

Building Regulations Notes

Client: Teresa Doherty

Project: Single Storey Rear Extension & Loft Conversion

- The Contractor shall take into account everything necessary for the proper execution of the works to the satisfaction of the Building Inspector, whether or not shown on the drawing.
- All work to comply with the town and country planning act 1990, the Building regulations 2000, and all relevant codes of practice, British and European standards. The party wall act 1996, neighbouring consent to be sort for work on, at or within 3m of the party wall or fence.
- All materials to be fixed, applied or mixed in accordance with manufacturers instructions or specifications. All materials shall be suitable for their purpose.
- All dimensions to be checked on site. The contractor to check all sizes and availability of all building materials used in the construction.
- All elements of the structure to be half hour fire resistant.
- All new timber to be pressure impregnated with preservative prior to fixing. All cut edges to be treated with brush applied preservative.
- Dimensions as shown for layout and for plans and elevations are approximate, and should be checked on site. All drawings for this project should not be scaled.

Single Storey Rear Extension.

Foundations.

- Excavations are to be taken down to a minimum depth of 900mm from any adjacent ground level to a firm strata, suitable for the applied loads and to the satisfaction of the Local Authority Building Control Officer. Concrete strip foundations are to be 600mm wide x 200mm deep, projecting 150mm from face of masonry, to both sides. Where ground conditions dictate, special foundations are to be in accordance with Structural Engineers Design.

Walls.

- Existing foundations to be exposed by trail hole to building control officer's approval on site.
- External walls to be facing brickwork and rendered blockwork to match existing with 100mm cavity, 100mm Rigid Kingspan Insulation, and 100mm lightweight aircrete block inner leaf, with inner face bonded and skimmed. Cavity ties to be stainless steel and spaced at max 750x450 c/cs. Allow for cavity trays to roof abutments etc.
- Walls to have overall 'U' value of 0.18W/M sq. Cavities to be closed at eaves, verge and door & window openings using cut block closers or 'Thermbate' 50 mm closers.
- Provide horizontal and vertical D.P.C's at all cavity closers.
- Cavity fill to new wall construction to terminate 225mm below DPC.
- All brickwork and block work to be laid in 4:1 sand/cement mortar. Internal block work walls to be finished using 14 mm lightweight plaster with a skim finish.
- Lintels to be taken from the Catnic range and to have 150mm end bearing. Infill with insulation to prevent cold bridges. Lintels type and size to be agreed with Building Control Officer.
- New wall construction to be tied into existing structure with 'furfix' ties and sealant.
- New walls to incorporate 665 mm external returns for structural stability.
- Provide cavity tray/stepped DPC at roof and wall abutments.

Floor Construction.

- Floor construction to have overall 'U' value of 0.18 W/M sq.
- Ground floors to be solid construction comprising: Concrete slab to be min 125mm with a 75mm sand cement screed finish, with 100 mm Kingspan Kooltherm K3 floorboard below sand/cement floor screed on 1200gauge polythene on 50mm sand blinding on min 150mm clean and well consolidated hardcore. Perimeter of concrete floor slab to include for 50mm of polystyrene to avoid thermal bridging. All vegetable matter to be removed from below slab areas.

Windows & Doors.

- Windows & doors to be Pvcu, fabricated from the Rehau system or similar approved sections. Double-glazed with Pilkington 'K' Glass. Window designs to match existing styles as detailed. All windows & glazing to comply with document L Conservation of fuel & power, document K means of escape & document N safety glazing. Folding doors to be powder coated thermally broken aluminium 'Smart Systems or Equally Approved'
- New windows to be fitted with trickle ventilators giving a minimum 8,000 mm sq background ventilation. Toughened safety glass to all areas of glazing below 800mm.
- New inner room windows to incorporate side/top opening escape sash fixed with side hung egress hinges or similar and approved to give a clear opening of no less than 450 x 730mm (0.33m sq). With a finished cill height to be between 800 to 1000mm above finished floor level.
- Velux windows to be fitted in full accordance with manufacturers installation instructions including jointing pieces and flashings as required.
- Windows/double-glazed units to have a minimum cavity thickness of 16mm and an overall 'U' value of 1.6 W/M sq.

Electrical

- Electrical work to be carried out to NIC EIC regulations with the position of and number of sockets and light fittings discussed and agreed with the client at the tendering stage.
- All electrical work to meet the requirements of Part P (electrical Safety) must be designed, installed, inspected and tested by a person competent to do so. Prior to completion the Council should be satisfied that Part P has been complied with. This may require an appropriate BS7671 electrical installation certificate to be issued for the work by a person competent to do so.
- Install mains connected, self contained interlinked smoke alarms to ground, first floor to BS5839 Part 1, sensor to be sited a minimum of 300mm from any wall (if not already provided).
- New utility room to be provided with efficient light fitting (minimum efficacy 40 lumens/circuit watt).

Central Heating.

- Central heating system is to be extended into proposed areas with the work carried out by a suitably qualified and corgi registered contractor, the position of the radiators and the suitability of the existing boiler is to be discussed and assessed before work commences.
- New radiators to have thermostatic radiator valves.

Roof construction.

- New roof to be tiled with tiles to match existing and be suitable for pitch, on 38x25 battens on Tyvek SUPRO breathable roof membrane and sealed at joints with Tyvek Butyl Tape, on 170 x 50 SC3 rafters @ 400 c/cs. Wall plate to be 100x75 with restraint straps at max 1800 c/cs. Roof space voids to be insulated with 150mm crownwool quilt laid between ceiling joists and 150mm crownwool laid over the joist to achieve a total thickness of 300mm to give a U-value of 0.16W/m2K.
- The roof is to be constructed as a non ventilated cold roof with Tyvek breathable membrane being installed all as per manufacturer's specification and installation guidelines.
- Rainwater goods to be 100mm half round guttering leading to 68mm dia rainwater down pipes. Adapt existing gutters to suit new.
- Flashings and valleys to be in code 5 lead with min 150mm up stand.
- Sloping ceilings if required to be insulated using 150mm Rigid kingspan between rafters and rafters boarded with 18mm marine plywood decking with staggered joints to act as a single diaphragm. Ventilation of a minimum of 30mm to be provided between the underside of the roofing felt and top of the insulation, with eaves ventilation. Upperside of roof or underside of rafters to be boarded with 18mm plywood decking with staggered joints and truss cips at every rafter position to prevent spread.

Joinery.

- All skirting and architrave to match existing, internal doors to be to client's choice.

Steelwork.

- All steelwork to be encased in two layers of 12.5 plasterboard and skim, supported on C30 concrete padstones. Steelwork as per structural engineers detail.

Beams

Kitchen Beam - Use a single 152 x 89 x 16kg Universal Beam loaded on to 100 x 450 C30 concrete padstones.

External exposed beams to be galvanized steel.

Finished works treated with 2 coats of protective paint and fire protected by use of 12.5mm plasterboard and skim finish.

Plumbing & Drainage

- All gullies are to be access type with back-inlet waste to discharge below grid level and above trap water level. All gullies to be rodable.
- Mechanical extract fan to be provided to utility room and WC equal to 15 litres per second, with 15 min over run operated intermittently via light switch.
- Mechanical extract fan to be provided to kitchen equal to 60 litres per second, with 15 min over run operated intermittently via light switch
- All vents to be ducted to external walls.
- All drainage runs are to be determined upon site. Determining exact positions, turns and connections prior to the commencement of works.
- All drains to be installed to the satisfaction of the Building Inspector and to conform to BS8301 and all current codes of practice.
- All new drains to be laid in 100 mm Hepworth Supersleeve laid to falls of 1:40 with Hepsleeve connectors.
- Any drains passing under new construction to be exposed and given 150 mm concrete surround. When passing through walls to provide 450 x 250 x 75 R.C lintel over opening with rigid sheet sealer to close up opening. Pipes laid less than the recommended cover depth to be bridged by reinforced cover slabs resting on a flexible filler with at least 75mm of granular fill between the top of the pipe and the underside of the flexible filler. All disused drains/gullies to be removed and branches sealed off. New rodding eyes & Inspection chambers to be provided as indicated on the drawings.

LOFT CONVERSION

Windows/doors

- New dormer to bedroom & Bathroom to be provided with window to incorporate top/side hung opening escape sashes fixed with top/side hung egress hinges or similar and approved to give a clear opening of no less than 450 x 730mm (0.33m sq). With a finished cill height to be between 800 to 1000mm above finished floor level.
- Velux rooflights if required to be double glazed with toughened K glass units and installed in accordance with manufacturers instructions.
- Windows/double-glazed units to have a minimum cavity thickness of 16mm and an overall 'U' value of 1.8 W/M sq.
- Any glazing adjacent to windows to be safety glazing.

Internal Roof Conversion.

- Insulation to sloping ceiling sections in upper bedroom to be 70mm Kingspan between the existing rafters, with Tri-iso Super 10 underneath, counter-battened and plaster-boarded.

Dormer Construction.

- Dormer to be 100 x 50 studding externally clad with cladding to match roof or PVCu cladding on 25 x 38 mm battens on felt to BS747, on 19 mm exterior grade ply, with 90mm Kingspan insulation (0.35 u value) with proprietary vapour breather membrane, 12.5 mm plasterboard and skim finish. Front dormer walls to be loaded on to outer wall. Roof joists to be 50 x 170 SC3 timbers laid as per roof layout diagram with 50 x 170 mm noggins. Supported by a 203 x 203 x 46kg Universal Column Section.
- Rainwater goods to be 100mm half round guttering leading to 68mm dia rainwater down pipes. Adapt existing gutters to suit new.
- Flashings and valleys to be in code 5 lead with min 150mm up stand.
- Sloping ceilings to be insulated by use of 70mm Kingspan between the rafters, with Tri-iso Super 10 underneath rafters, counter-battened and plaster-boarded. Include for 50mm airspace for ventilation between insulation and breather membrane.

Electrical.

- Electrical work to be carried out to NIC EIC regulations with the position of and number of sockets and light fittings discussed and agreed with the client.
- Install mains connected, self contained interlinked smoke alarms to first floor and loft landings to BS5446 Part 1 :1990, sensor to be sited a minimum of 300mm from any wall.
- All electrical work to meet the requirements of Part P (electrical Safety) must be designed, installed, inspected and tested by a person competent to do so. Prior to completion the Council should be satisfied that Part P has been complied with. This may require an appropriate BS7671 electrical installation certificate to be issued for the work by a person competent to do so.
- Loft conversion to be provided with 1 energy efficient light fitting (minimum efficacy 40 lumens/circuit watt).

Central Heating.

- Central heating system is to be extended into proposed areas with the work carried out by a suitably qualified and corgi registered contractor, the position of the radiators and the suitability of the existing boiler is to be discussed and assessed before work commences.
- Thermostatic radiator valves to be fitted to all new radiators.

Floor Construction.

- Loft floor to be 22mm T&G flooring on 63 x 170 SC3 timbers laid as per floor layout diagram with 63 x 170 mm noggins at midspan. Ceiling to be 12.5mm plaster board and skim. Timbers to be supported by existing load bearing walls.
- Floor to be supported by means of loading on to existing load bearing walls, suspended from 50 mm galvanised joist hangers at 400 ctrs.

Joinery.

- All skirting and architraves to match existing, internal doors to be to client's choice, providing half hour fire resistance, fitted with rising butt hinges.
- All doors other than bathroom doors to be upgraded to FD30 doors and frame complete with intumescent strips.
- Internal stud walls to be 75x50 unless otherwise stated with 12.5mm plasterboard and skim finish. Horizontal & Vertical studs fixed at a maximum of 600mm vertical centres, and 1200 mm horizontal centres. Providing foil backed plasterboard at all insulated surfaces.
- Floor joists to be doubled up at and below new partitions.
- Loft floor construction to be provided with 100mm Rockwool insulation between joists.
- Remaining loft area to be insulated in 1 layer of 150 mm insulation laid between ceiling joists with a further 150 mm layer laid at 90 degrees to first layer, to give a minimum U value of 0.158.

Stair Construction & Specification.

- Stairs to be timber constructed with fully enclosed risers & treads. Treads to be a minimum of 25 mm thick. Fully glued, blocked & wedged. Handrails to be 900mm above line of nosings. Gaps between balustrades should not be large enough to pass a 99 mm dia sphere through.

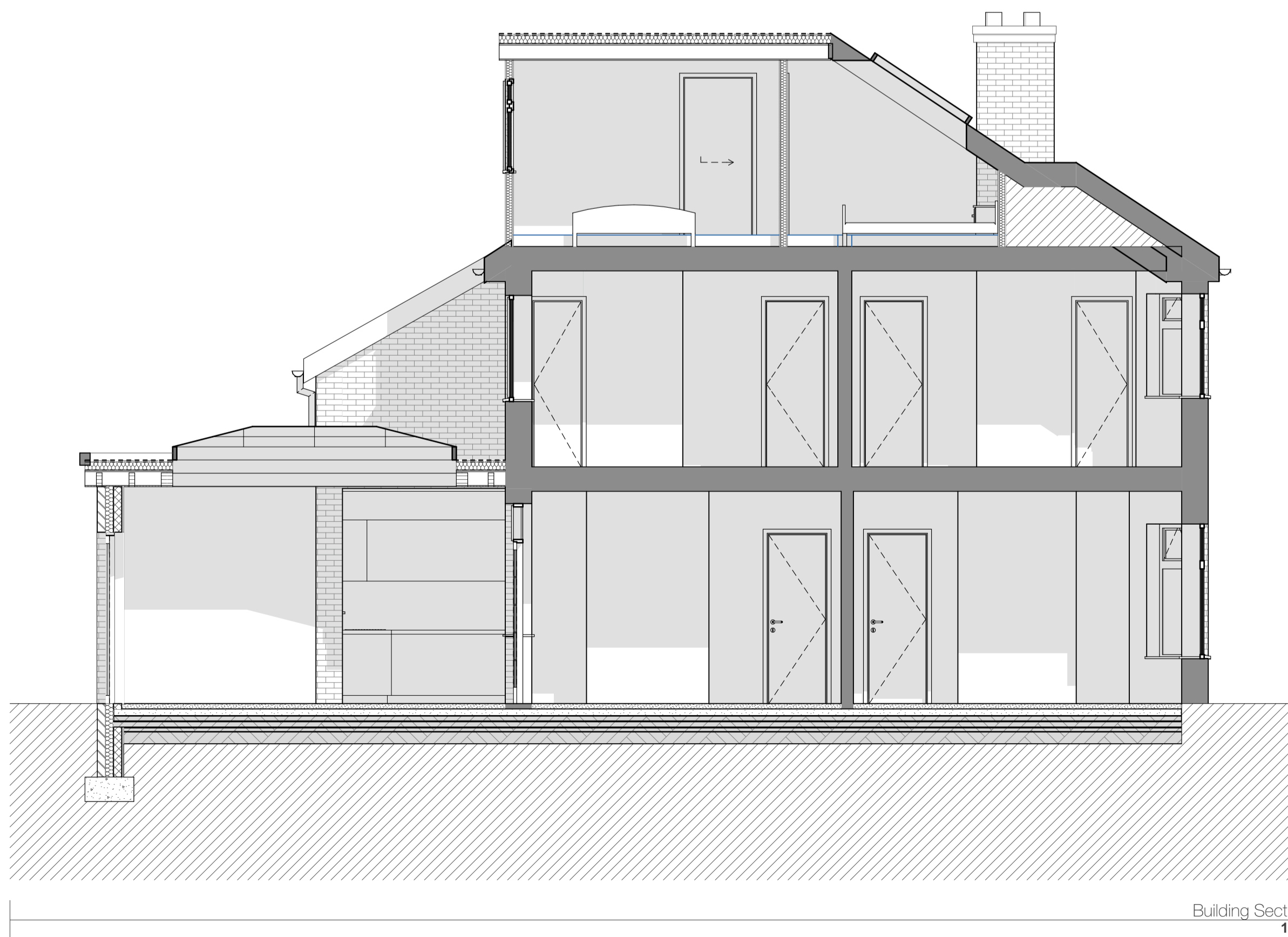
Stairs to achieve a minimum half hour resistance by application of 12mm thick plasterboard to underside and a plaster skimmed applied finish. Stairs to be installed at junction with wall b y means of 150mm x 10mm galvanised steel anchors at minimum 400mm centres or similar fixing and secured at top and bottom of flights by securing to trimmers with 12mm dia black iron bolts, with at least 3 bolts in number at each end.

Dimensions of stairs and headroom both above and below must be physically checked upon site before ordering and agreed with the Local Authority Building Control Officer before manufacture. Tapered treads to have going measured at centreline of tread and to have a minimum 50mm going at newel post. Stair flight to consist of treads not exceeding 218mm risers and minimum of 220mm treads. Headroom to stairs to be a minimum of 2000mm.

Stair Width - to match existing stairs

Tread depth - minimum 220 mm
Riser Height - not exceeding 218 mm
Handrail minimum 950 mm above pitch line.
Minimum going at any point 50 mm.

Pitch of stairs not to exceed 42 degrees.



This drawing is not to be scaled or manipulated in any way. Any errors or discrepancies should be reported to EVOKE ARCHITECTURE. Work to given dimensions only which the contractor must check and confirm all dimensions onsite. Copyright to remain with EVOKE ARCHITECTURE and is not to be copied, lent or used by any third party without express written permission of EVOKE ARCHITECTURE.

REV	DATE	NOTES

CLIENT	Teresa Doherty
PROJECT	30 Pembroke Dr, Whitby, Ellesmere Port
TITLE	Proposed Drawings
PROJECT No	22 - 64
DRAWN by	SD
DATE	06/2022
SIZE	A1
DRAWING No	BR.4
CHECKED	PD
SCALE (w.r.o)	1:50

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