REQUEST FORM FOR STRUCTURAL ENGINEERS ADVICE
DFG PROJECT

PROJECT ADDRESS	77 Longmoor Lane, Breaston, Derby DE72 3BB
PROJECT IDENTIFICATION NO	826440
DFG CONTACT	Anna Bebbington
PHONE NO	36240
cc	
DATE REQUESTED	13/01/16
CLIENT CONTACT DETAILS	Mrs Beverley Dawson 07739629671
ANY SPECIAL CLIENT NOTES	
PRIORITY *(Low/Medium/High)*	

EXISTING PROPERTY DETAILS	
Link to photos	
Type / age	2 bedroom semi detached house possible non-traditional
Basement	Y/N
Ground floor construction	
External wall construction	
Upper Floor construction	
Roof structure	
Roof form	
Water tank location	
Topography for extension	
Trees	
other	

PROJECT DETAILS / ADVICE REQUIRED	DFG Client – Mrs Beverly Dawson Visit booked 10.30am 26.01.16, joint visit with Anna Bebbington Initial advice requested regarding removal of section of wall to hall/kitchen at ground floor level parallel to staircase. Confirm if it is load bearing and can it be done, job a feasibility stage. Sketch plan and photos attached.

Attach relevant information / photos

TO BE READ IN CONJUNCTION WITH DFG DESIGNER DUTIES

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STRUCTURAL ENGINEER	David Hart/Angela Holmes
CHECKED	John Lawrence
DATE ISSUED	20/09/16
PROJECT ENGINEERS NOTES *(Confirm standard notes apply and/or Identify departures from general standard notes)*	30/3/16 – DH requested for the store ceiling to be taken down. Order placed 8/6/16. Carried out 12/9/16. From the initial assessment it was concluded by David Hart that, as laminate was present in the first floor bedroom, the only way to determine the span and support for the first floor joists above the store room to be removed was by taking down the ceiling in the store room. This was carried out by the DSO on the 12/9/16. The survey revealed that 3 No. joists 200mm deep x 50mm wide at 300mm centres were present above the store room spanning from the kitchen party wall to the stairs. The joist ends were unsupported at the stairs therefore they are cantilevering off the wall to be removed. The span of the joists was 1.95m wall to wall with a 0.9m cantilevered section. The ends of the cantilevered section are taking the stud wall of the bedroom above. Viewing the location of the joists in the bedroom above, this is circulation space only around the bed and there are no heavy wardrobes or storage directly above the cantilevered joists. The roof void was also inspected and the ceiling joists run parallel with the stud bedroom wall. No purlin supports are on this wall. The solid store wall in the kitchen is therefore loadbearing in that it is supporting the cantilevered joists. Calculations prove that the joists are adequate with this 900mm cantilevered section. When the supporting wall is removed the joists are adequate if their ends at the stairs are adequately supported. IMPORTANT NOTE: There is likely to be a further 2 or 3 No. cantilevered joists in front of the store which were not exposed during the inspection but will need exposing and confirming at commencement of the site works. There is only 1 option available to support the cantilevered joist ends which will involve continuing the stairs wall up in solid masonry rather than stud to build in the joist ends. The ends of the joists appeared to be directly behind the ply lining of the stairs stud wall so there should be sufficient bearing at their ends (minimum 75mm). If this is not the case we can always face fix the joists to the new wall using resin fixings in BAT Speedy hangers. I have discounted the option of vertical studs in the stud wall directly supporting the floor joists as I have reservations whether this is practical as the wall beneath the stairs is solid and the stud wall will be following the outline of the stairs? I have attached calculations proving that the existing joists are adequate if their ends are supported.

	Note the store wall in the kitchen will need to remain in place and cannot be demolished until the supporting wall has been constructed adjacent to the stairs to carry the joist ends. This is likely to prove difficult due to the limited workspace in the store room. The contractor may wish to prop the cantilevered joists. In this instance we will need to agree a method of working to ensure that the propping system encompasses at least the 5 No. joists thought to be present and gives sufficient room to carry out the new wall construction. The propping system is to be designed by a competent temporary works designer. I have not done a structural drawing for this as it should be self-explanatory. I would be grateful if you could confirm what the contractor's intentions are as to whether they wish to prop the joists and remove the wall first or build the supporting wall adjacent to the stairs. If their intention is to prop the joists I will need to provide the propping forces to the temporary works designers intended prop layout. The ground floors are concrete and therefore adequate to prop from.

Attach relevant annotated plans etc.