

**Electrical Works** - to latest IEE Regulations

a) Installation by qualified contractor registered with self certification scheme in accordance with Approved Document P (Electrical Safety).

b) Smoke detectors marked [D] to be linked to mains system and a minimum 300mm from ceiling fittings, and from any wall. All smoke detectors to be interlinked.

c) All external lights fitted with PIR sensors and energy efficient fittings throughout.

d) Switches / sockets fitted a minimum 450mm and maximum 1200mm from finished floor level.

e) Extract Fan ~ Shower / Bathrooms - extract rate of 15L / sec and wired in series with lightswitch and run on device. Timer over run of 15 minutes if no window is located in room. Utility ~ 30L / sec. Kitchen extract rate ~ 60 L / sec. Where cooker hood provided, the cooker hood capable 30L / sec.

Provision for energy efficient lighting to comply with the requirements of Approved Document L1B. A minimum of 1 light/25sqm of floor area or 1 per four fixed lighting points, whichever is greater.

Villavent heat recovery system to be installed where 5 or more extract fans are required.

**External Drainage** - all underground drainage

a) to be 100mm super sleeve by Hepworth or Orma or similar laid to a minimum fall of 1 : 80 with a cover of 450mm to crown.

b) Drainage bedded to suit ground conditions and in accordance with manufacturers recommendations. To comply with BS. 882 : 1988 / 830 1985.

c) Pipes passing through buildings to be lintelled to provide 50mm settlement gap. Apply steel plate surround and fill compressible fibre.

d) Drains within 1.0m of building and below foundations to be protected in concrete upto foundation level.

e) All manholes laid on 150mm concrete base. Manholes not exceeding 900mm to be Hepworth polypropylene 475mm dia with preformed benching. Cast iron covers capable of 1.5 ton loadings.

**Internal Drainage**

a) Kitchen - 42mm upvc from kitchen sink with 75mm deep seal traps. Provide 42mm upvc for dish washer and take through wall to trapped gulley.

b) Bathroom / Shower Room - 100mm dia upvc drain with access point to s.v.p. or a.v.v. from w.c. pan. 42mm dia upvc drain from w.h.b. bath; with 75mm deep seal traps.

Inline blending valves to be installed to all baths in order to restrict water temperature to 48 degrees

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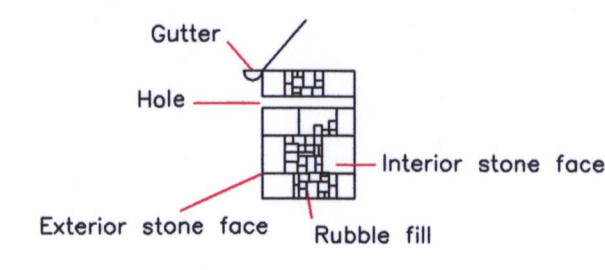
**Heating**

Greenstar Camray by Worcester Bosch floor mounted condensing oil boiler located on external wall of car port complete with conventional flue and fire stops. Direct main feed to all appliances / fittings. Circulating pump linked to automatic programmer and room thermostat. Heating system to zone controlled. All pipework lagged in accordance with BS 5422 1990. Heating and hot water to be inspected, commissioned and tested to manufacturers instructions. Contractor to provide written information for the use of the occupier on the operation and maintenance. Bunded Titan oil tank (1225L capacity) with fire valve raised to suit gravity feed to boiler.

Inline blending valves to be installed to all baths in order to restrict water temperature to 48 degrees

**Bat Mitigation Measures (If Required)**

Loft areas will be created above the proposed units. The loft areas above the proposed units will be made accessible to bats via a slot in the gable end wall (5-20mm wide and 40-80mm long) or via a raised ridge tile or via a gap at the eaves. Two gaps will be required, each providing access to the interior of the two lofts. Following the completion of the building works, the loft areas and wall voids will be monitored to see if bats are using or investigating these areas. Monitoring will take place during the summer season following completion.



**Internal Partitions**  
90 x 50mm treated at 600mm centres with 90 x 50mm head and sole and dwangs to support p.b. 12.5mm plasterboard, tape and 3mm skim finish.

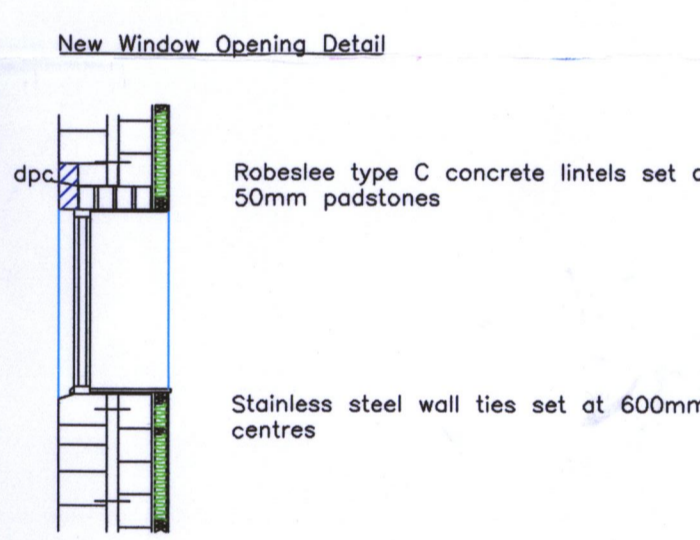
**Lintels**  
Spans up to 1200mm clear to be Robeslee Type A 100 x 145mm  
Spans over 1200mm to 1800mm clear to be Robeslee Type C 100 x 145  
Spans over 1800 to 3000mm clear to be Robeslee Type K9 100 x 215mm  
Minimum endbearing 150mm

**Strapping**  
All external walls to be strapped off using 75 x 38mm CLS timber and double CLS timbers to be used at corner joints and either side of openings. Kooltherm K18 75mm Kingspan insulation to be fitted in strapping. 12.5mm Duplex plasterboard with 3mm skim. U-value 0.30 W/m2k. 12.5mm moisture resistant plasterboard bathroom/showers

**Ground Floor Slab**  
All vegetable material within the footprint of the building to be removed, backfill with well compacted approved hardcore laid in max. 150mm layers. Depth of backfill must not exceed 600mm. Ground floor slab to be 150mm thick C25 / 20 concrete. Reinforcement to be one layer A142 mesh placed approx. mid depth. Minimum 400mm overlap between sheets of mesh. Alternatively fibre reinforcement may be used. The slab should be saw cut into bays within 24 hours of casting. The sawn joints to be cut using a diamond disc cutter, cutting to one quarter to one third of the slab depth. The bays should be of rectangular plan with a maximum plan ratio of 1 : 1.5. Distance between sawn-joints to be 5 - 7m maximum. Care to be taken when excavating against the existing walls to ensure the excavations to not undermine the existing foundations.

**Windows**  
Windows to be treated timber. 28mm d.g units Pilkington Low-E to give U-value 1.40w / m2K. Insulated d.p.c. strip to jambs, head, sill with trowel mastic pointing to external. Opening ventilation sashes equivalent to 1/20 of room floor area. Trickle Ventilation - 4000mm2 to all rooms. First floor windows to be fitted with Easy Clean hinges to allow glass to be cleaned from the inside.

**External Doors**  
All multi lock fitting. All fitted with 24mm d.g units with Pilkington 'Low E' to give U value 1.4 w / m2k. Glazing below 800mm above f.f. level to be toughened safety to BS. 6262. Insulated d.p.c. to all window and external door heads, sills and jambs



Northumberland National Park Authority  
Planning Department  
Received  
15 SEP 2015

<b>PROJECT</b> Conversion of Threshing Barn & Outbuildings to 2 No. Holiday Units & Farm Office.	
Thompson's Walls Kilham Northumberland TD12 4QT	
<b>CLIENT</b> Thompson's Walls Limited	
<b>TITLE</b> Proposed Floor Plan Layout	
<b>SCALE</b> 1 : 100	<b>DATE</b> 10 / 09 / 15
	<b>DRN BY</b> J Dobson
<b>PROJECT NO.</b> 15 / 450	<b>DWG NO.</b> 17
<b>REVISIONS</b>	
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