAVITY CLOSURES
Install proprietary cavity closers to all horizontal and vertical cavity openings, to be and provide insulated type dpc's, as spec above. Set all window / door frames back to overlap the insulated cavity closures by at least 30mm.

INTERNAL NON LOAD BEARING WALLS
Refer to legend.

UPPER FLOORS
Existing.

NEW WINDOWS & DOORS
Doors and windows to be in strict accordance with N.H.B.C. Standard 6.7 'Doors, windows and glazing'.
Refer to details.
The main entrance door security to comply with BS 3621, and secondary external access doors should have 5-lever locks and bolts fixed top and bottom. Windows to be fitted with suitable hinges and fasteners as outlined within the above referenced N.H.B.C. Standard.
Weather resistance of all windows to comply to BS 8375 to prevent water penetration between both the frame and opening and also the frame and structure.
All timber and wood based materials should comply with BS EN 942 as follows:
• glazing beads - European
• Window casements/sashes - 'U' classes
• All other elements - (see table 1 of BS EN 942)
External doors to be not less than 42.5mm (44mm nominal) in thickness, and MDF internal window boards to be of moisture resistant grade.
Incomparable for both doors and windows to comply with the appropriate standards including the following:
• BS 7352 'Specification for strength and durability of metal hinges'
• BS 3621 'Specification for blind-resistant locks'
• BS 4951 'Specification for builders' hardware: lock and latch furniture (doors)
• BS 8872 'Specification for locks and latches for doors in buildings'

INTERNAL DOORS
Internal doors to be ledged and braced with vertical timber boarding. Refer to specification for additional details.

ROOFLIGHTS
Rooflights from the Rooflight Company installed in strict accordance with the manufacturers details and specification.

GLAZING
All glazing to be insulated glass units complying with the requirements of BS EN 1279, be CE marked and the subject of a third party certification scheme (e.g. Kitemarking).
Insulated glass units to have 16mm or greater gap between panes, or filled (low-E, hard coat) min. U value 0.22 W/m²K.
Glass thickness to comply with BS 6262 for specific location and in accordance with Approved Document 'N'.
All glazing within 800mm above finished floor in partitions or walls and 1500mm in doors and side panels to be safety glass as defined in BS 6206.
All laminated glass to be class C BS 6206 in panels of glazed doors, windows and sidelights.

ROOF STRUCTURE
Refer to specification and detailed drawings.

New Carport:
To be a traditional cut roof. Timber sizes to conform to TRADA span tables and BS 8103 to be in accordance with BS 5534: Parts 1 & 2. New rafters to be birds-mouthed over beam spanning between timber posts and strapped down internally at the eaves with 30x5x1000mm as latraps (where applicable) and 100x75mm plate at the mono ridge. The mono ridge plate to be bolted to main structure.
240x15mm fascia boards to be suitably treated timber with external grade paint finish in strict accordance with N.H.B.C. Standard 2.3 'Timber preservation (natural solid timber)'. Soffit to be as detailed.

ROOF COVERING
To be constructed in strict accordance with N.H.B.C. Standard 7.2 'Pitched Roofs'.
As detailed.

All components are to be installed in strict accordance with the manufacturers instructions. Tiles at verges to project 40-50mm beyond the gable wall and incorporate either a proprietary system or a closed verge should be formed with tiles bedded into mortar on an undercloak of a plain tile. Tiles should overhang the gutter and be supported on proprietary support trays all as recommended by the manufacturer.

FLASHINGS
Where a roof abuts a vertical surface stepped cover flashings and sakers should be incorporated along with the building in of stepped cavity trays linked to the flashings. Refer to N.H.B.C. Standard 7.2 'Pitched Roofs' section 7.2 - S12(1) Stewwork clause for details.
Cover flashings should be tucked 25mm into a brick joint or chase not less than 75mm above the intersection with that roof.
Where soil pipes, vent pipes or other pipes penetrate roof tiling, a lead flashing or purpose made accessory supplied by the roof covering manufacturer to form a weathertight joint should be used. Flashings to connect with chimney dpc.

RAINWATER GOODS
As specified including all gutters stop ends, hoppers, clips, down pipes etc required to complete the installation.

INTERNAL SERVICES GENERALLY
To be installed in strict accordance with N.H.B.C. Standard 8.1 'Internal Services'.

Main Water Services
Water service to be in accordance with the statutory authorities requirements and based on the pressures and flow rates to be measured at the incoming main.
To BS 5572, separate connections to fittings, direct connections via a reducer.
Hot and cold water supplies to all fittings suitably sized and installed in accordance with Water Authority Regulations.
Contractor to assess the flow/pressure at the incoming main at the earliest opportunity and notify the CA of a suitable proposal for the proposed installation.

Hot & Cold Water Services
To be installed in strict accordance with N.H.B.C. Standard 8.1 'Internal Services'.
Cold water services to be taken to all outlets required eg. WC's, basins, baths, sinks and showers as indicated on the plans. The main stop tap should be positioned below the sink within the kitchens.
The hot water service to be installed with a secondary return circuit so as to provide instantaneous hot supply and should be installed as follows:
Install a fired boiler (refer to Space Heating for boiler notes). Contractor to provide the installation of an accumulator within the design to allow for poor water pressure to the building.
The above installation should be installed in accordance with the manufacturers details and specifications so as to provide a pressurised supply to all outlets as and when required.

Space Heating
General:
Contractor to carry out the calculations for the building heating design based on the following minimum standards.

Contractor to supply and install a suitably sized Combi Gas fired boiler positioned within the kitchens with flue to vent to the nearest suitable external wall. Boiler to provide adequate capacity for the heating of the building with underfloor heating to the following design criteria:
The design to be in accordance with BSRIA guides AG12 & 13 to provide the minimum standards outlined for 'whole home heating' at an outside temp of -3°C:
Living Room - 21°C
Dining Room - 21°C
Bedroom - 18°C
Hall & Landing - 18°C
Kitchen - 18°C
Bathroom - 22°C
Toilet - 18°C

Contractor to supply and install an underground gas tank with min 2400L capacity in accordance with all relevant regulations governing such installations. Position of tank to be agreed with Client prior to installation, but be positioned as close as regulations allow to the dwelling whilst allowing good access from the drive for deliveries.
Contractor to supply and install dual fuel heated towel radiators where indicated connected into the mechanical heating system and connected via a fused spur to the electrical installation.

INSULATION OF VESSELS, PIPES AND DUCTS
Pipes and ducts in unheated areas (unless contributing to the useful heat requirement of the room or space), lagged in accordance with the requirements of BS 5422 / 80.

ELECTRICAL INSTALLATIONS
Electrical installations in accordance with BS 7671 and current edition of the IEE Wiring Regulations: cables within or fully enclosed by insulation to have circuit protection and increased size cables. Installing Contractor to be Part P registered.

SOIL AND WASTE SYSTEMS
The design of the system is as indicated on the drawings in accordance with the relevant Building Regulations.
Entry of vermin into the system should be prevented.
Soil pipes passing through the dwelling are to be encased with timber formwork and lined with plasterboard the void around the soil pipe should be filled with insulation.
Discharge pipes min. 450 above drain invert with min. 200 radius stack to drain; small sized connections to stack offset by 110 ; no offsets in 'vee' portion of stack ; w/p's taken up min. 900 above openings into building within 3m and to be terminated at ridge or tile vents.
320dia pvc waste to basin, 40dia pvc waste to sink & both, 75 deep seal traps ; self ventilating type used waste pipes greater than 3m [sink+both] ; 1.7m [basin] ; waste pipes to discharge below gully gratings.

SMOKE & HEAT DETECTIONS
Provide mains operated self contained smoke & heat alarms with audible or visual signals on each unit to BS 5446 P1, all interconnected and positioned within dwelling circulation areas on each floor in the circulation space within 7.5m of the door to every habitable room, and ceiling fixed min. 300 from walls denoted on plan.

VENTILATION EXTRACT FANS
Kitchens: extract fans 60 litres/sec with humidistat and removable grease filter.
Cooker hoods: (where provided) 30 litres/sec.
Bathrooms: extract fans 15 litres/sec with 15 min overrun, extract fan 15 litres/sec, with 10mm air gap under door.
Fans to be either ducted through cavity wall or through roof space to terminal as indicated on plans. Where pilot ducts pass through roof voids, duct to have condensation trap complete with 20mm overflow. Duct also to be insulated.

VENTILATION
All rooms opening windows min 1/20th of floor area of room. All habitable rooms to have background trickle ventilation to be provided by controlled slot vents inserted in the window head with min 5000 sq/mm free air space in each room. Kitchens, Utility rooms, Bathrooms, WC's to have a min. 4000 sq/mm free air space in each room.

WALL CHASES
Wall chases max.1/6th wall thickness.

ACCESSIBLE SWITCHES AND SOCKET OUTLETS
IN THE DWELLING
Switches and socket outlets for lighting and other equipment in habitable rooms to be at appropriate heights between 450 and 1200 from finished floor level.

ENERGY SAVING LIGHTING
1-3 new rooms = 1no fittings
4-6 new rooms = 2no fittings
7-9 new rooms = 3no fittings
10-12 new rooms = 4no fittings
Fittings to have max output 40 lumens per circuit watt eg compact fluorescent type.

STAIRCASE
To comply with the current Building Regulations max 220mm rise, min 220mm going, max pitch 42 deg. Windows shall not be less than 50 mm at the narrowest point to building regulation requirement. Underdrum with 12.5 mm plasterboard and skim coat.
Handrail 800mm above pitch line, balusters at 100mm ctrs, 2000mm clear headroom above pitch line and consist of the following section sizes.

Ground to First Floor Stairs:
As detailed.
Risers to be box jointed to u/s of tread to form 90° corner from riser to tread as viable underneath.
Proprietary oak balustrade system to be fixed between newel posts.
Edge of floor openings to have balustrade guarding min 1100mm high to match stairs.

FLOOR FINISHES
45 - 50mm Flowcrete floor screed in accordance with N.H.B.C. Standard 8.3 'Floor Finishes' with underfloor heating pipework within. Contractor to consult with Mechanical Contractor as to product type and installation details so as to ensure compatibility of products. Refer to drawings for internal finish requirements.

M & E FITTINGS KEY		
MOUNTING HEIGHT	SYMBOL	DESCRIPTION
CEILING	⊗	LOW VOLTAGE RECESSED DOWNLIGHTER (WHITE / CHROME) FITTED WITH MBS DIMMABLE DIM LAMP
1800	⊗ IP	IP RATED FOR LOCATION DOWN TO FIVE RECESSED DOWNLIGHTER (WHITE / CHROME) FITTED WITH MBS DIMMABLE DIM LAMP
1800	⊗ Ext	INTERNAL WALL LIGHT FITTING LOCATION
1800	⊗ Ext	EXTERNAL WALL LIGHT FITTING LOCATION
FLOOR	⊗	GROUND RECESSED UPLIGHT IP RATED FOR EXTERNAL USE (REFER TO EXTERNAL WORKS DRAWINGS FOR LAYOUT)
CEILING	⊙	PENDANT FITTING
CEILING	⊖	1800mm FLUORESCENT STRIP LIGHT
1200	⊗	WALL MOUNTED SWITCH
1200	⊗	WALL MOUNTED SWITCH (no of way indicated)
CEILING	⊗	PULL CORD SWITCH
2000	⊗	PWR SENSOR LINKED TO LIGHTING
	⊗	WIRING CONNECTION TO INDICATE POSITIONS OF SWITCHES
450	⊗	13A SWITCHED SOCKET OUTLET
1200	⊗	HIGH LEVEL 13A SWITCHED SOCKET OUTLET
	⊗	SA LAMP SOCKET OUTLET
600	⊗ S	13A LOW LEVEL PULSED SPUR FOR PROBE ETC.
1200	⊗ D40	40A FUSED SWITCH-ED SPUR
2000	⊗ DF	13A HIGH LEVEL PULSED SPUR FOR FANS
450*	⊗	TELEVISION COAXIAL OUTLET (* - Mounting height is not fixed (Mount TV on wall)
450	⊗	TELEPHONE OUTLET
450	⊗	DATA SOCKET OUTLET
	⊗	WET UNDERFLOOR HEATING SYSTEM WITHIN FLOOR SCREED
	⊗	HEATED DUAL FUEL UPFURN IN TRADITIONAL TOWN HOUSES (PULSED IN SPUR & TOWN HOUSES)
1200	⊗	UPH THERMISTAT AND ROOM TEMPERATURE CONTROL
	⊗	BOILER (LPG GAS)
CEILING	⊗	CEILING MOUNTED EXTRACT FAN & DUCT TO OUTLET ROOMS WITHOUT WINDOW 15 l/s + 15 min OVERRUN ROOMS WITH WINDOW - 15 l/s
2100	⊗	WALL MOUNTED EXTRACT FAN & DUCT TO OUTLET ROOMS WITHOUT WINDOW 15 l/s + 15 min OVERRUN ROOMS WITH WINDOW - 15 l/s
CEILING	⊗	CIRCUIT BREAKER CONSUMER UNIT
	⊗	WALL MOUNTED WIRELESS BONE DETECTOR ALARM WITH BATTERY WITHIN 13M TO EVERY HABITABLE ROOM
	⊗	OUTSIDE TAP
	⊗	RADIATOR (PLUMBING IN)

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Ross Thain & Co. Ltd.
Chartered Surveyors - Architecture - Interior Design
20 Belton Street, Stamford, PE9 2EF
Tel: 01780 482483 Fax: 01780 752281
www.rossthain.co.uk

Job Title
Martin's Farm
Postland
Crowland
Peterborough

Scale: 1:50 Date: 17.01.11
Drawn: AJC
Drawing Title:
Services Plans
Drawing No.
300-07-03 Revision -

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Proposed Ground Floor Plan (Unit 1)
Scale - 1:50

Proposed Ground Floor Plan Unit 2
Scale - 1:50