

CALCULATIONS FOR PERCENTAGE INCREASE IN EXISTING FARMHOUSE BY PROPOSED EXTENSIONS AT HAGUE HALL FARM MATHER ROAD BURY BL96TJ

Calculations produced by only taking into account the original building plus any extensions in place as per 1937 Site Plan

Floor area of Farmhouse 117m^2 x height of walls to soffit 4.69m = 548.73m^3

Volume of main roof $\frac{1}{2}$ base x height x length
 $6.14/2 = 3.07\text{m}$ x 1.92m x 14.35m = 84.58m^3

Volume of roof over front outrigger
 $5.31/2 = 2.66\text{m}$ x 1.48m x 4.96m = 19.53m^3

Total $548.73\text{m}^3 + 84.53\text{m}^3 + 19.53\text{m}^3$ = 652.84m^3

Plus

Area of rear single storey larder/porch as per plan

$2.9\text{m} \times 2.1\text{m} \times 2.5\text{m}$ = 15.23m^3

Area of existing front porch $2.00\text{m} \times 1.2\text{m} \times 2.5\text{m}$ = 6.0m^3

Assumed as per replacement.

Total existing cubic capacity = 674.07m^3

Total extensions capacity

Rear extension subject to separate approval but requires to be included in total cubic capacity of extensions

Floor area $5.81\text{m} \times 3.00\text{m}$ x Roof $(1.96\text{m} + 2.97\text{m}/2)$ = 42.96m^3

Floor Area 31.32m^2 x 4.69m = 146.89m^3

Roof Volumes

Main Roof $\frac{1}{2}$ base x height x length
 $6.14/2 = 3.07\text{m}$ x 1.92m x 3.0m = 17.68m^3

Roof over front outrigger
 $4.317\text{m}/2 = 2.16\text{m} \times 1.48\text{m} \times 3.00\text{m} = 9.59\text{m}^3$

Small porch on front

$1.3\text{m} \times 2.0\text{m} \times 2.5\text{m} = 6.00\text{m}^3$

Total Cubic Capacity $= 223.12\text{m}^3$

Percentage of proposed extensions in relation to the existing building

Existing cubic capacity $= 674.07\text{m}^3$

Cubic capacity of proposed extensions $= 223.12\text{ m}^3$

Percentage of 30.21% less than acceptable 33%
