Concrete Strip Footing to be minimum 600 x 1000mm deep GEN 1 Concrete to BS 8500-2. Top of foundation to be minimum of 450mm below external dpc. Foundations are to be constructed to the complete satisfaction of the Building control and structural engineer (if required). Trench to be down onto a good load bearing strata.

In-Situ Floor Slab (UValue <0.21w/m2k) consisting of :-

- 150mm well compacted hardcore and sand blinding.
- ICOPAL RMB400 or similar approved radon barrier to be laid under insulation and lapped up walls and sealed with DPC to wall strictly in accordance with manufacturers specification and details- 150mm Concrete Floor Slab
- 200mm XTRATherm SR/UF insulation and edge strip to give min U Value of 0.2 W/m²k.
- 1200 gauge polythene isolation layer on top of insulation turned up minimum 100mm at perimeter to finish behind skirting.
- 50mm LAFARGE AGILIA SCREED A XTR Anydrite Floor Screed or similar approved concrete floor screed in accordance with manufacturers specification.
- Floor finish, to be agreed and to be laid strictly in accordance with manufactures instructions.

Insulated concrete roof deck to En-Suite consisting of :-

- Hollow core concrete floor planks as manufacturers specification and details,
- Pitch mastic tanking strictly as manufactures specification to consist of:-
- Black Sheathing felt and 20mm two coat polymer modified mastic asphalt roofing.
- 150mm well compacted Geocell Foam Glass aggregate.
- Tarmac topping to consist of 70mm well compacted sub base and 30mm wearing course.

Brick clad insulated cavity wall type A - (UValue < 0.18 W/m2k) consisting of :-

- 100mm FL Grade external blue brickwork.
- 175mm Cavity to be partially filled with 150mm Thin-R Partial Fill Cavity Wall Plus XT/CWP and 25mm SURECAV25 25mm cavity liner or similar approved. Insulation to be fitted as wall is built. Cavity to be clear of debris and snots and insulation fitted tightly without gaps.
- Below DPC cavity to be fully filled with POLYFOAM or similar approved XPS insulation. Fitted tightly in cavity and top chamfered towards external leaf.
- 100mm FIBOLITE or similar approved, concrete blockwork internal skin.
- Walls to be finished with wet plaster. Wet plaster forms air tightness layer. **If wet plaster omitted for board and skim then alternative air tightness measures will be required.**
- RUBBEROID or similar approved servicized DPC to be fitted minimum 150mm above finished external ground level. Cavity tray to be fitted sloping outwards to internal DPC in next corresponding horizontal joint. Floor DPM to be taken up blockwork and lapped with internal DPC.
- Stainless steel wall ties to BS 1243 DD 140 or BS EN 845-1. With minimum 50mm embedment Horizontal spacing of 900mm and vertical spacing of 450mm.
- THERMABATE or similar approved insulated cavity closers to be used to all openings.
- Gable walls should be strapped to roof with stainless steel tension straps at not more than 2m centres all to comply with Building Regs Part A.
- Lintels to be Catnic CG 1500/100 Insulated Lintel or similar approved with min 150mm bearing at the ends.

Stone clad insulated cavity wall type B - (UValue < 0.18 W/m2k) consisting of :-

- 100mm Random dressed stone.
- 175mm Cavity to be partially filled with 150mm Thin-R Partial Fill Cavity Wall Plus XT/CWP and 25mm SURECAV25 25mm cavity liner or similar approved. Insulation to be fitted as wall is built. Cavity to be clear of debris and snots and insulation fitted tightly without gaps.
- Below DPC cavity to be fully filled with POLYFOAM or similar approved XPS insulation. Fitted tightly in cavity and top chamfered towards external leaf.
- 100mm FIBOLITE or similar approved, concrete blockwork internal skin.
- Walls to be finished with wet plaster. Wet plaster forms air tightness layer. **If wet plaster omitted for board and skim then alternative air tightness measures will be required.**
- RUBBEROID or similar approved servicized DPC to be fitted minimum 150mm above finished external ground level. Cavity tray to be fitted sloping outwards to internal DPC in next corresponding horizontal joint. Floor DPM to be taken up blockwork and lapped with internal DPC.
- Stainless steel wall ties to BS 1243 DD 140 or BS EN 845-1. With minimum 50mm embedment Horizontal spacing of 900mm and vertical spacing of 450mm.
- THERMABATE or similar approved insulated cavity closers to be used to all openings.
- Gable walls should be strapped to roof with stainless steel tension straps at not more than 2m centres all to comply with Building Regs Part A.
- Lintels to be Catnic CG 1500/100 Insulated Lintel or similar approved with min 150mm bearing at the ends.

Rendered insulated cavity wall type C - (UValue < 0.18 W/m2k) consisting of :-

- Proprietary render system and accessories on 100mm blockwork strictly as render manufacturers specification and details.
- 175mm Cavity to be partially filled with 150mm Thin-R Partial Fill Cavity Wall Plus XT/CWP and 25mm SURECAV25 25mm cavity liner or similar approved. Insulation to be fitted as wall is built. Cavity to be clear of debris and snots and insulation fitted tightly without gaps.
- Below DPC cavity to be fully filled with POLYFOAM or similar approved XPS insulation. Fitted tightly in cavity and top chamfered towards external leaf.
- 100mm FIBOLITE or similar approved, concrete blockwork internal skin.
- Walls to be finished with wet plaster. Wet plaster forms air tightness layer. **If wet plaster omitted for board and skim then alternative air tightness measures will be required.**
- RUBBEROID or similar approved servicized DPC to be fitted minimum 150mm above finished external ground level. Cavity tray to be fitted sloping outwards to internal DPC in next corresponding horizontal joint. Floor DPM to be taken up blockwork and lapped with internal DPC.
- Stainless steel wall ties to BS 1243 DD 140 or BS EN 845-1. With minimum 50mm embedment Horizontal spacing of 900mm and vertical spacing of 450mm.
- THERMABATE or similar approved insulated cavity closers to be used to all openings.
- Gable walls should be strapped to roof with stainless steel tension straps at not more than 2m centres all to comply with Building Regs Part A.
- Lintels to be Catnic CG 1500/100 Insulated Lintel or similar approved with min 150mm bearing at the ends.

Internal Stud Partitions consisting of :-

- 55x75 sw treated studwork at 600 c/cs with noggins to suit.
- 12mm WBP plywood screw fixed to both sides of timber studs.
- 12.5mm plasterboards with integral vapour barrier to both sides screw fixed to 50x75.
- WEDI board or similar approved to be used to en-suite and bathrooms
- BRITISH GYPSUM Acoustic ISOWOOL Insulation fitted in void as manufacturers instructions.
- Lightweight plaster skim to both sides.

Stairs

- Stairs to be in accordance with Part K of the Building Regulations.
- For stepped change of level within entrance level of dwellings stairs to be minimum of 900mm wide.
- Maximum Rise 220mm, minimum going 220mm with a maximum pitch of 42degrees, any rise between 155mm and 220mm used with any going between 245mm and 260mm. Any rise between 165mm and 200mm used with any going between 223mm and 300mm.
- Open treads to be protected to prevent a 100mm diameter sphere from passing through.
- Tapered treads should have min 50mm width at narrow end and the going should not be less than the going of the straight flight, measured at centre point as Diagram 1.8, Part K of Building Regs.
- Headroom should be minimum of 2m or for loft conversions minimum of 1.8m at edge and 1.9m at centre of stairs.
- Handrails to 1 side if less than 1m wide or to both sides if over 1m wide. Height between 900mm and 1000mm to top of handrail from pitch ine or floor.
- Guarding to stairs to be 900mm high, guarding to landings and balconies to be 1100mm high and be such as; - ensure that a 100mm sphere cannot pass through any openings in the guarding and avoid horizontal rails to avoid it being climbable.
- Stairs to comply with Part K of the Building regulations.

Truss Roof Construction insulation at rafter level to consist of :-

- Clay plain tiles fitted strictly in accordance with manufactures specification and details.
- 25x50 tanalized battens and **counter battens** nailed with stainless steel nails to rafters. **Counter battens MUST be used to provide 25mm ventilation space.**
- TYVEK SUPRO breather membrane or similar approved breathable roof membrane.
- Truss rafters sized by manufacturer,
- Minimum 150mm XTRATHERM Thin R Pitched roof XT/PR insulation to be fitted between and under truss rafters to slope of roof in accordance with manufacturers recommendations and instructions.
- 12mm OSB screwfied to underside of roof trusses. All joints to be taped with INTELLOPRO air tightness tape or similar approved, **not duct tape**. Any and all penetration to be made good.
- Ceilings to consist of metal frame suspended ceiling with 100mm service void finished with plasterboard and skim.
- 100 x 75 C24 sw wall plate fixed to top of inner wall at 1200mm centres and every half joint with galvanized wall plate straps. Rafters birdsmouthed over wall plate. Birdsmouth a maximum of 1/3 depth of rafter.
- First 3 trusses running parallel to the gable wall are to be strapped to the gable wall with proprietary galvanized horizontal restraint straps at min 1800mm c/cs

Cut Roof Construction to porch insulation at rafter level to consist of :-

- Clay plain tiles fitted strictly in accordance with manufactures specification and details.
- 25x50 tanalized battens and **counter battens** nailed with stainless steel nails to rafters. **Counter battens MUST be used to provide 25mm ventilation space.**
- TYVEK SUPRO breather membrane or similar approved breathable roof membrane.
- Rainwater drainage to be taken to existing underground surface water culvert and holding pond
- Discharge pipe minimum diameter all as table 2 and diagram 3 of section 1of part H1 of current building regs. Minimum diameter, gradient and maximum lengths to be;
- sink - 40mm dia / 18mm/m / 3m Max length
- sink - 50mm dia / 18mm/m / 4m Max length
- bath - 40mm dia / 18mm/m / 3m Max length
- bath - 50mm dia / 18mm/m / 4m Max length
- basin - 32mm dia / gradient as diag 3 / 1.7m Max length
- basin - 40mm dia / gradient as diag 3 / 3m max length
- WC - 75mm dia / 18mm/m / 6m Max length for single wc.
- Traps to be fitted to all points of discharge into the drainage system. Minimum trap size to be 32mm dia for basins, 40mm pipe dia for baths, showers, 40mm pipe dia for sinks, washing machines and kitchen fittings 75mm dia for WC trap depths all as Table 1, section 1 of Part H1 of the Building Regulations.
- Where pipes are to be run through joists. Holes to be in the vertical centre of timbers and are to be located within the first third of the span from the support.
- Wholesome water supply is to be provided by the local water supply undertaker.
- Hot water system to be properly commissioned, and certified on completion. Thermostat to be fitted to bath to limit temperature to 48° centigrade.
- Fittings and sanitaryware to maximum water usage of 125L per person per day or 110L per person where optional requirement applies.
- The "Fittings approach" to water efficiency will be used. fittings will not exceed the values in Table 2.1 in approved doc Part G2.

Beam and Block First Floor consisting of :-

- Concrete Beam and block floor system. To be fitted strictly in accordance with manufacturers specification, details and drawings.
- 100mm XTRATherm SR/UF insulation and edge strip With min 25mm perimeter insulation to be fitted BEFORE floor insulation and to run from beam and block floor slabs up to top of floor slab.
- 1200 gauge VISQUEEN ECOMEMBRANE polythene isolation layer on top of insulation turned up minimum 100mm at perimeter to finish behind skirting.
- 50mm LAFARGE AGILIA SCREED A XTR Anydrite Floor Screed or similar approved concrete floor screed in accordance with manufacturers specification.- Floor finish, to be agreed and to be laid strictly in accordance with manufactures instructions. MC to ensure levels of proposed and existing floor levels match exactly.

Windows and Glazing consisting of :-

- All new windows to be double glazed units with minimum U Value of 1.6W/m²k. With K Glass to internal pain
- All glazing below 800mm and 1500mm to doors or within 300mm of door reveal to be Laminated Safety Glazing in accordance with Building Regs part K.
- New windows to first floor bedrooms with ffl under 4.5m above external ground level to have an escapable window. To be minimum of 450 x 450 and with a minimal openable area equivalent to 0.33m². The bottom of the openable area should not be more than 1100mm above floor in accordance with Building Regs part B1.
- Windows with Cill heights of 800mm or less to be fitted with egress hinges with restrictors.
- At least one of the existing first floor windows should be an escape window if not already.
- Ground floor, basement and other easily accessible windows (including easily accessible rooflights) should be secure windows in accordance with Approved Document Part Q.

Drainage and Water Supply consisting of :-

- Above ground pipework to be uPVC to BS EN 1329. External pipework and internal pipework to be Black. Internal pipework where visible to be white. Below ground pipework to be uPVC to BS EN 1401+ minimum flow rate to be 2.5l/s achieved by a 100mm diameter pipe laid at a minimum gradient of 1 in 40 in accordance with Local Authority Recommendations.
- Rainwater drainage to be taken to existing underground surface water culvert and holding pond
- Discharge pipe minimum diameter all as table 2 and diagram 3 of section 1of part H1 of current building regs. Minimum diameter, gradient and maximum lengths to be;
- sink - 40mm dia / 18mm/m / 3m Max length
- sink - 50mm dia / 18mm/m / 4m Max length
- bath - 40mm dia / 18mm/m / 3m Max length
- bath - 50mm dia / 18mm/m / 4m Max length
- basin - 32mm dia / gradient as diag 3 / 1.7m Max length
- basin - 40mm dia / gradient as diag 3 / 3m max length
- WC - 75mm dia / 18mm/m / 6m Max length for single wc.
- Traps to be fitted to all points of discharge into the drainage system. Minimum trap size to be 32mm dia for basins, 40mm pipe dia for baths, showers, 40mm pipe dia for sinks, washing machines and kitchen fittings 75mm dia for WC trap depths all as Table 1, section 1 of Part H1 of the Building Regulations.
- Where pipes are to be run through joists. Holes to be in the vertical centre of timbers and are to be located within the first third of the span from the support.
- Wholesome water supply is to be provided by the local water supply undertaker.
- Hot water system to be properly commissioned, and certified on completion. Thermostat to be fitted to bath to limit temperature to 48° centigrade.
- Fittings and sanitaryware to maximum water usage of 125L per person per day or 110L per person where optional requirement applies.
- The "Fittings approach" to water efficiency will be used. fittings will not exceed the values in Table 2.1 in approved doc Part G2.

New doors - Security :-

- All new windows and doors that are easily accessible and could allow unauthorised entry to a dwelling should comply with Building Regs part Q.
- New doorsets should be secure door sets and mechanically fixed to the structure, and have locks that in accordance with Building Regs part Q
- The main doors for entering a dwelling (usually the front door) should have a door viewer unless other means exist to see callers, such as clear glass within the door or a window next to the doorset. The same doorset should also have a door chain or door limiter.
- The main doors for entering a dwelling (usually the front doorset) should be fitted with a multipoint locking system that meets the requirements detailed in Approved Doc. Part Q.

Ventilation consisting of :-

- Provide mechanical ventilation to bathroom and en suite linked to light switch and fitted with either over run timer or humidistat to provide minimum extract rate of 15 l/s.
- Provide intermittent mechanical ventilation to Kitchen to provide minimum extract rate of 30l/s adjacent to hob or 60 l/s elsewhere.
- Provide intermittent mechanical ventilation to Utility room to provide minimum extract rate of 30l/s.
- Provide intermittent mechanical ventilation to WC linked to light switch and fitted with over run timer. To provide minimum extract rate of 6l/s. To be
- Windows to be fitted with trickle vents to provide habitable rooms with minimum equivalent area of 5000mm² and 9500mm² in each wet room.
- All ventilation to in accordance with Building Regs Part F.

Stove / Open Fire (ISOKERN FLUE LINER)

- Flue dia to be as manufacturers instructions and to be fitted in accordance with Building Regs Part J.
- Carbon Monoxide alarm to be fitted in room where stove located,
- Form non-combustible hearth EITHER at least 840x840mm and at least 125mm thick made of non- combustible material such as concrete or masonry. OR Hearth made of non-combustible board/ sheet material or tiles at least 12mm thick if appliance does not cause the tempertature of the upper surface of the hearth to exceed 100degrees c.
- Walls adjacent to hearth to be of solid, non-combustible material as Diagram 30 Building Regs Part J. All to comply with accordance with Building Regs Part J.
- Stove and Flue to be fitted by HETAS approved installer.
- ISOKERN DM or similar approved insulated chimney system to be used to provide insulation to flue and existing truss. In accordance with LA requirements.
- If the proposed chimney is within 600mm of the ridge its should terminate at least 600mm above the ridge.
- Elsewhere on the roof proposed chimney to terminate a minimum 2300mm horizontally from nearest point on the weather surface and at least 1000mm above the highest point of intersection of the chimney and weather surface; or at least as high as the ridge.

Smoke Detectors consisting of :-

- Recommended that an L3 Interlinked smoke detectors to **BS5839-6** to be provided to circulation areas to include top and bottom of all staircases.
- Smoke detectors to be mains powered with battery back up.
- Smoke detectors to be sited within 3m of the door to all habitable rooms. Final positions to be agreed on site with client.
- Heat detectors to be located in the kitchen and linked with smoke detectors. To be minimum of 300mm from walls and cupboards.

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Part R Physical infrastructure for high-speed electronic communications networks

In-building physical infrastructure

R1

(1) Building work must be carried out so as to ensure that the building is equipped with a high-speed-ready in-building physical infrastructure, up to a network termination point for high-speed electronic communications networks.

(2) Where the work concerns a building containing more than one dwelling, the work must be carried out so as to ensure that the building is equipped in addition with a common access point for high-speed electronic communications networks.

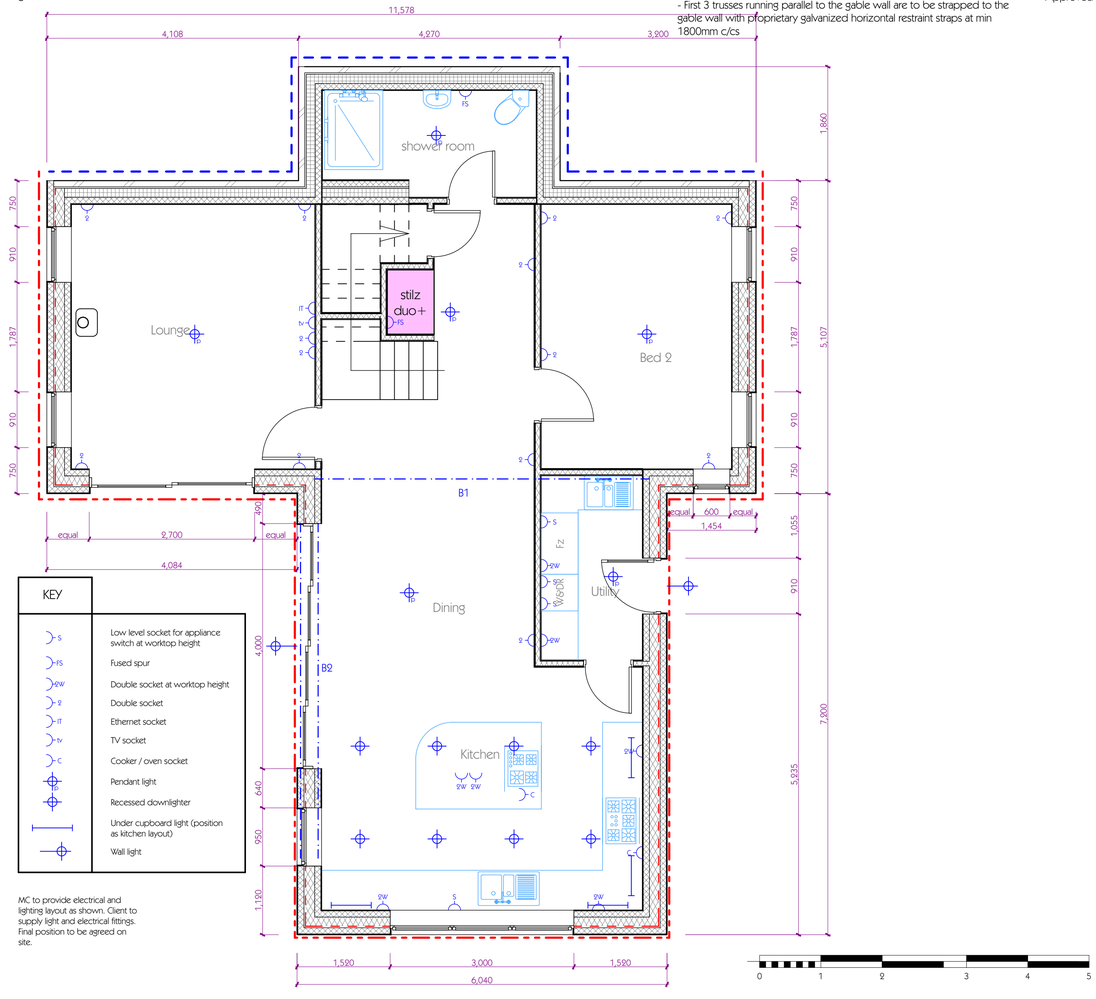
- Requirement R1 is to provide the in-building physical infrastructure so that, in future, copper or fibre-optic cables or wireless devices capable of delivering broadband speeds greater than 30 Mbps can be installed. NOTE: A standard copper telephone cable, when connected to a service provider's fibre network, can deliver broadband speeds up to 70 Mbps.
- The requirement is to provide only the in-building physical infrastructure, from the service provider's access point to the occupier's network termination point. Multi-dwelling buildings must be equipped with a common access point capable of serving all the dwellings within the building.
- It is not a requirement to provide any network cabling or equipment, or any in-building infrastructure that extends internally beyond the network termination point. Nor is it a requirement to provide any external or site-wide infrastructure beyond the access point. The developer and broadband service provider should agree who will install such external infrastructure.
- All works to comply with Building regs Approved Doc Part R

Electrical Installation consisting of :-

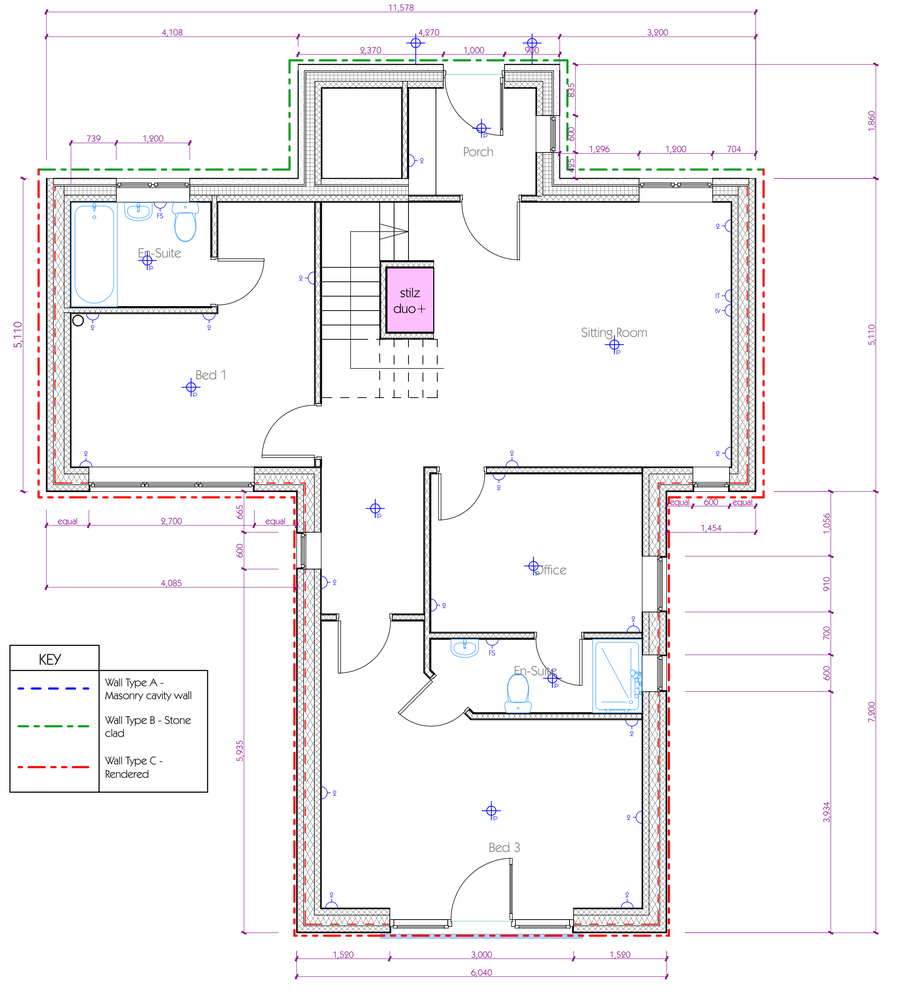
- All electrical installation to be carried out in accordance with latest I.E.E Regulations and Part P of the Building Regulations by a competent person and electrical test certificate issued on completion.
- All joints in cables to be made at junction boxes.
- Minimum of 250mm clearance between any electrical wiring and hot pipework.
- MC to confirm requirements for encasement of cables where laid on rigid insulation board in accordance with manufacturers specification.
- Where cables are to be run through joists. Holes to be in the vertical centre of timbers and are to be located within the first third of the span from the support.
- Minimum 75% proposed light fittings to be capable of taking energy efficient lamps.
- Switch and sockets heights to be between 450mm - 1900mm above floor level all in accordance with Section 8, Part M of the Building Regulations.
- In new dwellings mount the consumer unit so that the switches are between 1350mm and 1450mm above floor level.

Dry lining to all existing walls consisting of :-

- 50x50 sw battens at 600 c/cs screwfixed to existing blockwork walls.
- 12.5mm FERMACELL Fibre gypsum board
- Void between studs to be fully filled with KNAUF DRITHERM ULITMATE 32 mineral wool or similar approved.



Ground Floor - Setting Out 1:50



First Floor - Setting Out 1:50

rev.	details	by	date
E	**Amend layout**	**dta**	**28/6/23**
D	Amend extent of render	dta	9/5/22
C	Amend stone cladding notes	dta	25/4/21
B	Amend layout	dta	16/11/21
A	Amend layout	dta	13/7/21

Project
Vaughan
Willow Bank
Kniveton

Drawing Name
Proposed Setting Out - Ground and First Floor

Drawn by: dta
Date: May '21

Project No.: 2019
Drawing Scale: 1:50

Layout ID: 11E
Status: Construction