FOUNDATIONS
Provide mass concrete strip foundations to load-bearing walls. Foundations are to be 600mm wide, 200mm thick and are to be 900mm deep (or otherwise stated). The concrete mix for the foundations shall be designed mix C20 to BS 5328, Part 2, 1991, having a characteristic compressive strength of 20 N/mm2 at 28 days and a minimum cement content of 220Kg/m3. All foundations to be laid in accordance with the recommendations of BS 6004:1986 Code of Practice for Foundations. Any trees within 20m of the proposed development, the foundations to be designed in accordance with N.H.B.C. Guidelines Chapter 4.2 – see section for details.

* **INSULATION ABOVE INTEGRAL GARAGE**
200mm Knauf Earthwool loft roll or 115mm Celotex PIR or 140mm Kingspan between joists. (0.22W/m2k).

* **GROUND FLOOR (CONCRETE)**
65mm sand/cement screed on 100mm concrete slab on 1000g visqueen vapour control layer on 70mm Kingspan K3 insulation on 1200g visqueen dpm lapped to dpc (25mm upstand to perimeter wall on sand blinding on well consolidated hardcore.(0.22W/m2k)

GROUND FLOOR (TIMBER)
T & g flooring grade chipboard Type C4 moisture resisting on 150 x 50 sw joists at 600ccs on 100 x 50 wall plate on dpc on honeycomb sleeper walls on thickened site concrete (100mm min). Provide 130mm Celotex PIR or 140mm Knauf Earthwool flexi insulation between joists supported on battens or rust protected nails (0.22W/m2k) 225 x 75mm air bricks at 1.5m ccs.

INTERNAL PARTITIONS
To compromise of 75 x 75mm studs at 600ccs vertically, 450mm horizontally with 12.5mm plasterboard and skim. Provide 75mm Rockwool batts between studs to all internal partitions. Partitions built off double joists where they are parallel with span of floor joists or provide row of rw noggings between each joist.

FLAT ROOF
3 No. layers roofing felt laid to BS 747 on 126mm Kingspan Thermaroof TR31(Composite deck) or 126mm Celotex TD4000 Tempcheck Deck (Composite deck) on 18mm ply on sw firings or sw joists (see section) with 9.6mm plasterboard and skim.(0.20W/m2k) 30 x 50 x 450mm holding down straps at 2m ccs.

EXTERNAL WALLS
To be cavity wall construction. Outer leaf to be facing brickwork to match existing/approved by Local Planning Authority. 100mm cavity fully filled with Crown Dritherm 32 Insulation batts with 100mm Thermalite shield blockwork or Celcon Standard/Tarmac Toplite Standard with 12.5mm plasterboard on dabs. Walls to achieve a "U" value of 0.26W/m2K. Inner and outer leaves of cavity walls are to be tied together with wall ties conforming to DD140.. Ties to be vertical twist type stainless steel, spaced at 750mm horizontal and 450mm vertical. Provide additional wall ties within 150mm of unbonded jambs of structural openings at 225mm vertical centres. Provide a horizontal dpc in walls at a level not less than 150mm above finished ground level. Provide dpc's to all horizontal and vertical edges of structural openings. Provide cranked dpc above lintols in cavity walls abd stepped dpc/cavity trays at junction of roof areas/cavity walls. Provide open perpends at 900mm max centres to drain the cavity. All external lintols, jambs, cills to be insulated to prevent cold bridging. Walls below ground level to be formed with Class B engineering bricks in 1:3 cement mortar. Cavity to be filled with lean mix concrete to ground level. New cavity walls to be tied to existing masonry via patent wall starters or block bonding. Maintain cavities at junction of new/existing masonry walls. New extensions being constructed above existing 50mm cavity walls / 100mm blockwork, use facing brickwork to match existing, 50mm cavity fully filled with Crown Dritherm 32 insulation 100mm Thermalite Shield or Celcon Standard / Tarmac Toplite Standard with 65 mm Knauf insulated plasterboard on dabs. Remaining spec'n as above.

VENTILATION/WINDOWS/GLAZING
All windows to be double glazed and all habitable rooms to achieve ventilation equal to 1/20th of respective floor area. Additional ventilation required as follows: -
Habitable rooms: 8000mm2 background ventilation.
Kitchen: 4000mm2 ventilation with rapid mechanical extract ventilation equal to 60 litres/second.
Utility rooms: 4000mm2 background ventilation with rapid mechanical extract ventilation equal to 30 litres/second.
Bathroom: (with or withing WC) 4000mm2 ventilation with rapid mechanical extract ventilation equal to 15 litres/second.
WC: 8000mm2 background ventilation. 6 litres/second.

DRAINAGE
Provide 112mm diameter upvc rainwater gutters, with 65mm diameter or 65mm square upvc rainwater pipes, all to discharge into roddable back inlet gulleys. S & VP to be fitted with 450mm diameter rest bend. Any connections made to an existing public sewer to be agreed and inspected with Water/Local Authority officers. 100mm diameter pvc drains (or otherwise stated) bedded and surrounded in pea gravel laid to 1:40 falls or as shown. New brick manholes to be 215mm engineering brickwork on 100mm concrete base, with sand cement benching and medium duty covers. Shallow access fittings or upvc inspection chambers to be laid in strict accordance with manufacturer's instructions. Any drains laid under or within 1.000m of building or at shallow depths to be encased in 150mm thick concrete. Where drains penetrate walls, provide a lintol over and leave 50mm gap around the pipe or mask the gap with rigid sheet material. All drainage to fully comply with BS 8301:1995.

FIRE SAFETY
Install a suitable number of self-contained smoke alarms conforming to BS 5446: Part 1 which are to be mains operated with a battery back-up power supply. The smoke alarms are to be located in the circulation areas within 7.000m of the kitchen or living room doors and within 3.000m of bedroom doors. All wiring must conform to IEE Regulations and be wired to a separately fused circuit at the distribution board.

ELECTRICAL/HEATING
Building to extend or alter the existing heating and electrical system as required by the Client. Extend security system as necessary. All wiring must conform to IEE Regulations and new Approved Document Part P.

ROOF INSULATION
100mm Rockwool Roll between joists with a further 170mm Rockwool Roll laid across – 270mm total thickness 0.16W/m2K.

FIRST FLOOR CONSTRUCTION
The floor construction is to be 220mm x 75mm SC3 grade floor joists at 450mm centres. All joists to be tanalised softwood joists. In accordance with Robust Details. All trimmer joists to be 75mm in width. Install noggings to centre span. Floor finish to be 22mm "peel clean" V313 moisture resistant tongue and groove flooring quality chipboard to BS EN312. Acoustic absorbant layer of mineral wool within the floor, min. 100mm and density 10kg/m3. Joists built into external walls to be hung on joist hangers.

* **GARAGE FLOOR CONSTRUCTION**
125mm concrete slab on 1200g visqueen dpm (lapped to dpc) or sand blinding on well consolidated hardcore.

* **ROOF CONSTRUCTION**
Roof trusses to be designed and manufactured by specialist and in accordance with BS 5268 Part 5. All bracing as required shall be Bs 5268 Part 3:1985 and comply with the manufacturers specification roof timbers to BS 5268 Part 5. Factory assembled gable ladders, or provide 30 x 5 x 450 lateral restraint straps at 1200 ccs with 150 x 100mm noggings between trusses. Concrete interlocking tiles (to match existing) and to suit pitch of roof (as required by manufacturer) on 50 x 25mm pressure treated battens on sarking felt. Calculations for roof trusses to be submitted to Building Control by contractor for approval prior to erection. Valleys formed with 19mm external quality ply boards with Code 5 linings on 4mm external qualify plywood sheathing between fillets. Provide stepped dpc/cavity tray at junction of new roof areas and External walls or change of roof levels. Provide Code 4 lead counter flashings and soakers. Roofing work in accordance with BS 5534 Part 1 1978.

EAVES CONSTRUCTION
112mm dia PVC guttering fixed to 215mm upvc fascia. Provide 10mm vent gap (or otherwise specified) with patent anti-vermin screen. Provide patent eaves ventilator to maintain ventilation over insulation. 100 x 50mm wall plate with 30 x 5 450mm holding down straps at 2m ccs.

SLOPING ROOF (T fail roof)
Tiles to match existing on battens on Nilvent or Tyvec breathable roofing membrane on;
175mm x 50mm sw rafters at 400 ccs with 50mm vent gap above insulation. Provide 25mm vent gap with anti-vermin screen to eaves and vented ridge or roof vent tiles. Provide 125mm Kingspan Kooltherm K7 Insulation between rafters with Kingspan K18 Insulated Dry-Lining Board comprising 12.5mm plasterboard & 25mm of insulation to underside of rafters, (0.18W/m2K).Duo pitch roof, provide 100 x 50 sw ceiling ties @ 400mm ccs bolted to rafters. 125mm x 38mm ridge member.
Stepped dpc /cavity tray with Code 4 lead counter flashing @ junction of roof & brickwork.

* **DORMER SIDE CHEEKS**
Vertical tile hanging or upvc cladding on sw battens on 9mm Supalux boarding on Nilvent breathable membrane on 100 x 50 sw studding, 450mm ccs vertically, 600mm ccs horizontally. Provide 100mm Kingspan Thermalwall TW55 between studs with 22mm Gyproc Thermaline Basic plasterboard &skim to inner face of studding..

ABOVE GROUND DRAINAGE
100mm dia PVC soil and vent pipe to terminate 1m above all openings with bird net. Provide patent roof flashings where applicable. Provide 100mm stub stack with durgo valve where specified. 38mm dia pvc sink/bath waste, 32mm dia whb all connected to 100mm dia s and vp with 75mm deep seal trap (50mm dia waste where combined). Encase s and VP with 25mm (min) mineral wool quilt (minimum 10kg/m3) around pipe. Pipe boxed in with 2No. layers 9.5mm plasterboard and skim (8kg/m2 min). All voids around pipe to be sealed.

* **ROOF**
Tiles to match existing on x sw rafters at 400ccs, 215 x 38mm wall plate bolted to wall. Ceiling joists x sw at 400ccs, 1200g visqueen vapour barrier, 9.6mm plasterboard and skim 300mm insulation quilt to roof/ceiling level. Provide stepped dpc / cavity tray, code 4 lead counter flashing at junction of roof and brickwork. Lean to roof, eaves as specification and roof vent tiled to cross ventilate roof.

ELECTRICAL WORK
All electrical work required to meet the requirements of Part P (Electrical Safety) must be designed, installed, inspected and tested by a competent person to do so. Prior to completion the Council should be satisfied that Part P has been compiled with. This will require an appropriate BS7671 electrical installation certificate to be issued for the work by a person competent to do so.

WINDOWS AND DOORS
All windows and doors to be white upvc double glazed frames supplied and fitted by appointed subcontractor. White locking fasteners, friction hinges and white vents to window/door frame/sash heads to satisfy Building Regulations. Minimum 4.12.4 hermitically sealed double glazed units wall glass shall be of the required thickness to meet wind load and safety requirements of Bs 6262 (1982) Code of Practice for glazing of buildings. Provide toughened or laminated glass to glazing below 800mm from floor level (1500mm in a door or side panel). Glass to be Low E/Pilkington 'K' glass or equal and approved. Provide proprietary mastic sealant to all external frame/wall junctions. Integral trickle vents to all heads of frames. See ventilation. All windows to be easily cleaned from inside of the dwelling.

* NOT APPLICABLE

ST 0758/20 HFUL

SOUTH TYNESIDE COUNCIL
14 OCT 2020
PLANNING

PROPOSED ALTERATIONS TO;

40, CLEADON MEADOWS,
CLEADON,
TYNE WEAR.

Scale 1/50 1/100	Date
Dwg No	Amendments

HEALTH AND SAFETY

The owner is regarded as a domestic client for the purposes of the CDM REGULATIONS 2015. As there are no legal consequences for the owner for not appointing a PD (Principle Designer) unless otherwise agreed it will be left to the contractor to carry out all duties in relation to the CDM Regulations. The owner should provide any information they may have relating to the site and existing buildings or hazards that may present, such as contaminated land, asbestos, overhead cable, buried services etc. Unless otherwise stated, the owner has not made the designer are of such information. Unless agreed otherwise, Contractor is responsible for all safety precautions, carrying out the work in a safe manner, and acting as Principal Contractor in accordance with the CDM Regulations for 2015 for domestic projects. The Contractor should allow sufficient time for Health and Safety be considered in the planning and construction work. They should have the skills, knowledge and experience to identify, reduce, and manage Health and Safety risks. If the work will take longer than 500 person days or 30 working days < with more than 20 people working at the same time> it will need to be notified to the HSE. In this instance no elements of construction have been amended in the design, but due regard has been paid to health and safety with, for example, the specification of upvc fascias to minimise work at height and reduce future maintenance.
The main risks are :-
The possible collapse of deep excavations, the collapse of structures < where formal structural openings> falls from height, handling heavy steelwork, exposure to building dust, exposure to asbestosis, electric shock, gas explosion, and general protection of the client, the public, and any other visitors. The Contractor should have the general competence and experience to deal with such risks, empty personnel that have the training and experience to carry out the job in hand safely, issue and use appropriate personal protective equipment, and ensure the correct use of mechanical and other tools and equipment, that propping is installed within its loading limits, etc. If deep excavations are avoidable they should be shored up during excavation, and covered or barriered until backfilled. Existing structures should be adequately propped, with the propping installed by competent personnel and not removed until all beams have been set solidly on padstones, all piecing up has bee completed, mortar has been allowed to harden, all joints/ welds have been properly completed etc.
Sufficient personnel or mechanical equipment should be provided to safely lift steelwork into position, following safe lifting practices, and fix in place as quickly as s practical. Proprietary lintels preferred where loading allows they are easier to handle and locate into position - cost should not come before health and safety.
At the construction stage the Contractor should erect a safe scaffold, providing guard rails, mid- rails and toe boards, make sure that ladders are in good condition, at the correct angle < 1:4>, tied or footed. Wet cutting and vacuum extraction on tools should be used, and any dust vacuumed up not swept, wearing a suitable well-fitting mask. Block pavers should be cut using block splitters to avoid using machinery that creates dust. Work should not start if it is suspected that asbestosis may be present until a survey has been carried out by a competent person and any appropriate action/remediation has taken place in accordance with the survey recommendations. Note that due to the Control of Asbestos Regulations 2012 even the lowest risk of asbestosis related wrk is notifiable to the HSE < Health and Safety Executive>. Any work involving artexed surfaces,floor tiles, & asbestos cement products,etc (examples only. not intended to be an exhausted list) that could have been installed before 1990, including drilling through or stripping out such materials, will require risk assessment,method statements , appropriate personal protective equipment records of work carried out, appropriate staff training , & staff health checks / records. The Contractors therefore advised to obtain specialist advice if any doubt whatsoever exists in relation to the possible disturbance of asbestos based products/ materials. Electricity/ gas supply should be turned off before drilling into walls, & carefully hand dig near suspected underground services, do not use excavators or power tools in these locations.Unless such services can be isolated & diverted away from the work area they should be protected & recorded for inclusion in the Health & Safety File. Generally protect people by securing the site , keeping the site tidy, prefabricating building components off site where possible, following safe lifting practices, temporarily protect roof light openings , & laying decking as soon as practicable after installing joists, covering / netting scaffolds where necessary.
If the Contractor has any concerns that they cannot fulfil these criteria, does not understand any element of the design, or how it should be safely constructed they should consult the architect before proceeding with the works.The Contractor should discuss how the Health & Safety / risks will be managed with the designer & owner before works start & throughout the build. Arrangements for adequate welfare facilities, including wc, washing clothes drying, & meal break accommodation , etc will have be agreed before works commence.

The Contractor should draw up a construction phase plan before work starts on site, explaining how health & safety risks will be managed proportionate to the scale of the work associated risks.
At the end of the build the contractor should provide a health & safety file containing any useful information to help the current owners manage health & safety risks during any future maintenance , repair , additional construction work , or demolision.

SPECIFICATION

All work and materials to comply with Bldg. Regs, B.S's, C.P's, any relevant technical digests/manufacturers specification, etc., or equivalent European Standards. All materials to have appropriate CE certification/markings. Unless otherwise agreed plans are prepared for Planning and Building Regulations purposes. Sufficient information is generally included for pricing purposes, but there may be items requiring further investigation such as drainage inverts, existing construction, Clients requirements, etc. This may give rise to minor variations to the cost of the work, for which the Architect will not be responsible. Such variations are generally of a minor nature and can be agreed with the Client/B.C.O. on site. Any variation should be priced and agreed before proceeding or as soon as is practical after the variation has been identified. The contractor is therefore advised to visit site and/or discuss with the owner(s) any questions he may have regarding the existing site conditions and proposed works. The plans will not generally contain any serious omission or error, but if one is discovered it should be reported to the Architect for resolution as soon as it is discovered. Unless agreed otherwise, the Architects responsibility will be limited to gaining Local Authority and associated approvals, and responding to any problems/site queries relating to the plans. Financial liability will be limited to a maximum of three times the cost of the plans (excluding Council and other associated fees). It will be the owners' responsibility to obtain prices for the work, check out the solvency and competency of any contractor whether suggested by the Architect or otherwise, and make their own selection of builder. The contractor should confirm any omissions or provisional sums being made in relation to the specified works, such as the allowance for any electrical work, etc. included (or excluded) from the price to be quoted. The owner(s) should verify with the contractor any guarantee periods to be provided, typically 3 - 6 months for general defects, 1 or 2 years for new electrical and heating installations, and up to 10 years for new roofing work, etc. Such guarantees should preferably be written into the contractor's price and job offer. It should be noted that most domestic building contractors will only provide a limited written guarantee so owners may wish to consider taking out an insurance backed guarantee if one is available for the work to be undertaken. Dimensions to be verified on site and any discrepancy resolved before work proceeds. Where dimensions are not given heights, wall positions, etc relate to existing building elements. Heights should be adjusted where necessary to suit nearest full brick coursing. Contractor should hold appropriate insurances (Public Liability). Owner to inform Building Insurers of proposed work. Contractor is responsible for temporary weatherproofing and maintaining security during construction. All work to boundary with adjoining owners written consent under the Party Walls (Etc) Act 1996 where applicable. Should consent not be obtained or be refused the terms of the Act should apply. Salvage block paving, carting away all debris. Site to be left in a clean, tidy, and complete state with any damage to existing property made good.

BUILDING REGULATIONS/BRITISH STANDARDS
All works to comply with the current Building Regulations and Approved Documents. All materials and workmanship shall be supplied/installed to current Codes of Practice. The contractor shall carry out his statutory obligations and notify the Local Authority Building Surveyors at the relevant stages of work.

REMOVAL OF RUBBISH/CLEANING
Allow for the removal of all debris from the site as quickly as possible and skips should be replaced as they become filled. All debris must be removed to a recognised site. Allow for the cleaning of the site on completion including sweeping areas for storage, removing any temporary fencing and making any good damage.

PARTY WALL ACT
Disputes with neighbours regarding any aspects of the proposed works which may affect "the party line" reference to be made to the Party Wall Act through a Chartered Building Surveying Company.

STRUCTURAL TIMBER
Timber is stress graded to BS 4978 for visual grading and BS EN 519 for machine grading. To satisfy the Building Regulations structural timber used in buildings must be stress graded and marked DRY or KD. If there is no grade mark the piece MUST NOT be used for structural purposes.

LINTOLS
Provide Catnic CN90 combined (insulated) lintols to all external cavity openings as specified on the drawing. All lintols to achieve 150mm end bearing and to be encased in 125mm plasterboard and skim to achieve 30 minutes fire resistance.

SOUTH TYNESIDE COUNCIL
14 OCT 2020
PLANNING

ST0758/20 HFUL

PROPOSED ALTERATIONS TO;

40, CLEADON MEADOWS,
CLEADON,
TYNE WEAR.

Scale 1:50 1:100	Date
Dwg No	Amendment