GLAZING
To be safety glazing to BS6206 in critical location, between finished floor level and 800mm above that level in internal and external walls and partitions, between finished floor level and 1500mm above that level in a door or in a side panel, close to either edge of the door.

VENTILATION
Background ventilation to be provided equivalent to $8000mm^2$ to habitable rooms and 2500mm2 to wet rooms via hit and miss or 2 stage catches fitted to windows. Mechanical ventilation is to be provided to the rooms listed below directly ducted to the outside air equivalent to the following rates. Kitchen 30 litres per second over hob or 60 litres elsewhere. Utility room 30 litres per second .Bathroom 15 litres per second (including shower rooms & en-suites) . Toilet 6 litres per second W/C (with window optional) Mechanical ventilation to rooms without openable windows to be linked to light operation and have 15 minutes overrun and a 10mm gap under the door for air supply. Fans must not be installed in rooms containing open flue appliances unless the interaction of mechanical ventilation & open flue heating appliances is checked and certified by an approved method & suitably qualified person as contained in ADJ. Mechanical ventilation to be ducted in proprietary insulated ducts to outside through walls to proprietary vent or through roof space to proprietary matching tile /soffit vent minimum 400mm from any opening into the building

STEELWORK
Provide steel beams as detailed, provide 2 long x 2 deep engineering brick padstones . Encase beams 12.5mm plasterboard & skim finish or paint with intumescent paint to manufacturers instructions to provide 30mins fire protection. All steelwork is to be fabricated from dimensions taken from site measurements. Dimensions shown on this drawing are for information only and are not to be used for fabrication purposes in any situation. Any existing foundations to be exposed to check for adequacy and replaced if required as foundation note

ESCAPE WINDOWS TO HABITAL ROOMS
Means of escape windows to be fitted with proprietary hinges to open the window to the minimum required clear width of 450mm. Escape windows must have minimum clear opening casement dimensions of $0.33m^2$ (typically 450mm wide x 750mm high) , with the opening located between 800-1100mm above floor level to all bedrooms and habitable rooms at first floor level and inner habitable rooms on the ground floor level.

ENERGY EFFICIENT
Provide new internal light fittings, capable only of accepting lamps having a luminous efficacy greater than 45 lumens per circuit-watt.

LINTELS
Catnic insulated lintels, minimum 150mm end bearings

RADIATORS
New radiators to be fitted with thermostatic radiator valves. (TRV`s)

VELUX WINDOW
Provide velux as shown, double rafters to sides and bolt 600mm centres M10 g4.6 bolts. Provide trimmers top and bottom

WINDOWS & DOORS
All to be double glazed to BS6262: 1982, with a WER classification of band C,B or A. Frames to overlap the cavity closer by minimum 30mm. Finish externally and internally around frame with mastic sealant. New windows to achieve a U value of 1.6w/m2k and doors minimum 1.8w/m2K

BELOW GROUND DRAINAGE
New drains to be 110mm Diameter OsmaDrain laid to fall of 1:40 unless otherwise stated. Where drains run under building to be laid on 100mm pea gravel with pea gravel haunch and backfilled with gravel to underside slab or sub-base. Drains passing through load bearing walls to be bridged with 100mm x 150mm reinforced prestressed concrete lintels to BS8110 & BS5977. Use Masterboard around all pipes/concrete lintels and voids packed with fibreglass to ensure the prevention of ingress by vermin.

ABOVE GROUND DRAINAGE
New above ground sanitary pipework to be in accordance with BSEN12056:2000. 110mm diameter Stub stack to finish 1000mm above FFL in air admittance valve. S&Vp to finish 900mm above any adjacent openable window in wire cage. All waste fittings to be provided with 75mm deep seal anti syphon traps. 32mm waste to basin, 40mm sink wastes. Internal S&VP to be boxed in and tightly packed with fibreglass insulation. Provide rodding access panels at all connections and at 150mm above ground floor level.

PARTITIONS
47mm x 100mm SW studding @ 400mm centres, finished both sides with 9.5mm plasterboard and skim finish.

SOUND PARTITION
47mm x 100mm SW framing members @ 400mm centres lined both sides 12.5mm plasterboard & skim finish. Infill with 25mm mineral wool minimum 10 kg/m3.

PIPE BEDDING AND TRENCH BACKFILL
Pipe to have minimum 50mm pea gravel bedding all round, minimum size 5mm, maximum size 20mm. Backfilling should be compacted in 300mm layers, Backfill to be clean hardcore minimum size 20mm, maximum size 200mm or selected subsoil free from vegetable matter, lumps of clay or building rubbish.

RAINWATER
Provide 110mm diameter half round gutters (or profiled equivalent) to 70mm diameter downpipe to new soakaway. New surface water soakaway (s) to be designed, sited and constructed to provide adequate short term storage for rain/surface water and adequate percolation into the ground. Soakaways should be sited at least 5m from any buildings and constructed on land lower than or sloping away from the foundations of the buildings. Soakaway to have a minimum capacity of $1\text{-}2m^3$ (in free draining granular type sub soils) , per rain water pipe serving a roof area up to 30m2 as agreed with building control, constructed of clean stone/rubble with particle sizes ranging in size from 20 to 150mm and covered with polythene and top soil or to other methods as shown on the drawing/specification. Soakaways in clay sub soils or serving roof areas exceeding 30m2 per rwp to be designed in accordance with BRE Digest 365 or by a drainage specialist (i.e. Hydrologist) .

SMOKE ALARMS
Fire detection and fire alarm systems Self contained mains operated smoke alarms with battery backup to BS EN 14604 or BS 5446, and fire alarm systems to be installed in accordance with BS 5839 to the following standards:

(i) New houses and extensions: Grade D Category to a LD3 standard Self contained mains operated smoke alarms with battery backup to BS EN 14604 or BS 5446, to be installed in accordance with the relevant recommendations of BS 5839 Part 6: 2004 as follows: in all circulation areas at each storey level that form part of the escape route from the dwelling, within 7.5m of all doors to habitable rooms. Sited at least 300mm from walls and light fittings, interconnected together. Heat alarms to be installed in kitchens if the kitchen is open to the stairway or circulation area (in two storey dwellings)

GROUND FLOOR
Ground floor consisting 65mm (1:6) sand/cement screed on 125mm concrete 1:3:6 (= 50kg cement: 0.1m3 fine aggregate: 0.2m3 coarse aggregate) on 1200g DPM on 75mm Kingspan Kooltherm K3 insulation on 1200g polythene DPM vapour barrier on minimum 150mm mechanically compacted hardcore in 150mm layers to required level (maximum 600mm) . Provide 20mm Celotex GA2020 perimeter insulation all round. 1200g DPM to be sealed at all joints with vapour resistant tape and the membrane to continue across the cavity to form a cavity tray. Any existing sub-floor ventilation to be maintained by use of 100mm diameter uPVC ducts set in new floor and terminating in external wall in 225mm x 225mm air bricks. U valve of this construction achieves 0.22W/m2.

STRUCTURAL TIMBER
All structural timber to be Grade C16 to BS4978: 1978 and BS5268: Pt2: 1984 unless otherwise specified. Timber to be treated by pressure impregnation using a Vac-Vac process prior to delivery on site with a preservative in accordance with BS5589: 1978. All cut timbers ends to be treated with preservative complying with BS1282:

CAVITY WALL - BRICKWORK
Cavity wall comprising 100mm brickwork to match existing, brickwork is to be minimum 5N/mm2 and laid in 1:1:6 (cement:lime:sand) mortar . Below DPC use 1:3 mortar with sulphate resisting cement. Inner skin of 100mm Celcon standard (3.6 N/mm2) or similar blockwork (0.16W/mK or lower) to BS6073: 1981 in 1:6 masonry cement: sand mortar. 100mm cavity filled with 100mm Dritherm 37 (0.037W/mK) cavity insulation. Finish internally with 12.5mm plasterboard on dabs (minimum 10mm air gap) . U valve of this construction achieves 0.27W/m2K. Stainless steel wall ties @ 750mm centers horizontally and 450mm centers vertically to cavity, allow for additional wall ties at corners, reveals, all openings and where cavity is vertically closed, with maximum vertical spacing of 300mm. Provide hold down straps at plate level, 5mm x 30mm x 900mm long MS straps @ 1.6m centres plugged and screwed to walls/roof joists. Provide Thermabate insulated cavity closers (minimum 0.45m2k/w) to AC No. 91/2648 at all cavity closers and reveals. To avoid the need for movement joints the blockwork above and below openings should be reinforced with masonry grade bed joint reinforcement. The bed joint reinforcement should be provided in two courses above and below the opening and extend at least 600mm beyond each side of the opening.

ELECTRICAL SAFETY PART P
All fittings to be MK. All electrical works required to meet the requirement of Part P (Electrical Safety) must be designed, installed, inspected and tested by a person competent to do so. On completion of the works the appropriate BS7671 electrical installation certificate to be issued to the Local Authority Building Control Department and the client. Works carried out by those registered under competent persons schemes and who can self certify their own work are a) BRE Certification Ltd; b) British Standards Institution; c) ELECSA Ltd; d) NICEIC Certification Services Ltd; e) NAPIT Certification Ltd. Works carried out by competent electricians not a member of any of the above schemes and hence cannot self certify but are considered competent for the purposes of signing a BS7671 electrical installation certificate.

PITCHED ROOF (approx 25 degrees)
Rooftiles to match existing roof tiles on 25mm x 38mm SW battens on Glidevale VP400 vapour permeable roofing felt draped over 47mm x 195mm SW rafters at 400mm centres birdsmouthed over 47mm x 100mm SW plate. 47mm x 147mm SW ceiling joists (over bathroom only) @ 400mm centres supported by joists hangers. Ceiling joist finished under with 12.5mm plasterboard and skim finish. Infill between ceiling joists with 100mm Rockwool Roll quilt insulation with a further 170mm cross laid over, all minimum 0.044W/m2k or lower providing a total thickness of 270mm. To sloping roof provide 165mm friction fixed celotex GA4000 between rafters finished with 12.5mm foilbacked plasterboard and skim finish. No notches allowed in rafters. Provide hold down straps at plate level, 5mm x 30mm x 900mm long MS straps @ 1.6m centres plugged and screwed to walls/rafters. This construction achieves a U value of 0.16w/m2 K. Ensure minimum 30mm air gap over insulation. Ridge tiles to be mechanically fixed. fascia and soffits to match existing

PUBLIC SEWERS
IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER who is carrying out the building work to make an application to the water authority to build close to or over a public sewer if the new foundations are within 3.0m of a public sewer . This will require the works to the public sewer to be constructed in accordance with the water authority specification.

Details can be found at www .stwater .co.uk /ConWebDoc/846

PARTY WALL ACT 1996
IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER who is carrying out the building work to serve notice on any adjoining Owner in accordance with the Party Wall Act 1996 at least 2 months prior to commencement of the works if there are any works to a party wall or the foundations for the new extension are within 3m of a neighboring owners building and the new foundation is deeper than the neighbors foundation . Note that for the purposes of section 6 of the Act, `Adjoining Owners` may include your next-but-one neighbor if they have foundations within 6 metres. Details of the notice that has to be served can be found at www. communities.gov.uk/ documents/ planning and building/ pdf/ 133214.pdf

DRAWINGS
The drawings are the copyright of M.Pellegrini. The drawings must not be scaled from. The Contractor should take and verify all dimensions, floor & rafter positions, trimmers, load bearing walls, drains, services etc, on the site before proceeding with any works and any discrepancies reported directly to M.Pellegrini. Only a drawings with a Building Control Stamp `Full Plans Approval` or similar wording should be used for construction purposes. This drawing is not Approved and is for information purposes only. Any works carried out or materials ordered prior to Full Plans approval may be subject to removal or replacement regardless of any inspection by Building Control. Any works carried out prior to Full Plans Approval are solely at clients own risk.

FOUNDATIONS
Foundations to be in accordance with BS 8004: 1986. All foundations to be taken down to a firm bearing strata, inspected and approved by Building Control Inspector prior to concreting. Such depth to be a minimum of 1350mm below existing adjacent ground, increased as required by Building Control inspector in the light of the ground encountered. Foundation to be taken down to IL of any adjacent drains. All concrete for deep strip foundations to be ST2 or GEN1, 1:3:6 (= 50kg cement: 0.1m3 fine aggregate: 0.2m3 coarse aggregate) , width to be 500mm unless otherwise stated. Any weak pockets to be taken down to firm bearing strata and filled with concrete to general foundation level.

MATERIALS AND WORKMANSHIP
All materials must comply with the following: British Standards or European Standards, Product Certification Schemes (Kite marks) ,Quality Assurance Schemes, British Board of Agreement Certificates (BBA) , Construction Product Directives (CE Marks) ,Local Authority National Type Approvals (System Approval Certification) . All materials must be fixed in strict accordance with manufacturers printed details and workmanship must be in strict accordance with BS 8000: Workmanship on Building Sites: Parts: 1 to 16. Where materials, products and workmanship are not fully specified or described, they are to be: Suitable for the purpose stated or inferred & In accordance with recognized good practice

DPC & DPM
Dpc to BS8215, minimum 150mm above ground level and lapped a minimum of 150mm with any existing dpc. Dpm to be 1200g polythene lapped a minimum of 150mm with dpc.

CONSTRUCTION
All external door and window frames, service penetrations to walls, floors and ceilings, etc, should be sealed both internally and externally with proprietary sealing products to ensure air tightness. All openings in the envelope should be fitted with draught excluders. The building is to be built in an airtight manner.

SWITCHES & SOCKETS
Between 450mm and 1200mm from finished floor level.

Status ☒ FOR BUILDING REGULATIONS	☒ FOR PLANNING	☒ PRELIMINARY	Scale: As Shown	M.PELLEGRINI ARCHITECTURAL SERVICES	PROJECT: 128 Railway lane South, Sutton Bridge, PE12 9XA	DATE: April 2016
A3 Page size	Dims in mm	Metres @ 1:50 0 1 2 3 4 5		Mob: 07891 639516	TITLE: Single storey side extension	DWG No: 16-313-1