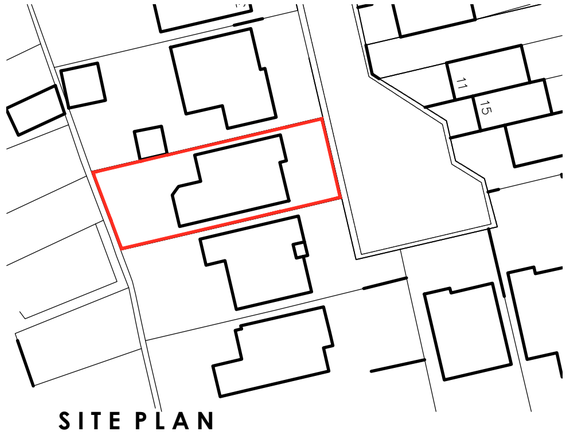
EXISTING ELEVATION
SCALE 1:100

PROPOSED ELEVATION
SCALE 1:100

LOCATION PLAN
SCALE 1:1250



SITE PLAN
SCALE 1:500

DPC
Provide horizontal strip polymer (hyload) damp proof course to both internal and external skins, minimum 150mm above external ground level. New DPC to be made continuous with existing DPCs and with floor DPM. Vertical DPC to be installed at all reveals where cavity is closed. The cavity should extend to at least 225mm below the DPC or where this is not possible provide a cavity tray at the base with weep holes at 600 ctrs. Existing walls may require an injected DPC if one is not already present and working.

WALL TIES
All walls constructed using stainless steel vertical twist type retaining wall ties built in at 750mm ctrs horizontally, 450mm vertically and 225mm ctrs at reveals and corners in staggered rows. Wall ties to be suitable for cavity width and in accordance with BS EN 845-1:2013.
Wall ties for cavities over 150mm to be suitable for cavity width, and installed as manufacturer's details.

CAVITIES
Provide cavity trays over openings. All cavities to be closed at eaves and around openings using Thermabate or similar non combustible insulated cavity closers. Provide vertical DPCs around openings and abutments. All cavity trays must have 150mm upstands and suitable cavity weep holes (min 2) at max 900mm centres.

ELECTRICAL
All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a Competent Person registered under a Competent Person Self Certification Scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to Building Control on completion.

HEATING
Extend all heating and hot water services from existing and provide new TRVs to radiators. Heating system to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authorities bye laws, the Gas Safety (Installation and Use) Regulations 1998 and IEE Regulations. The energy performance of the new components to be assessed. The results should be recorded and given to the building owner. All accessible pipes to be insulated to the standards in Table 4.4 Approved Document L.

SMOKE DETECTION (S)
Where the new room does not have a external door smoke detection will be required.
Provide a linked smoke alarm detection system to BS EN 14604 and BS 5839-6:2019 to at least a Grade D2 category LD3 standard (Grade A for large house, Grade A, LD2 for large house with 3 stories or more). System to be mains powered with battery back up. At least one smoke detector to be provided in each hallway and landing. In hallways exceeding 7.5m in length, no point within the hallway should exceed 7.5m from the nearest detector and no bedroom door should be further than 3m from the nearest smoke alarm. If ceiling mounted they should be 300mm from the walls and light fittings. Where the kitchen area is not separated from the stairway or circulation space by a door, there should be an interlinked heat detector in the kitchen.

NOTE: A large dwellinghouse has more than one storey, and at least one storey exceeds 200m².

PURGE VENTILATION
Minimum total area of opening in accordance with Table 1.4 Approved Document F1.
Hinged or pivot windows with an opening angle of 15 to 30 degrees to have an openable area in excess 1/10 of the floor area of the room.
External doors and sash, hinged or pivot windows with an opening angle of equal to or greater than 30 degrees to have an openable area in excess of 1/20 of the floor area of the room.
Purge ventilation should be capable of extracting at least 4 air changes per hour per room directly to the outside.
Internal doors should be provided with a 10mm gap below the door to aid air circulation.

NEW AND REPLACEMENT WINDOWS
New and replacement windows to be double glazed with 16-20mm argon gap and soft coat low-E glass. Window Energy Rating to be Band B or better and to achieve U-value of 1.4 W/m²K. The door and window openings should be limited to 25% of the extension floor area plus the area of any existing openings covered by the extension.
Insulated plasterboard to be used in reveals to abut jambs and to be considered within reveal soffits. Fully insulated and continuous cavity closers to be used around reveals.
Windows and door frames to be taped to surrounding openings using air sealing tape.

NEW AND REPLACEMENT DOORS
New and replacement doors to achieve a U-Value of 1.4W/m²K. Glazed areas to be double glazed with 16-20mm argon gap and soft low-E glass. Glass to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1 and Part K (Part N in Wales) of the current Building Regulations.
Insulated plasterboard to be used in reveals to abut jambs and to be considered within reveal soffits. Fully insulated and continuous cavity closers to be used around reveals.
Windows and door frames to be taped to surrounding openings using air sealing tape.

SOLID FLOOR INSULATION OVER SLAB
To meet min U value required of 0.18 W/m²K
P/A ratio 0.5
Solid ground floor to consist of 150mm consolidated well-rammed hardcore, blinded with 50mm sand blinding. Provide 100mm ST2 or Gen2 ground bearing slab concrete mix to conform to BS 8500-2:2023 and BS EN 206 over a 1200 gauge polythene DPM. DPM to be lapped in with DPC in walls. Floor to be insulated over a VCL on slab with min 90mm thick Celotex GA4000 insulation.
25mm insulation to continue around floor perimeters to avoid thermal bridging. A VCL should be laid over the insulation boards and turned up 100mm at room perimeters behind the skirting, all joints to be lapped by 150mm and sealed. Finish over the insulation with a floating layer of min 20mm tongue and groove softwood boards or moisture resistant particle/chipboard grade type C4 to BS EN 312 as required. Lay with staggered joints.
Where drain runs pass under new floor, provide A142 mesh 1.0m wide within bottom of slab min 50mm concrete cover over length of drain.
Where existing suspended timber floor air bricks are covered by new extension, ensure cross-ventilation is maintained by connecting to 100mm dia UPVC pipes with 100mm concrete cover laid under the extension. Pipes to terminate at new 65mm x 215mm air bricks built into new cavity wall with cavity tray over.

INTERNAL STUD PARTITIONS
100mm x 50mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/3 height or 450mm c/cs. Provide min 10kg/m³ density acoustic soundproof quilt tightly packed (e.g.100mm Rockwool or Isowool mineral fibre sound insulation) in all voids the full depth of the stud. Partitions to be built off doubled up joists where partitions run parallel or provide noggins where at right angles, or to be built off DPC on thickened concrete slab if solid ground floor. Walls faced throughout with 12.5mm plasterboard with skim plaster finish. Plasterboard to be taped and jointed complete with beads and stops.

NOTICE OF COMPLETION
A Notice of Completion to be given to Building Control not more than 5 days after the work has been completed. The notice to contain the following information:
- The name, address, telephone number and (if available) email address of the client, principal contractor, and principal designer.
- A statement from the applicant to say that the works have been completed and complies with all the applicable regulations to the best of their knowledge.
- A statement from both the principal contractor and principal designer to confirm they have fulfilled their duties under Part 2A (duty holders and competence).

THERMAL BRIDGING
Care shall be taken to limit the occurrence of thermal bridging in the insulation layers caused by gaps within the thermal element (i.e. around windows and door openings).

MATERIALS AND WORKMANSHIP
All works are to be carried out in a workmanlike manner. All materials and workmanship must comply with Regulation 7 of the Building Regulations, all relevant British Standards, European Standards, Agreement Certificates, Product Certification of Schemes (Kite Marks) etc. Products conforming to a European technical standard or harmonised European product should have a CE marking.
The latest edition of the British Standard (including any amendments) applies to any undated references within these specifications.

EXISTING STRUCTURE
Existing structure including foundations, floor, beams, walls, roof and lintels are to be exposed and checked for adequacy prior to commencement of work and as required by the Building Control Officer. Particular care must be taken if the existing external wall is single leaf construction with piers, checks for stability and defects must be performed.

LINTELS
- For uniformly distributed loads and standard 2 storey domestic loadings only
Lintel widths are to be equal to wall thickness. All lintels over 750mm sized internal door openings to be 65mm deep pre-stressed concrete plank lintels. 150mm deep lintels are to be used for 900mm sized internal door openings. Lintels to have a minimum bearing of 150mm on each end. Any existing lintels carrying additional loads are to be exposed for inspection at commencement of work on site. All pre-stressed concrete lintels to be designed and manufactured in accordance with BS EN 1992-1-1:2023 Eurocode 2, with a concrete strength of 50 or 40 N/mm² and incorporating steel strands to BS 5896 to support loadings assessed to BS EN 845-2:2013.
For other structural openings provide proprietary insulated steel lintels suitable for spans and loadings in compliance with Approved Document A and lintel manufacturer's standard tables. Stop ends, DPC trays and weep holes to be provided above all externally located lintels. Independent lintels to have an insulated cavity closure between the inner and outer lintel.

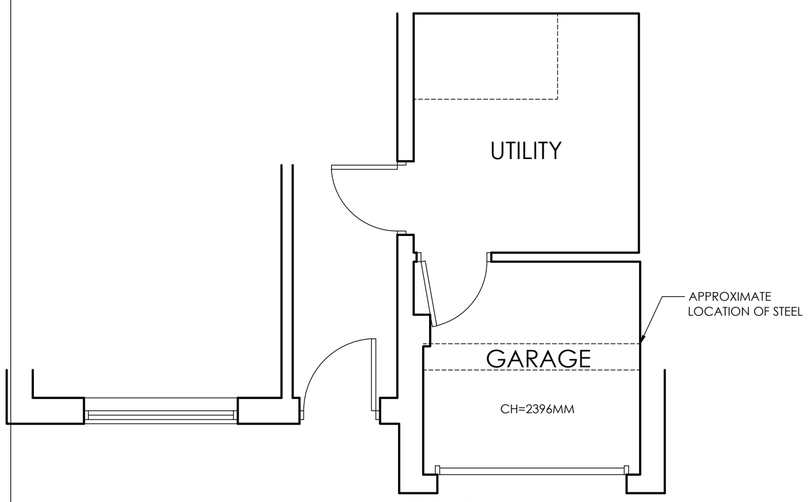
FULL FILL CAVITY WALL
To achieve minimum U Value of 0.18 W/m²K (actual U Value achieved 0.17 W/m²K)
New cavity wall to comprise of 103mm suitable facing brick. Full fill the cavity with 90mm Kingspan Kooltherm K106 full fill insulation as manufacturer's details, leaving 10mm cavity between the insulation and outer skin. Inner leaf constructed using 100mm lightweight block, 0.15 W/m²K, e.g. Celcon solar, Thermalite turbo. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.
Vertical joints in the board must be staggered and all joints tightly butted.
All details including corner and junction to be as relevant BBA certificate.
Location to be assessed for suitability of insulation boards.

EXISTING TO NEW WALL
Cavities in new wall to be made continuous with existing, where possible, to ensure continuous weather break. If a continuous cavity cannot be achieved, where new walls abuts the existing walls provide a movement joint with vertical DPC. All tied into existing construction with suitable proprietary stainless steel profiles.

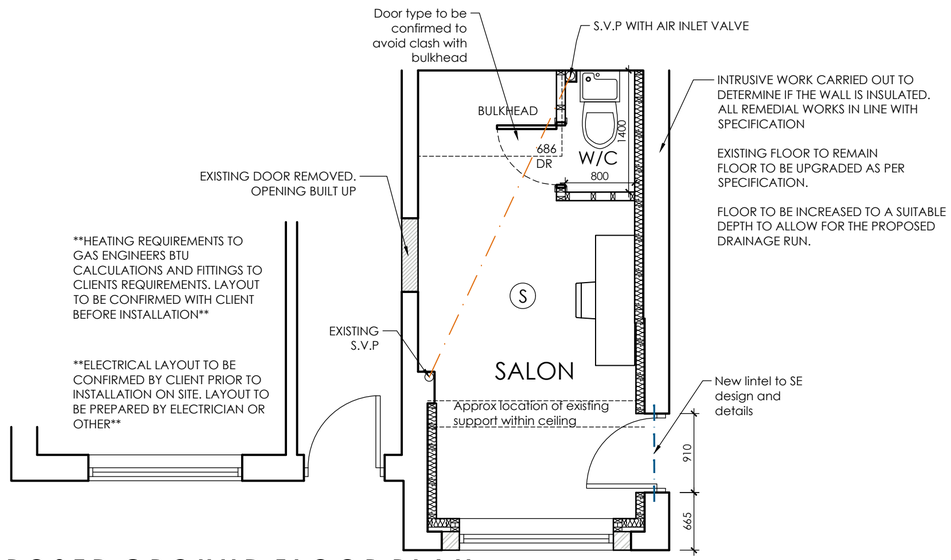
FOUNDATIONS
Trial hole to be excavated to ascertain whether the garage has a continuous foundation across the infill which is adequate to build off. If there is no foundation provide new concrete foundation with a width at least the width of the new wall plus 300mm, mix to conform to BS EN 206:2013 (+A2:2021) and BS 8500-2. Depth be a minimum of 1000mm below ground level, to existing foundation depth or to be agreed on site with Building Control Officer to suit site conditions. All constructed in accordance with 2004 Building Regulations A1/2 and BS 8004:2015 Code of practice for foundations (+A1:2020). Ensure foundations are constructed below invert level of any adjacent drains. Sulphate resistant cement to be used if required. Please note that should adverse soil conditions, or any major tree roots in excavations be discovered, the Building Control Officer is to be contacted and the advice of a Structural Engineer should be sought.

DRY LINING EXISTING CAVITY WALL
To achieve min U-value 0.18 W/m²K
The existing external walls must be checked for stability and be free from defects as required by the Building Control Officer. Insulate existing wall on the inside using 100mm Celotex GA4000 insulation board fixed to 25 x 50mm battens at 600mm centres to provide a nominal 25mm cavity between the masonry and insulation (50mm cavity to be provided if required by building control).
Fix a vapour control layer on the warm side of the insulation. Finish with 12.5mm plasterboard with a plaster skim. An injected DPC may also be required to the wall if one is not already present and working. New DPC to be made continuous with floor DPM.
All work to be in accordance with BS 8000-8:2023 Design and installation of dry lining systems.

INTERNAL LIGHTING
Install low energy light fittings that only take lamps having a luminous efficiency better than 80 lumens per circuit watt. All fixed to have lighting capacity (lm) 185 x total floor area, to comply with Part L of the current Building Regulations and the Domestic Building Services Compliance Guide.



EXISTING GROUND FLOOR PLAN
SCALE 1:50



PROPOSED GROUND FLOOR PLAN
SCALE 1:50

White Agus Architectural Services
OFFICE ONE, DRILL HALL, 11 EASTGATE, BARNSLEY, S70 2EU
Phone: 01226 208482
Email: info@whiteagus.co.uk
Web: www.whiteagus.co.uk

Project. PROPOSED GARAGE CONVERSION AT 31 KIRKLAND GARDENS, SMITHIES BARNSLEY, S71 2GD	Client. TAMARA NEALE
Drawing Title. PLANS & ELEVATIONS	Date. JANUARY 2025 / Scale. 1:50 @A2
	Ref. 24–166 / Dwg. No. 01 / Rev. A

Date	Suffix	Description	Date	Suffix	Description
27/01/2025	A	W.C SIZE REVISED			