

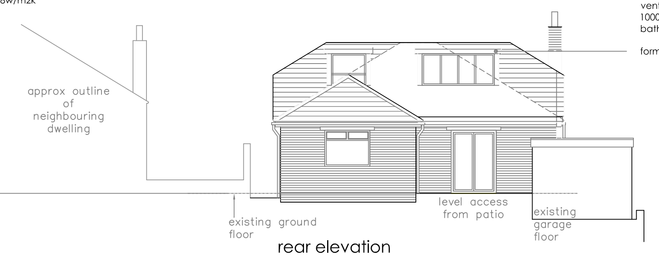
Front elevation

LEAD
Provide Code no. 4 lead flashing and soakers where pitched roof abuts cavity wall. Lead to be dressed up over soakers min 150 mm and to be linked to cavity tray at abutment. Cavity tray to be fixed in accordance with manufacturers recommendations.
DPC to chimney stack to be stepped to 150 mm above line of tiled roof and Code 4 stepped lead apron flashing.

side elevation

External finishes
Red / Brown facing brickwork to match existing
Blue / Grey roofing tiles to match existing

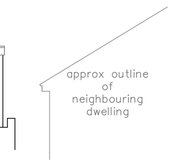
flat roof
Single ply membrane roofing system mechanically fixed in accordance with manufacturers recommendations or 13 mm limestone chippings bitumen bedded on 3 layers built up roofing felt to BS747 on kingspan thermaroof (min 130mm thick) insulation on vapour control layer on 19mm exterior quality plywood on firrings laid to falls on 175mm x 50mm flat roof joists spaced at max 450mm cnts,-12.5mm foil backed plasterboard & skim ceiling finish.to achieve max 'u' value of 0.18w/m2k

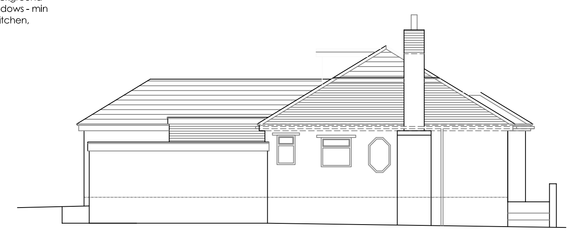


rear elevation

WINDOWS
All windows to be glazed to achieve a max U value of 1.6 w/m2k in accordance with BS6262 and for safety glazing in critical locations to BS EN12150
Windows to first floor habitable rooms to be fitted with escape windows total area of 0.33m2 - when opened at right angles to the frame with a minimum clear opening of 450mm in any direction.
provide windows as schedule or drawings with background ventilation via trickle vents installed in head of windows - min 10000mm2 to all habitable rooms & 5000mm2 to kitchen, bathroom, utility and wc.

form dormer as shown





side elevation

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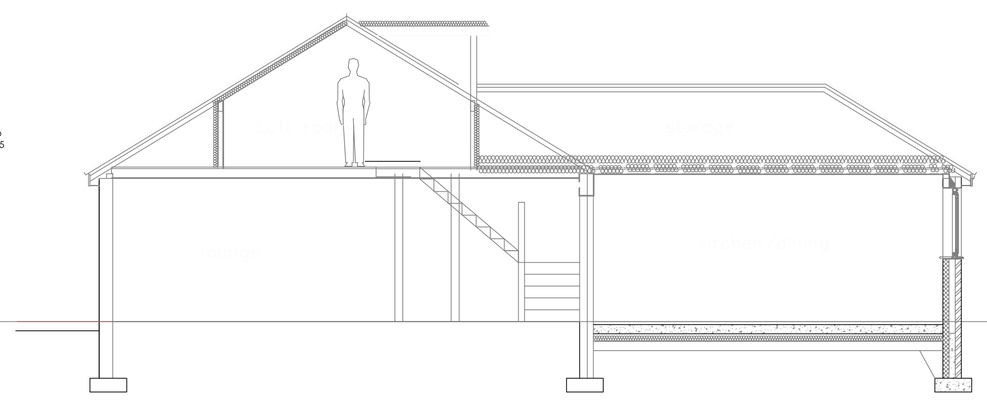
The contractor is responsible for checking dimensions and levels and drainage inverts prior to commencing works - any discrepancy to be verified before proceeding.-figured dimensions only to be worked to: DO NOT SCALE.
All work to be carried out in accordance with the current Building Regulations, British Standards/Codes of practice and statutory authority bye -laws and recommendations.

Revision	Comments	Date

ROOF VENTILATION
Provide Tyvek Supra breathable felt or alternatively provide Glidevale roof ventilation to all roofs with insulation at ceiling level. Ref RV along full length of eaves and fix Glidevale ref FV100 continuous ventilation along eaves equivalent to a 10 mm opening. All fixed in accordance with manufacturers recommendations.
Where there are sloping insulated ceilings provide Glidevale ref RV between rafters and Glidevale ref FV250 continuous ventilation along top of eaves, equivalent to a 25 mm opening. Provide Glidevale ref MR50 at roof abutment with cavity wall and Glidevale ref G ridge ventilators installed at 2.4 m centres to all ridges where roof is insulated.

METAL STRAPS
Galvanised MS 32 x 2.5 x 600 mm long holding down straps to pitched roofs at 1800 mm maximum centres with 90o twist 125 mm from top fixed to joists and to wall. Galvanised MS 32 x 6 mm lateral support straps at 2 m max centres to timber floors and gables fixed to timbers and bend down 100 mm into cavity behind inner leaf. Roof straps 1500 mm long, floor straps 1100 mm long. All straps to have supporting noggins not less than ¼ the depths of joists/rafters.

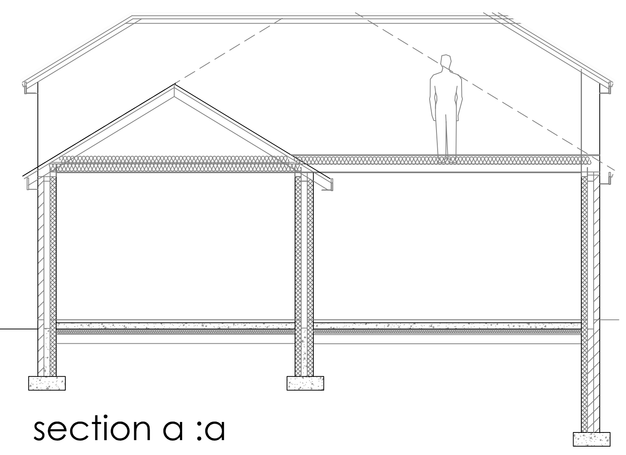


section b:b

CEILINGS
12.5 mm plasterboard and skim, taped and filled joints with plaster skim finish. Ceilings to underside roof spaces to have 100 mm fibreglass quilt insulation between joists and 170 mm fibreglass quilt insulation over at 90o.
Where ceilings are formed to underside rafters lay 100mm Knaufherm K7 insulation board between rafters and 52.5mm mm below rafters.
It may be necessary to batten to underside of the rafter to ensure a 50 mm continuous air gap is achieved above insulation.

GROUND FLOOR
Ground floor construction is to comprise of 50 mm sand/cement screed laid on 100 mm concrete ground floor slab, laid on 500 guage viqueen seperating layer dpm (which is to be securely tapped and taped at joints and linked to dpc) laid on 75 mm Kaatherm K3 insulation board and 50mm wide turned up at edge of slab laid on 1200 guage viqueen dpm turned up at edge of slab & linked to dpc in wall on 50 mm sand blinding on 150 mm well compacted sulphate free hardcore.Ground floor to be constructed to achieve a maximum U value of 0.22 w/m2k.

FOUNDATIONS
Concrete strip foundations under external walls to be 600 x 225 mm. If ground conditions at foundation level are unsuitable then foundations should be laid at an increased depth or the use of one layer b503 reinforcement mesh with min 50 mm concrete cover in foundations to approval of Local Authority Building Control.
Provide 450 x 230mm concrete strip foundations to load bearing internal walls - reinforced one layer b503 mesh.
Any non - loadbearing walls to be built up off thickened out floor slab - min 450mm wide x 300mm thick.
Provide 3 no. courses of facing brickwork below ground level and concrete common brickwork for all walls below ground level with a weak mix concrete up to 150 mm below dpc in cavity.
foundations shown on this drawing have been shown at the minimum required depth of 1000 mm below ground level. If upon excavation it is found that ground conditions or effect of any adjacent tree roots at this level are unsuitable then foundations shall be laid at an increased depth on adequate load bearing strata. Final depth of foundations to be approved by Local Authority Building Control Department.

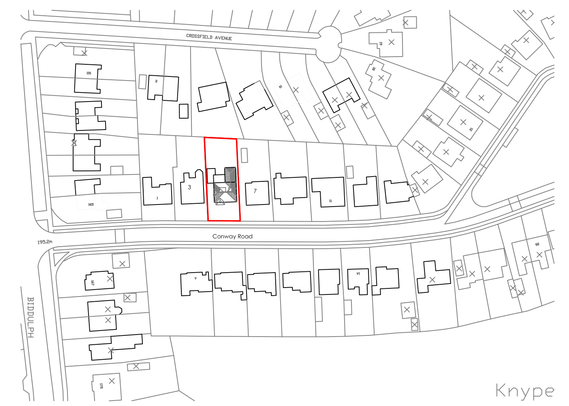


section a :a

ROOF
Pitched roof construction to comprise of the selected roofing tiles on 38 x 25 mm softwood tanalised battens laid on one layer untreatable roofing felt which is to conform to BS747 laid on 150mm x 50mm rafters @ max 450mm cnts-200 x 25mm ridge board, last 3no timbers running parallel to wall strapped at max 2000 mm cts with 30 x 5 mm Expamet hot dipped galvanised mild steel straps to BS2989.
provide C16 grade ceiling joists @ max 450mm cnts -sizes /centres as described on plan.
provide 2no rafters spiked together where trimming dormer or velux window openings.
provide 12.5 mm plasterboard to underside of first floor ceiling tape and fill joints and skim to finish.
Provide purlins in roof space as on drawing. Ridge board, hip rafters, valley rafters,hip rafters where read. 100x 75 mm dragon ties across wallplates to corners of hipped roof.
Provide 100 x 75 mm softwood tanalised wall plate to be fixed to top of inner skin of blockwork at max 1200 cts with 30 x 2.5 mm Expamet hot dipped galvanised mild steel to BS2989.
Roof to be constructed to achieve 0.16 w/m2k

FLOOR
Structural timbers shall be stress graded to C16 kiln dried regularised and treated. All new floors to comply with approved document part E of building regulations 2002.
First floor 25mm T & G boarding on C16 grade floor joists to sit in galvanised steel restraint type joist hangers or approved joist seals - sizes & centres as described on plan. Alternatively sit in approved joist seals where built into external walls.
provide herring bone strutting between joists using 38mm thick softwood or galvanised steel, depth to be min 3/4 depth of joist, positioned centrally where joist span is 2.5 - 4.5m or 2no rows equally spaced where joist span exceeds 4.5m, strutting to be blocked solidly to perimeter walls.
provide and fix plasterboard to underside of joists, fill, tape and skim finish. Last three floor joints running parallel to wall to be strapped at max 1200 mm cts with 30 x 50 mm noggins at perimeter to all heading joints. All joints to be glued. Provide and fix plasterboard to underside of joists fill, tape and skim finish. Last three floor joists running parallel to wall to be strapped at max 1200 mm cts with 30 x 50 mm galvanised mild steel straps to BS2989.
Provide two joists spiked together where running parallel to and under stud partition walls and where trimming stairwell opening.
Line to underside of ceilings with 12.5mm Gyproc wallboard 10 and lay 100mm isowool general purpose roll in floor cavity.

DAMP PROOF COURSE
Provide and fix new vertical and horizontal dpcs to all jamb and cill lovers.
DPC to BS743 to all walls min 150 mm above ground level.
Alreflex 2L2 to all cavity returns at external openings or similar insulated cavity closer to eliminate cold bridging.



location plan 1 :1250

wall ties to be spaced at max 750mm horizontal cnts & 450mm vertical cnts - closing to 225mm cnts to door & window reveals.

new walls tied to existing with catnic stainless steel wall starters.

provide smoke detectors to ground floor hall & first floor landing area.

steelwork encased in 2 layers 12.5mm plasterboard & skim to give 30 mins fire resistance.

Provide thermostatic radiator valves to all radiators.

LINTELS
Provide prefabricated Catnic Cougar steel lintels open backed to BS5977 Part 2 1983 with corrosion protection and continuous integral insulation. Installed in accordance with the manufacturers recommendations, on a mortar bed, allowing a nominal 150 mm bearing at each end. Provide weep vents to lintels outer leaf complete with stop ends.

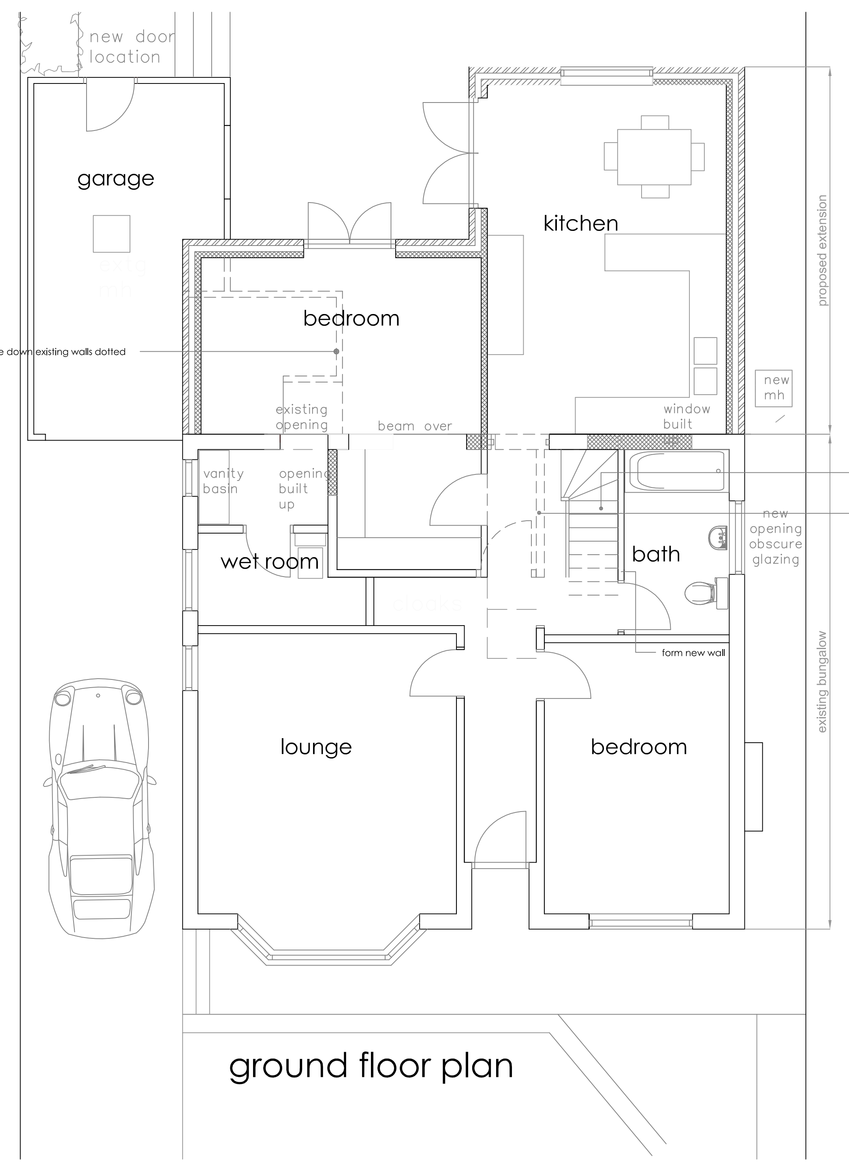
RAINWATER
New rainwater goods to be round section upvc 115 mm dia half round eaves gutters and 63 mm dia rainwater downpipes fixed in positions shown to discharge into new trapped storm water gullies where required. Rainwater goods to be BS4514.
New rainwater pipes to connect in new storm gulley with combined rodding access, with stoneware bends and 150 mm concrete bed and surround. Fit cast iron grating and frame to gulley. If storm water does not connect into existing drainage system then provide new via 1100 mm dia soakaway min 4.6 m away from any building or boundary and to be 1000 mm deep below lowest incoming invert. To be filled with clean stone or broken bricks with top soil replaced.

Allow for altering & extending existing heating, plumbing & electrical installations as required for proposed works all carried out in accordance with latest regulations & standards. All new light, socket & radiator positions to be agreed with client

INSPECTION CHAMBERS
The contractor shall excavate for and construct new inspection chambers, size 450 mm dia to depths as shown on drawings in precast concrete bedded to manufacturers instructions with 450 mm dia medium duty manhole covers and frames set in mortar. Provide all necessary bending and channelling to suit connections, all to the approval of the Local Authority Inspector. Storm and foul manholes greater than 900 depth to comprise of 215 mm brick chambers to BS3921 internal dimensions 1200 x 750 mm built off 150 mm thick concrete (1:2:4) slab. All connections formed in half channels and finished with 1:3 cement/sand benching.

EXISTING DRAINAGE
All existing drainage runs are assumed and shall be ascertained by Contractor upon commencement of work.

NEW DRAINAGE
All new drains to be 100 mm dia Hepworths supasleeve vitrified clay pipes laid in straight lines at 1 in 40 m falls on trimmed trench bottoms with flexible joints, backfilled with selected as dug materials.
Provide 150 mm dia sleeve pipe with reinforced concrete lintels over a flexible joint each side where drains pass through foundation brickwork. New 100 mm drains laid to falls and surrounded with 150 mm concrete where they pass under building.



ground floor plan

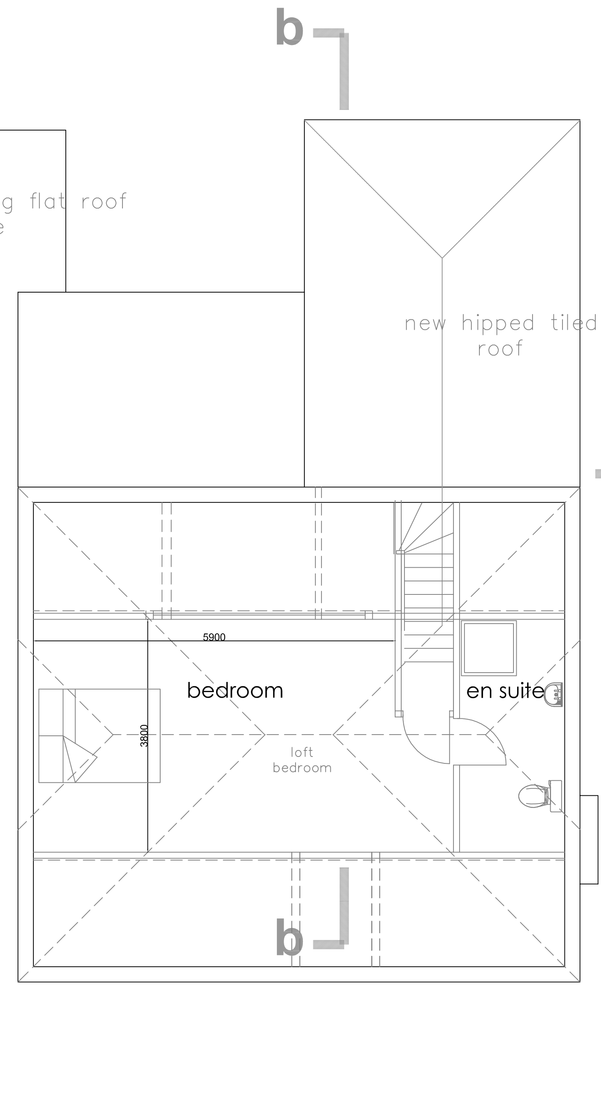
EXTERNAL WALLS
New cavity wall construction to comprise of 102.5 mm facing brickwork (or 100mm aerated concrete blockwork if shown with render finish) with a 100mm structural cavity - fully fill cavity with 100mm Dritherm 32 insulation or 9x 50mm Kooltherm K8 to inner skin of blockwork with insulation retaining clips to wall ties - inner skin of 100mm thick Tarmac Hemelite or similar approved, plastered with 13mm lightweight Gypsum plaster. Provide min. 5 no/m2 DD140 type 4 stainless steel wall ties complete with insulation retaining clips. External walls to be constructed to achieve a maximum U value of 0.28 w/m2k. cavity tray dpcs to be built into walling over all vents, air bricks, lintels, service boxes and anything that crosses the cavity with weep holes every third perpend. Provide cavity tray to top of cavity wall insulation in gables. Close cavity at eaves with a fire resistant material.

new kitchen fittings to clients choice.

SANITARY
New sanitaryware to be Clients choice of bath, wash hand basin and WC. Bath to have
40 mm dia pvc waste pipe with a 76 mm deep seal trap.
Wash hand basin to have 32 mm dia pvc waste pipe with a 76 mm dia deep seal trap and WC to have 100 mm dia pvc waste pipe with a 50 mm deep seal trap. All to be connected into svp back inlet gulley or manhole. See drawing for position and runs of pipework.
Also shower tray to have 75 mm deep seal trap with 50 mm dia upvc waste pipe.
Provide 40 mm upvc waste pipe to new kitchen sink to be connected to a back inlet gulley via 76 mm deep seal trap.

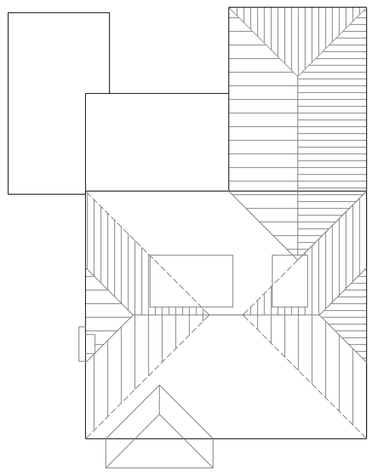
Provide new 100 mm svp in position shown to collect waste from sanitaryware. Connection of bath waste pipe into svp to be min 200 mm below connection of WC, svp to connect into main drains via slow radius curve (min 300 mm radius) and to cease 900 mm above head height of nearest window - head of pipe to be connected to a tile terminal with flexible hose connector. Provide lead collar at junction of roof where svp terminates roof structure. Box in svp as shown with 12.5 mm plasterboard, filled and taped joints with skim finish, provide glass fibre insulation to lag pipe.
Air admittance valves to be fitted to soil pipe in a position not liable to freezing, above the flood level of the highest sanitary fitting being served.

VENTILATION
Provide mechanical extract ventilation in kitchen capable of extracting at a min rate of 60 litres per second and trickle ventilation installed at head of windows capable of min 4000 mm2 clear air opening. Also provide mechanical extract ventilation to en-suites and bathroom capable of extracting at a min rate of 15 litres per second. Provide mechanical extract ventilation to utility to extract at a min rate of 30 litres per second and to WC to extract at a min rate of 6 litres per second. Where no opening light is available operated intermittently with light switch with a 15 min overun facility. Provide 100 mm dia upvc pipe terminating with grille built into external wall.



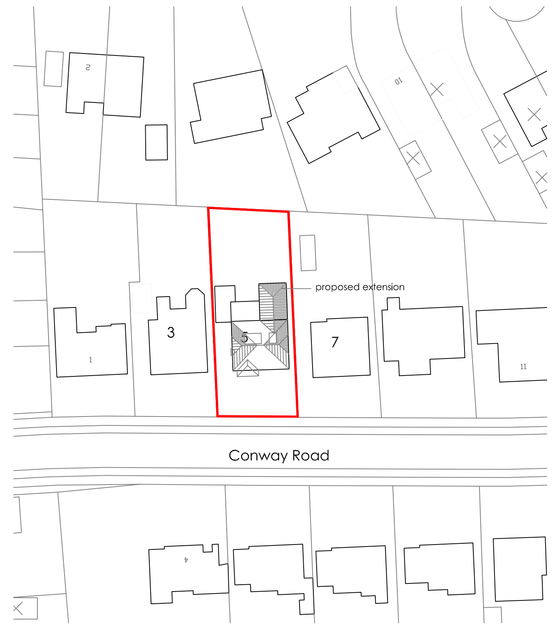
first floor plan

TIMBER PARTITIONS
Construct new partition walls in positions shown to be of 75 x 50 mm softwood vertical studs at max 450 cts. 75 x 50 mm softwood noggins fixed horizontally at max 600 mm cts.
Provide 25 mm thick isowool acoustic partition roll (1200) insulation quilt between and finish both sides with 12.5 mm thick gyproc wallboard ten plasterboard with filled and taped joints and skim finish.



roof plan

north



site plan 1 :500

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Client
Mr & Mrs Wright.

Project
Proposed alterations and extension at 5 Conway Road, Knypersley, ST8 7AL

Title
Scheme layout plan

Scale @ A0 1:50 1:100
Date March 2016
Drg no 1680 /02 Rev