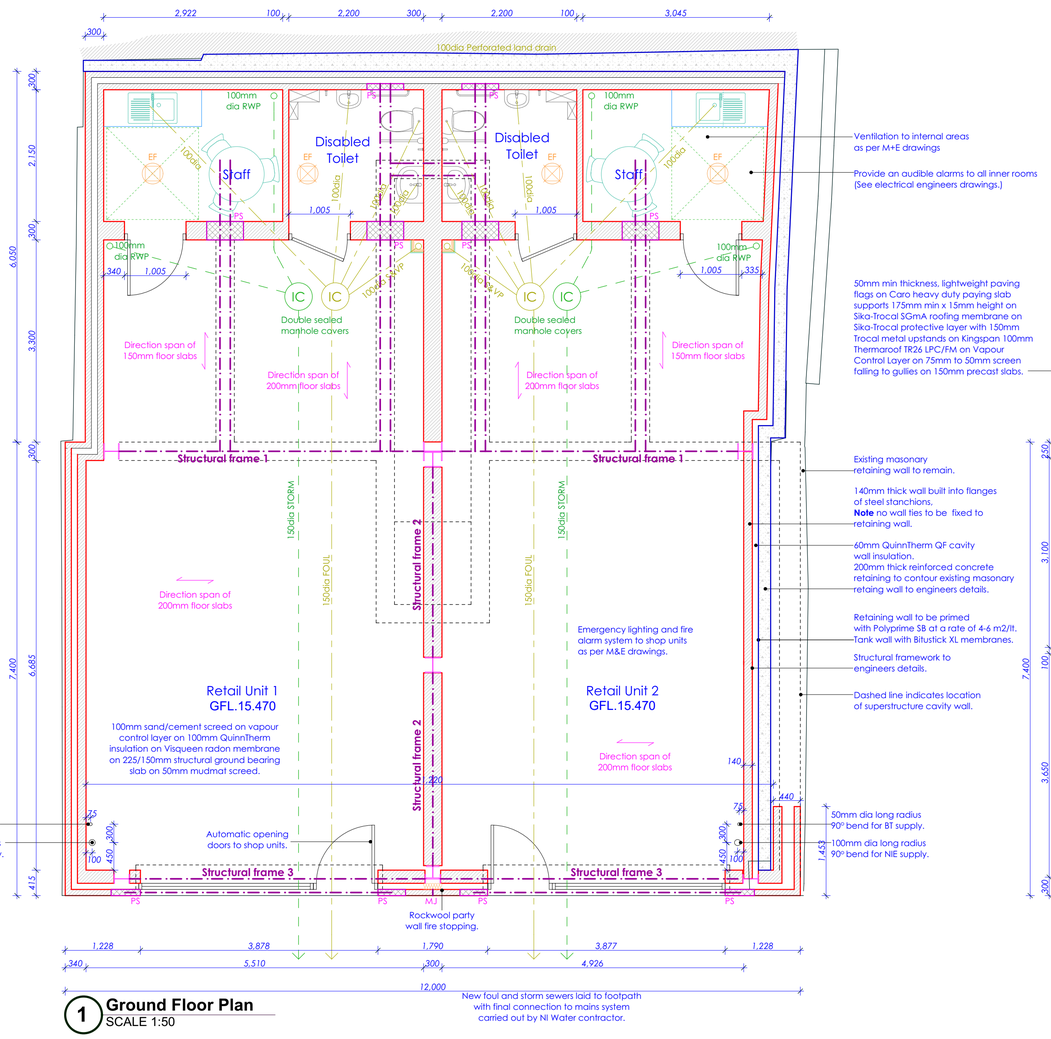


1 Ground Floor Plan
SCALE 1:50

Ventilation to internal areas as per M+E drawings

Provide an audible alarms to all inner rooms (See electrical engineers drawings.)

50mm min thickness, lightweight paving flags on Caro heavy duty paying slab supports 175mm min x 15mm height on Sika-Trocal SGmA roofing membrane on Sika-Trocal protective layer with 150mm Trocal metal upstands on Kingspan 100mm Thermaroof TR26 LPC/FM on Vapour Control Layer on 75mm to 50mm screen falling to gullies on 150mm precast slabs.

Existing masonary retaining wall to remain.

140mm thick wall built into flanges of steel stanchions.
Note no wall ties to be fixed to retaining wall.

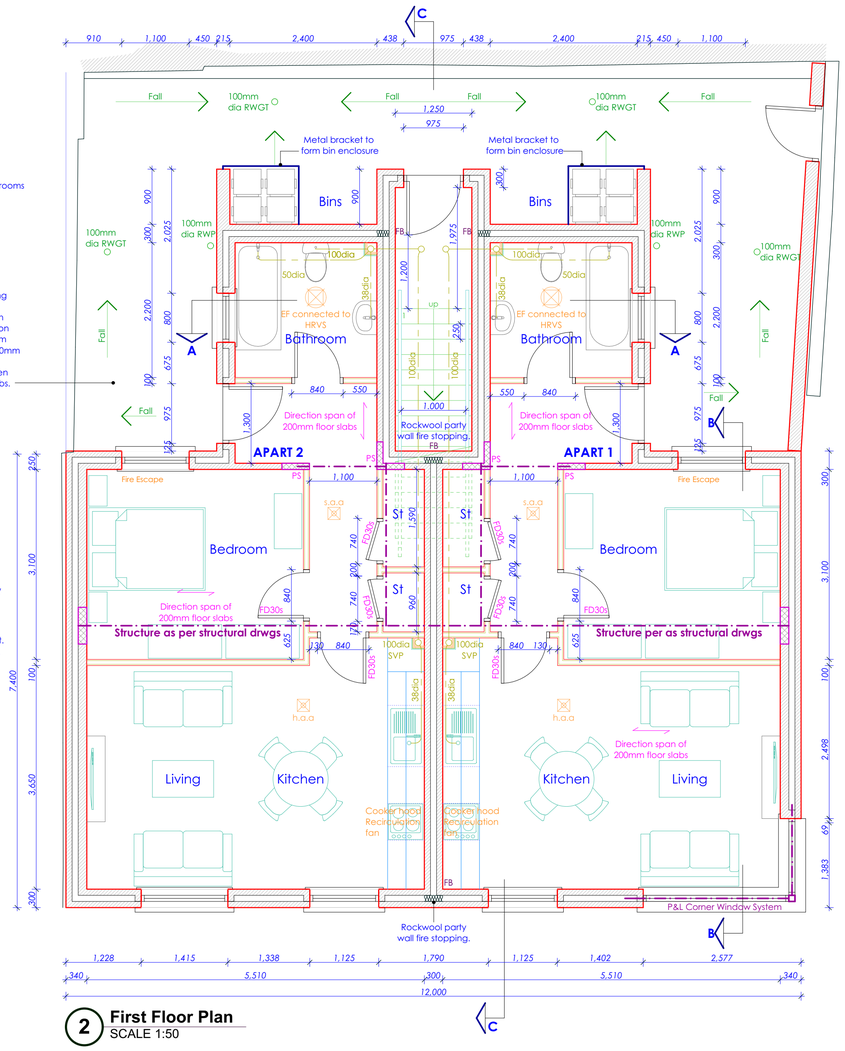
60mm QuinnTherm QF cavity wall insulation.
200mm thick reinforced concrete retaining to contour existing masonary retaing wall to engineers details.

Retaining wall to be primed with Polyprime SB at a rate of 4-6 m2/lt.
Tank wall with Bitustick XL membranes.

Structural framework to engineers details.

Dashed line indicates location of superstructure cavity wall.

Emergency lighting and fire alarm system to shop units as per M&E drawings.



2 First Floor Plan
SCALE 1:50

Flat Roof Construction
50mm min thickness, lightweight paving flags on Caro heavy duty paying slab supports 175mm min x 15mm height on Sika-Trocal SGmA roofing membrane on Sika-Trocal protective layer with 150mm Trocal metal upstands on Kingspan 100mm Thermaroof TR26 LPC/FM on Vapour Control Layer on 75mm to 50mm screen falling to gullies on 150mm precast slabs.

Fire Escape Windows & Fire Doors.
Window manufacturer to be fully aware of Technical Booklet Part 'E' Section 1 of the current N.I. Building Regulation 2012. All given dimensions to be check on site prior to manufacturing of windows. Fire Escape windows should provide an unobstructed opening not less 0.33m2 with a clear width and height of not less than 450 mm. The lower edge of the window opening shall be not less than 800 mm and not more than 1100 mm above the finish floor. The ground beneath the window should be clear of any obstructions, such as railings or horizontally hung windows, and should be suitable for supporting a ladder safely. The area should be of sufficient size to provide a place of safety from a fire in the house.
Provide FD30 self closing doors to all openings onto hallway/stairs

Apartment Finishes
Doors: Solid core pressed panel door Standard stock 'Regency' type or equal other approved. 'Lorient' LP1004SS to frames.
Skirting: 150mm standard stock beveled edge.
Architraves: 100mm standard stock beveled edge.
Painting Woodworks 'Dulux Trade. 1no coat Wood Primer (BS 5358), 1no Full Undercoat and 2no coats of full gloss.
Walls and Ceiling.
'Dulux Trade' 1no Full Undercoat & 2no coats of Matt Vinyl. Class 0 surface spread of flame.

AIR TIGHTNESS
Wall to Floor
Adhere Pro Clima DA-S airtightness strips sealed to the wall and the floor with Orcon-F non aging flexible adhesive glue.
Windows & Openings
Form seal/bond between window and plaster with Contega FC connection tape.
Ceiling to Wall
Form seal/bond between INTELLO PLUS and plaster with Conega PV connection tape.
Ceiling to Wall
Fix Pro clima INTELLO® PLUS membrane to underside of rafters and joists.
Attic Hatch
DOLLE Profi PlusInsulated Airtight Attic Hatch

Reducing the Risk of Scalding
Prevention of excessive domestic hot water temperatures
Where the operating temperature of domestic hot water in the storage vessel in a dwelling is capable of exceeding 80 °C under normal operating conditions (a situation that may occur in vessels used as heat stores and those connected to solar heat collectors or solid fuel boilers that do not have intervening controls between the boiler and the vessel containing the hot water) the outlet from the storage vessel should be fitted with a device, such as an in-line hot water supply tempering valve in accordance with BS EN 15092. The in-line hot water tempering valve should be set/adjusted to ensure that the temperature supplied to the domestic hot water distribution system does not exceed 60 °C.
Reducing the risk of scalding at bath

The hot water supply temperature to a bath should be limited to a maximum of 48 °C by the use of an in-line blending valve or other appropriate temperature control device, with a maximum temperature stop and a suitable arrangement of pipework. In-line blending valves and composite thermostatic mixing valves (TMVs) should be compatible with the sources of hot and cold water that serve them. The length of supply pipes between in-line blending valves and final outlets should be kept to a minimum in order to prevent colonisation by waterborne pathogens. Where intermittent use of a bath is anticipated, consideration should be given to high temperature flushing to allow for pasteurisation of the pipes and outlet fittings. This should be configured and operated in such a manner that prevents inadvertent high temperature use.

Ventilation
Extract Ventilation Rates
Kitchen with a nominal airflow rate of 30litres/second, adjacent to hob.
Utility room with a nominal airflow rate of 30litres/seconds.
Bathroom with a nominal airflow rate of15litres/second.
Toilets with a nominal airflow rate of 6litres/second.

Intermittent extract fans other than cooker hoods should be installed as high as is practicable and preferably within 400 mm of the ceiling.
Cooker hoods should be 650 mm to 750 mm above the hob surface (or installed in accordance with the manufacturer's instructions).
Where fans and background ventilators are provided in the same room they should be a minimum of 500 mm apart.

System 4 - Continuous mechanical supply and extract with heat recovery (MVHR) to provide whole house ventilation rates in accordance with Table 2.2 and paragraphs 2.85 to 2.104 of Technical Booklet K of the Building Regulation (N.I.) 2012.

To ensure good transfer of air throughout the dwelling, there shall be an undercut of minimum area 7600mm2 in all doors within the dwelling above the floor finish and achevied by undercutting each door by 10mm

Ventilation
Rapid
For a hinged or pivot window that opens 30° or more or for parallel sliding windows (e.g. vertical sliding sash windows), the "height x width" of the opening should be at least 1/20th of the floor area of the room.

Where a room contains more than one openable window, the areas of all the opening parts shall be added together to achieve the required proportion of the floor area. The required proportion of the floor area is determined by the opening angle of the largest window in the room.

For an external door, the "height x width" of the opening part should be at least 1/20th of the floor area of the room.
Where a room contains more than one external door the areas of all the opening parts may be added to achieve at least 1/20th of the floor area of the room.
Where a room contains a combination of at least one external door and at least one openable window, the areas of all the opening parts may be addedtogether to achieve at least 1/20th of the floor area of the room.

Stairs
Stairs to be manufactured by specialists who are to be fully aware of Technical Booklet Part 'H' of the current Building Regulation (Northern Ireland) 2000. All given dimensions to be check on site prior to manufacturing of staircase. Stairs to be no less than 1200mm wide. Handrail to be provided to outer side of staircase, 900mm above pitch line & to be 50mm dia. Headroom to be no less than 2m from pitch line.
Steps shall have step nosings which are distinguishable through suitable permanent visual contrast of not less than 50 mm and not more than 60mm to all treads and risers.
Stair 1: 16no risers: 170mm, Goings: 250mm, 2R+G=620mm Angle: 34°

Partitions
GYPWALL Classic 70mm stud walls, having a max height of 3.350m, studs to be covered in 12.5mm Gyproc wall board and finished smooth in 2mm Thistle board finish.

Smoke Alarms
Self contained smoke activated alarms (s.a.a.) to comply with BS 5446: Part 1 2000, heat activated alarms (h.a.a.) to comply with BS 5446: Part 2 2003.
Smoke alarms shall be located in the circulation route so that there is one not more than 3 m from every bedroom door and not more than 7.5 m from every door to a living room or kitchen.
Smoke alarms shall be located in a principal habitable room so that no point in the room is more than 7.5 m from the nearest smoke alarm. Heat alarms shall be located in a kitchen so that no point in the kitchen is more than 5.3 m from the nearest heat alarm.
Alarms are to be interconnected so that they both give an audible alarm when one detects smoke, and will be permanently wired to a circuit which is seperately fused at the distibution board and serves only the alarms. Each alarm shall be fitted with its own battery backup power source. Ceilings mounted alarms to be no less than 300mm from light fittings.

Electrical Installation
All new eletrical components to be installed in accordance with the IEE regulations.
Fixed energy efficient light fittings shall be installed throughout the house, or at a ratio of 3 in 4 minimum proportion of LE light fittings.
Fixed external lighting means lighting permanently fixed to an external surface of the dwelling and under the direct control of the occupant by having an electricity supply from the dwelling.
External lighting shall **(a)** have a maximum output of 100W per fitting and automatically switch off (i) when there is adequate daylight; and (ii) when not required at night; or **(b)** have sockets that can only be fitted with lamps having a luminous efficacy greater than 40 lumens per circuit-Watt.

Controlled Fittings/Doors/Glazing
1. Critical Locations
Provide toughened or laminated safety glazing to the following locations:
• Glazing to windows and screens within 800mm from F.F.L.
• Glazing to doors within 1500mm from F.F.L.
• Glazing to screens within both 1500mm from F.F.L. and 300mm of either side of doors.
Glazing suitable for installation in a critical location shall satisfy the test requirements of Class 3 of BS EN 12600.
Where the glazing is installed in a door or a door side panel and has a pane width of more than 900 mm, it shall satisfy the test requirements of Class 2 of BS EN 12600
2. Manifestation of Glazing
Any door manufactured from transparent glazing, or a large uninterrupted area of transparent glazing shall be made apparent by permanent manifestation as follows;
(a) a broken circular pattern not less than 50mm in diameter.
(b) linear zone 1 located between 850-1000mm above floor level.
(c) linear zone 2 located between 1400-1600mm above floor level.
(d) shall be distinguishable by having suitable visual contrast from the background seen through the glazing.

Manholes / Inspection Chambers
Where the invert level of a drain does not exceed 1m in depth a inspection chamber shall be provided with a min internal size of 450x450mm and a cover size of 450x450mm. Where the invert level of the drain exceeds 1m a manhole shall be provide with a min internal size of 750x1200mm and include fixed iron steps and have a cover size of 600x600mm.
Manholes/inspection chambers to be provided as shown on floor plan.

Drainage
All sanitary pipework and fittings, foul and storm drainage to comply with Technical Booklet 'N', Building Regulations (Northern Ireland) 2012. Sanitary and foul pipework, fittings and joints to be UPVC to BS 5481: 1977, storm pipes and gutters to be UPVC to BS 4514: 1983. All points of discharge into a system shall be fitted with a water seal trap outlet and be removable for inspection and cleaning. 100mm dia SVP to be provided to head of foul drainage system and shall rise 900mm above openings within 3m.
100mm dia UPVC external pipes to have a min, invert level of 600mm under a vechicle area and 300mm under other areas, and a max of 10m under all areas.
Pipes to be bedded as defined in 'Diagram 3.3' of Technical Booklet 'N', Building Regulations (NI) 2012.
Lintels to be provided at openings where pipes pass through a wall or foundation, with a 50mm space all round pipe.
Mask openings to both sides of wall with rigid sheet material to prevent entry of fill or vermin as defined in 'Diagram 3.6' of Technical Booklet 'N', Building Regulations (NI) 2012.
Where the invert level of pipes is below foundation level, the pipe shall be wrapped in polythene and surrounded in 150mm of concrete. Gradients of external pipes to be 1:60 for foul and 1:80 for storm.

Disabled access and facilities
Entrance to the front to have a level threshold (15mm max) access from external area with a clear opening of not less than 775mm. A ramped approach to the front entrance door shall have a surface which is firm and even, an unobstructed width not less than 900 mm, a slope not more than 1:20.
All wall mounted socket outlets & switches shall be located not more than 1200mm or not less than 450mm above the finished floor level and the cord of a pull switch should terminate not more than 1200mm above floor level.
All doors to ground floor to be 2040x826mm within a structural opening of 915mm. Clear opening between door stops to be no less than 800mm.

Roof
Trussed Roof Structure
Trusses by specialist manufacture fixed to 50x100mm wallplate. Trussed rafters to be designed, constructed and braced in accordance with BS. 5268 part3 1985. 25x100mm Diagonal bracing to be provided to trusses with 25x100mm longitudinal bracing at all node points. Double trusses to be provided to trap door opening.
General Structural
Wallplates to be fixed to wall with mild steel anchor straps at 2m centres. Horizontal anchor strapping to be provided to walls at 2.0m maximum centres at rafter and ceiling levels. Lateral support to comply with diagram 4C.13, Part D of the Building Regulation (N.I.) 2012.
All graded timber members to be identified that they have been kiln-dried and shall be treated in accordance with the British Wood Preserving and Damp-proofing Association Commodity Specification C8.
Covering
Concrete interlocking Black flat tiles or slates fixed to 25x50mm tanilized battens on Tyvek Supro breather membrane covering on all roof structures. Concrete or cement fibre angle ridge tile.
Insulation
Trusses/Joists -150mm mineral fibre insulation to be provided between and 250mm over bottom chords of trusses.
Apartments Ceilings
12.5mm general plasterboard to form first floor ceiling fixed to Gysum Caseline MF suspended ceiling system, plasterboard skimmed with 2mm thistle board finish as ceiling finish, 15mm Gypsum Fireline board to be fixed to bottom chord of roof trusses to form second floor ceiling prior to erection of internal partitions, plasterboard skimmed with 2mm thistle board finish as ceiling finish.

CLIENT'S AND CONTRACTOR'S NOTE.
Dimensions, levels and materials as specified on the Planning Approval & Building Regulations drawings/documentation, together with conditions within the Planning Permission Document, must be adhered to at all times. O'Connor Burke Architecture Ltd will not be responsible for any unauthorised deviations made on site. Such deviations to be bought to O'Connor Burke Architecture Ltd.'s attention so that the appropriate advice can be provided accordingly. Where we have been engaged to provide Architectural Certification, any alterations/deviations may result in our Practice being unable to certify the construction works.

Contractors Notes
Contractors including all sub-contractors to be fully familiar with the current edition of the N.I. Building Regualtion 2012, and will be fully responsible for carrying out and completion of the works in accordance with these regulations.
Contractors to visit the site prior to tendering and satisfy themselves to the full extent of the works. Any discrepancies found on site, or within the contract documents to be brought to the attention of the architect.
Architectural drawings and specifications to be read in conjuction with all relevant consultant's drawings and specifications.
All elements to be constructed satisfactory on site, so everything that is done will be deemed necessary for the overall completion of the works, comprehending what may be reasonably implied by or inferred from the drawings and specification.
Do not scale drawings, work to written dimension. All dimension to be checked on site, prior to manufacturing or installations of components.
Where materials or elements are 'out of production', the main contractor shall supply 'equal and approved' products, to the approval of the architect.

General Notes
The following is a summary of the information that must be submitted to the district council (and where mentioned to other parties) on completion of dwelling to satisfy Part F and Part L of the current building regulations.
(1) To avoid thermal bridging, the dwelling shall be constructed to details given in the Department for Communities and Local Government (DCLG) publication "Accredited construction details for Part L" or to details that give an equivalent level of performance when assessed in accordance with BRE IP 1/06 "Assessing the effects of thermal bridging at junctions and around openings in the external elements of buildings".
The builder shall demonstrate that an appropriate system of site inspection has been set in place to ensure that the construction standards achieve the required level of consistency. A report shall be provided showing that the construction checklists given in the DCLG have been completed and show satisfactory results and copy shall be forwarded to the district council.
(2) Note that an air permeability of 10m3/(hm2) @ 50 Pa has been used in the design calculations and that this rate must be achieved by test on completion of the dwelling.
(3) A notice confirming that all fixed building services have been properly commissioned shall be provided and a copy shall be given to the district council and the building owner. The notice shall be signed by a suitably qualified person.
(4) The building owner shall be provided with sufficient information, including operational and maintenance instructions, to enable the dwelling to be operated and maintained in an energy efficient manner. The instructions shall be directly related to the specific system(s) installed in the dwelling and shall be readily understandable by the occupier.
Without compromising health and safety requirements, the instructions shall explain to the occupier of the dwelling how to operate the systems efficiently. These shall include:
(a) how to make adjustments to the timing and temperature control settings; and
(b) what routine maintenance is necessary to enable the systems to be maintained at a reasonable efficiency throughout their service life.
(5) An energy rating shall be calculated for the dwelling as built and a notice stating the energy rating shall be fixed in the dwelling (adjacent to the electrical distribution board) The energy rating shall be calculated using the same SAP software used to calculate the TER and DER.

Foundation details
Refer to Structural Engineer's drawings, specification and documentation.

Retaining wall details
Refer to Structural Engineer's drawings, specification and documentation.

Radon
Visqueen' radon membrane fixed to both the Visqueen Zedex Damp Proof Course and the Bituthene Bitustick XL tanking membrane with 30mm Double Sided Jointing Tape as per manufactures details. Top hats to be installed where pipes penetrate membrane. Radon protection to be installed in accordance with the guidance set out in BR 413 Radon; guidance on protective measures for new dwellings in Northern Ireland and BRE GG 74 (revised 2015) Radon protection for new dwellings.

Ground Floor
1. 100mm sand & cement(1:3) screed on
2. Protective polythene layer on
3. 100mm QUINNTHERM QF insulation to achieve a 'U' value of 0.25W/m2k, on
4. 'Visqueen' radon membrane on
5. 225/150mm insitu structural subfloor slab on 50 mm mudmat as per structural engineers drawings.
6. 'Visqueen' radon membrane to be sealed to Visqueen Zedex DPC and Bituthene Bitustick XL wall tanking membrane using Visqueen Double Sided Jointing Tape as per manufactures details. 'Visqueen' Pre-formed Top hats to be installed where pipes & services penetrate membrane.
25mm QUINNTHERM PIR Permeter Strip Insulation to full depth of screed, overlapping floor insulation

Walls
1. Substructure - No substructure blockwork.
2. Superstructure Outer Leaf - 100mm concrete block. Smooth render finish, with recessed plinth at DPC level to all other areas.
3. Superstructure Cavity - 60mm QUINNTHERM QF insulation to achieve a min 0.30W/m2k,'U' value. Close cavites at door/window jambs and heads/sills of openings with QUINNTHERM 40mm PIR insulation faced with DPC
4. Superstructure Inner Leaf ground floor - 215.140 and 100mm concrete block Inner leafs as per structural engineers drawings. Provide 10mm sand/cement undercoat to form air tightness barrier, finish in 2mm skim.
5. Superstructure Inner Leaf first floor -140 and 100mm concrete block Inner leafs as per structural engineers drawings. Provide 10mm sand/cement undercoat to form air tightness barrier, finish in 2mm skim
6. Superstructure Inner Leaf first floor -100mm concrete block Inner leafs as per structural engineers drawings. Provide 10mm sand/cement undercoat to form air tightness barrier, finish in 2mm skim
7. Closer - Provide 100mm thk Rockwool' cavity closer at wall plate level.
8. Wall Ties - Galvanised M5 wall ties to be provided at 900mm ctrs horizontally and 450mm ctrs vertically, and 300mm ctrs vertically within 225mm of openings as per diagram 5 of TGD A.
7. Structure - Lateral support to walls to comply with diagrams 4C.12 and 4C.13, Part D of the Building Regulation (N.I.) 2012.

Sills
140mm deep X 210mm Precast concrete sills to BS 5328. Concrete grade RC50 or C50 and reinforced with 2no 9mm rods to BS 4449 and or BS 4483. Sills to be projected 70mm from external blockwork, weathered and throated to underside. Rear & bottom of sills to be faced with continuous stepped DPC. Provide propriatory cavity closer to sill. (ACCREDIATED DETAIL).

Concrete & Steel Lintels
Precast reinforced concrete lintels to BS 5328 with concrete designated mix not less than RC30 or C30 and having a maximum nominal size of aggregate of 20mm. Lintels with a clear span up to 900mm to be 150mm deep and have an end bearing of 150mm, and reinforced with 1no 12mm mild steel for each 105mm of wall thickness. Lintels with a clear span up to 1800mm to be 225mm deep and have an end bearing of 225mm, and reinforced with 1no 16mm mild steel for each 105mm of wall thickness. Lintels up to 2400mm to be reinforced with 2no 16mm mild steel for each 105mm of wall thickness. Reinforcement to BS 4449 and or BS 4483 with a minimum nominal cover of 20mm. P&L corner Lintels to be designed by Foyle Consultant Engineers used at first and second floor levels.

REV	DATE:	ISSUE PURPOSE:
Building Control Stage Rev: B	*6th March 2020*	*Building Control and Construction*

CLIENT: **Mr Shaun Doherty**

JOB REFERENCE: **1706**

PROJECT: **Proposed 2no Retail Units and 4no Apartments at 64&66 Spencer Road, Derry.**

DRAWING REFERENCE: **05**

TITLE: **GROUND AND FIRST FLOOR PLANS**

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