CONSTRUCTION NOTES

ACCREDITED CONSTRUCTION DETAILS
Dwelling to be constructed using ACD's. Contractor to obtain ACD handbook and provide confirmation of compliance via signed checklists to SAP Assessor at end of project. SAP Thermal Bridge Values based on Extratherm Insulation test results.
Air pressure test will be required for each dwelling on completion.

EXTERNAL WORKS
Demolish existing bungalow. Level site and prepare for excavation. Reduce levels in accordance with site plan and site section drawings.

FOUNDATIONS
All concrete work to LA Approval. To be 1:2:4 mix 21N/mm2 strength trench fill footing size 600mm wide x 1000mm deep on external walls. Loadbearing internal walls - foundation size 450mm wide x 1000mm deep.

EXTERNAL WALLS BELOW DPC
To be structural blockwork min 7n/mm2 to engineers design.Introduce bitumen polymer type dpc built into all walls and leaves 150mm above g/l stepped as required. Finish externally with 100mm brickwork to form brickwork plinth as dwelling rises out of sloping ground.

EXTERNAL WALLS ABOVE DPC/GROUND LEVEL
Cavity Wall construction.
Front and Rear Elevation Walls to consist of outer leaf of 150mm Natural stone type to be agreed. Architectural dressings to include cast window heads,cills and parapet copings all by Bradstone. 100mm cavity filled with 100mm Jablite Jabfill Premium insulation.

Side Elevation Walls: To consist of outer leaf of 100mm Celcon Hi Strength 7 insulation blockwork with 'K' rend external finish, colour to be agreed. 100mm cavity filled with 100mm Xtratherm Cavity Therm insulation. Include for Extratherm Riser,Top and Corner Panels, Cavity Tray Channel and Service Void Channel for beam and block floor vents.

Inner leaf throughout to be 100mm 'Celcon Hi Strength 7' Insulation blockwork. (SUITABLE FOR 3 STOREY LOADINGS) finished internally with 12.5mm plasterboard on dabs and 3mm skim coat of ltwt plaster. Introduce bitumen polymer type dpc built into all walls and leaves 150mm above g/l. Fill cavities with weak mix mortar to 225mm below dpc. Seal cavities around openings and at tops of walls with 100mm Catnic cavity closers.

Stainless Steel Wall ties conforming to BS 1243:1978 should be used and placed at approx 600mm c/c horiz and 450mmc/c vert, do not place directly on the DPC. It is recommended (to avoid piercing the boards with additional wall ties at reveal openings), that an additional wall tie is included within 225mm of the opening on each board course. Double up ties at openings.

U value of rendered walls = 0.17w/mk.
U value of Nat Stone walls = 0.23w/m2k

LINTELS
Use Keystone Hi-Therm insulated lintels throughout. (see schedule) www.keystone.com
Damp-proofing at lintel level must be provided with stopends and weep holes.

GROUND FLOOR BEAM AND BLOCK
65mm screed laid on polythene seperation layer on 150mm Kingspan Kooltherm K3 Insulation. 1200gauge poly DPM on beam and block floor as supplied by Stowell Concrete or similar approved. DPM linked to radon cavity tray on external wall. Overlap Joints.
Beams resting on sleeper wall at midspan. (see section AA)
Fill all voids with mortar. Include for plastic telescopic vents at 1.5mc/c for ventilation to floor void.
'U' value of this construction 0.11 w/m2k. P/A=0.50

GROUND FLOOR PARTITIONS
To be 100mm dense conc blwk loadbearing walls on foundation to Inspector Approval with plaster skim to each side.
Non loadbearing walls in lightweight insulation block or studwork built off slab.

FIRST FLOOR
20mm moisture repellent t&g wood board flooring on 50x200 C24 grade joists @400mmc/c. Herringbone strapping with s/s straps.
Line underside ceilings with one layer 12.5mm th. plasterboard and skim to form ceilings.
100mm isowool to floor voids. Provide lateral straps where first floor joists run parallel with external walls.
Double up joists under partitions and baths.

FIRST FLOOR PARTITIONS
To be of studwork. 75x50mm treated sw tread, sole and wall plates. 75x50mm treated sw studs @ 400mmc/c and 75x75mm treated sw noggins @ 600mmc/c. All to be finished with 12.5mm th. plasterboard, butt jointed, taped and skim coat of plaster to each side. 100mm insulation quilt in studs.

STAIRS 1 GROUND FLOOR
Ground floor - First floor = 2670mm approx. 13No. risers @205.38mm, 250mm going. Width of flight 860mm.
Install handrail 900mm above pitch line. 2m headroom to be provided at all times. Balustrade where applicable @100mm c/c. 50mm min going at winders.

STAIRS 2 FIRST FLOOR
First floor - Second floor = 2650mm approx. 13No. risers @203.84mm, 250mm going. Width of flight 860mm.
Install handrail 900mm above pitch line. 2m headroom to be provided at all times. Balustrade where applicable @100mm c/c. 50mm min going at winders.

SECOND FLOOR
In conjunction with attic truss structure.Line underside ceilings with one layer 12.5mm th. plasterboard and skim to form ceilings.
100mm isowool to floor voids.

DORMER CHEEKS AND FRONTS
External finish of Natural Cedar Vertical Cladding on ventilated treated battens and Tyvek breathable roofing membrane or Kingspan Nilvent membrane.
12mm ext.grade plywood fixed to studs. Studs @400mmc/c cross braced horizontally @900mm c/c. 100mm Kingspan Kooltherm K7 between studs.
Fix 62.5mm Kingspan Kooltherm K18 to inside face of studs, taping joints, seal perimeter with mastic and 3mm skim to finish 'U' value 0.16w/m2k.
Double up rafters either side of the dormer cheeks.

DORMER PITCHED ROOFS 30 DEGREE PITCH
Use 50x100 timber for dormer roofs. 2 layers of Crown Earthwool Loft Roll 40 to level area roof void. (2x200mm) 'U'=0.08w/m2k

MAIN ROOFS (HOUSE 36 DEGREE PITCH, GARAGE 45 DEGREE PITCH)
FINISHES: Redland Cambrian Slate.
All on treated battens and Tyvek breathable roofing membrane/Kingspan Nilvent on Attic trusses as supplied by Stalbridge Timber Supplies (01963 363174)
Trusses to BS5268 pt3 1998 and to include all necessary lateral and diagonal bracing. Double up Trusses either side of the velux rooflights.
All on 100x50mm plates anchored to walls with 'mafco'or similar approved plate anchors @1.8mc/c. Rafter ends tied to wall plates with galv. anchor straps.
Lateral restrains to end walls comprising of 30x5mm galv m.s anchors fixed over 3No. rafters, turned down and secured to blockwork.
Form valleys at intersections of roofs with code 5 lead lining on 19mm ply layboard and ex 75x75 tilting fillets. Code 5 lead lining and cavity trays at abutments with walls.
Insulate level area with 400mm Earthwool loft roll 40 'U' value 0.08w/m2k.
Insulate sloping areas of roof from ridge to eaves with 150mm Kingspan Kooltherm K7 between rafters and 37.5mm Kingspan K18 insulated plasterboard fixed to underside of rafters. 3mm skim to finish.
UPVC fascia and soffitts set 50mm clear of finished wall with roof ventilation via glidevale vents equivalent to continuous strip 10mm wide.
UPVC rainwater pipes and downpipes discharging into existing soakaway min 5.0m from any building.

BREAKFAST ROOM ROOF (45 DEGREE PITCH)
FINISHES: Clay double roman tiles
All on treated battens and Tyvek breathable roofing membrane/Kingspan Nilvent on roof structure to engineers design.
Attic trusses as supplied by Stalbridge Timber Supplies (01963 363174)
Form valleys at intersections of roofs with code 5 lead lining on 19mm ply layboard and ex 75x75 tilting fillets.
Code 5 lead lining and cavity trays at abutments with walls.
Insulate sloping areas of roof from ridge to eaves with 150mm Kingspan Kooltherm K7 between rafters and 37.5mm Kingspan K18 insulated plasterboard fixed to underside of rafters. 3mm skim to finish.
UPVC fascia and soffitts set 200mm clear of finished wall with roof ventilation via glidevale vents equivalent to continuous strip 10mm wide. UPVC rainwater pipes and downpipes discharging into existing soakaway min 5.0m from any building.

CHIMNEYS
To be Ibstock Kevington 'Faststack' Othello Chimneys clad in brickwork to match main lower plinths. (Pat Parle 07803 945380)
Flue lining system if required by Poujalat.

SURFACE WATER DRAINAGE
Surface water drainage system to soakways min 5m from any building. (subject to percolation test)

GENERAL
All new structural timber to be strength graded and marked DRY or KD. Decorate to Clients choice.

FIRE SAFETY
FD30 fire doors throughout except for bathroom doors.Mains wired smoke detection to all landings to be interlinked and fitted with battery backup.

BOILER/HEATING
To be designed installed and commissioned in accordance with the Domestic Heating Compliance Guide 2012.
Heating via wall-mounted radiators. Worcester Greenstar Combi Boiler located in kitchen. Provide radiator to airing cupboard.
All central heating installations by approved Contractor.

SECONDARY HEATING
Room sealed Log Burner has been accounted for in the SAP calculations. To be a HETAS approved appliance. Flue lining to be encased in Gyproc fireline board and to discharge thru Ibstock Chimneys. Provide carbon monoxide detector to living room area.

FOUL DRAINAGE
All work to LA Approval. Soil pipe to be 100mm Supersleve vitrified clay pipe flexibly jointed or OSMA plastic underground drainage system or similar approved and laid to min 1:40 fall bedded on 150mm th. pea gravel and surrounded. Where pipes pass thru walls include flexible joint and use prestressed lintels. Where drains run under building encase in concrete.
Soil pipes to terminate 900mm above any openings within 3m. New Manholes on site to be OSMA Plastic Inspection chambers.
Connect to new Klargester Biodisc Model to be agreed.
WASTE SIZES:
WC - 100mm dia soilpipe Wash Basin - 32mm dia with 75mm deep seal bottle trap.
Bath - 38mm dia with 75mm trap
Kitchen Sink - 38mm dia with 75mm trap
Shower - 38mm dia with shower trap.

WATER EFFICIENCY
Pressure regulating aerator fitted on kitchen sink taps
Spray taps fitted to all wash hand basins.
WC's to be low dual flushing cisterns.

PART P - ELECTRICAL SAFETY
All electrical work required 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 must be satisfied that either :-
1. An electrical installation certificate issued under a Competent Person Scheme has been issued; or
2. An appropriate electrical installation certificate has been issued for the work, and that it has been signed by a person competent to do so; or
3. They have carried out sufficient inspections and tests to ensure relevant work complies with part P.

Electricalworks to min IEE Standards by approved IEE Electrical Contractor. Switches and sockets between 450 -1200mm from floor level. Provide 100% energy saving light fittings.

VENTILATION
Mechanical ventilation to bathroom/ensuite/wc to be Vent Axia Lo-carbon Quadra (variable speed selection from 6 -60l/s duct fan ducted to external air and wired to light switch with time delay and isolator switch.
In kitchen mechanical ventilation via cooker extractor hood ducted to external air.

DISABLED PART M
Disabled access - provide level threshold at front entrance door with min opening 775mm clear with mobility threshold.
Ground floor wc to comply with diagram 25 Approved document M with 838mm door set. Internal ground floor doors to be min 750mm clear opening. Use 838 wide doors on ground floor. 762 doors to first floor. See door schedule above for all sizes.

BUILDING REGS PART L1A DESIGN SAP
'As designed' energy SAP to be provided with Building Regulations submission. Please note alterations to the fabric thermal specifications noted during actual construction should be communicated to the Architect immediately and before such an amendment is implemented as this will necessitate the need for an the calculation to be rechecked. An 'as built' energy rating calculation will be required prior to occupation. In particular the finalised boiler/heating system to be supplied should be checked against the calculation before purchase and installation to ensure the calculation will still achieve a pass. EPC to be issued on completion.
Air Pressure Test result to be forwarded to SAP Assessor to complete 'As Built' SAP calculation prior to issue of EPC.

STRUCTURAL CALCULATIONS
Structural engineers calculations will be required for the following.

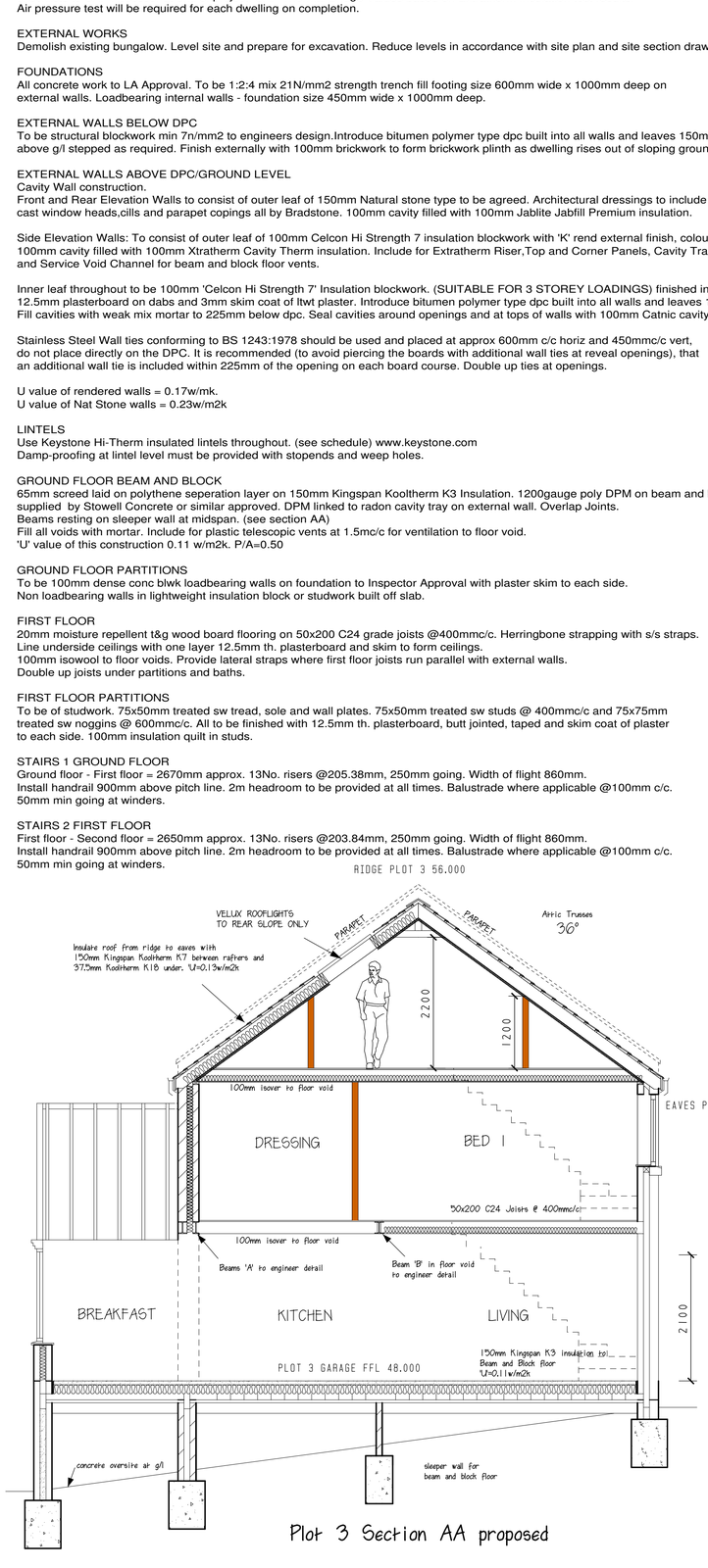
1. Attic Trusses (by truss supplier)
2. Beam 'A' supporting first floor joists
3. Beam 'B' breakfast ridge beam
4. Beam and Block Floor (by truss supplier)

PARTY WALL ACT
Works may come under the Party Wall act of 1996 and the building owner is advised to seek the appropriate legal advice.

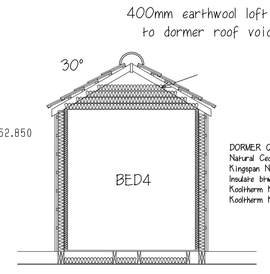
CDM REGULATIONS
The main Contractor will be required to give notice to the HSE (Health and Safety Executive) prior to commencement of works in accordance with CDM (Construction Design and Management) Regulations 1994. The Principal Contractor shall ensure that he complies with all requirements of CDM Regs, adequate safety precautions to be taken on site at all times.
Proper scaffolding shall be used at all times. First Aid kit fully stocked on site at all times. Vehicles and Plant leaving or manoeuvring on site shall only be operated by trained operatives with adequate care to avoid injury to persons or damage to property.
Client/Contractor is to appoint a Planning Supervisor for CDM prior to works commencing.

RENEWABLE ENERGY
Solar PV System to be designed an installed by MCS Approved Installer. Min 1.5kwp system.

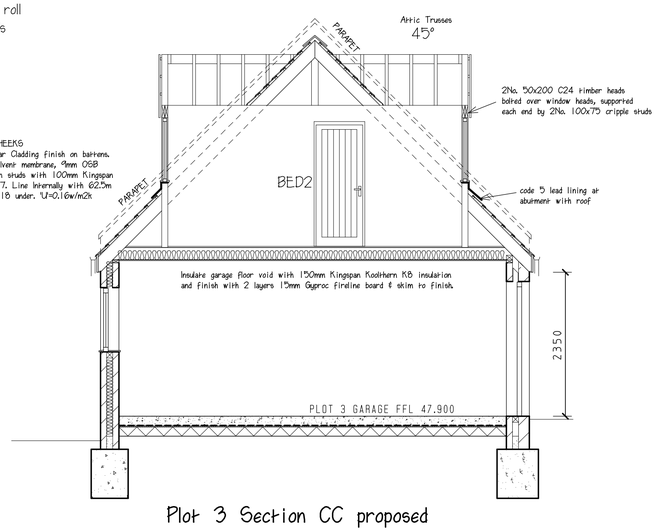
BUILDING COMMISSIONING
All commissioning certificates to be supplied to building control incl. Electrical,Heating, As Built SAPs etc.
Building services manual to be provided to be retained at property for furure occupants.



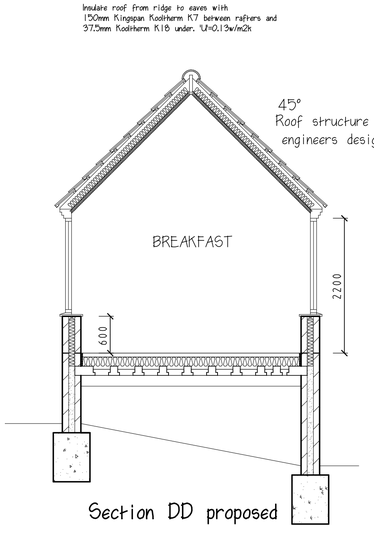
Plot 3 Section AA proposed



Plot 3 Section BB proposed



Plot 3 Section CC proposed



Section DD proposed

Rev	Date	Details	Ref
A	JULY 16	MAIN ROOF 36° EXTERNAL FINISHES	

PROJECT:
Proposed development of 3 No. dwellings at
Cherry House
Timsbury Road
Farmborough
BA2 0DA

PLOT 3 SECTIONS AND NOTES

CLIENT: Palmer Developments

SCALE: 1:50 @ A1 | DRAWING NO: 2016/CHERRY/10A

DATE: MAR 2016 | DRAWN: m.bissex

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