

21069 - 339 Manchester Road

Dwelling increase calculations

1. Existing house volume:

Overall footprint = 117.7m². Height to eaves = 2.4. $117.7 \times 2.4 = 282.5\text{m}^3$

Roof main part footprint = 99.8m². Half of roof height = 1.2. $99.8 \times 1.2 = 119.8\text{m}^3$

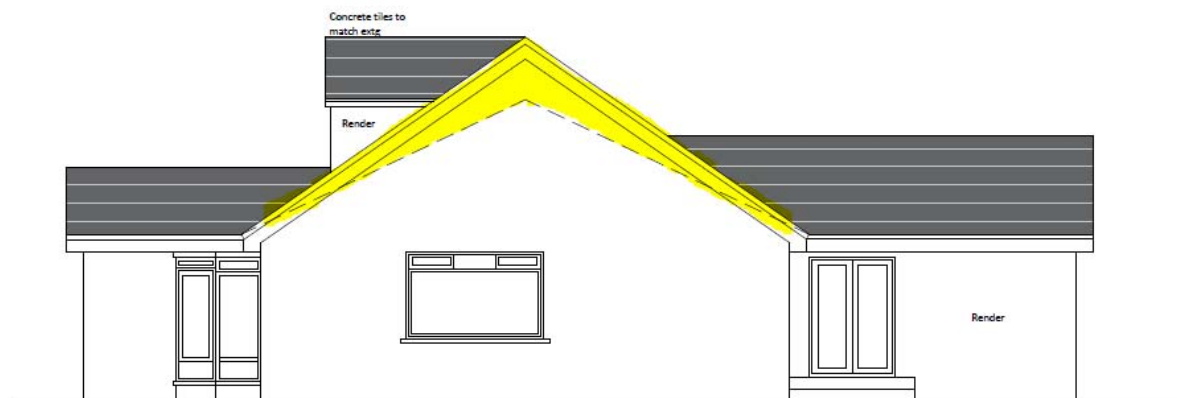
Roof front part footprint = 15.9m². Half of roof height = 0.6. $15.9 \times 0.6 = 9.5\text{m}^3$

Total volume of existing house is **411.8m³**

2. Proposed house volume:

Roof pitch change.

Area shaded yellow = 5.4m². Main part length = 10.8m. $5.4 \times 10.8 = 58.3\text{m}^3$



South Elevation

Dormer addition.

Dormer cheek = 1.2m². Width = 2.5m. $1.2 \times 2.5 = 3\text{m}^3$

Dormer roof half of height = 0.5m. Width = 2.5m. $0.5 \times 2.5 = 1.3\text{m}^3$

Total dormer volume = **4.3m³**

Rear extension.

Extn footprint = 38.2m². Height to eaves = 2.4. $38.2 \times 2.4 = 91.7\text{m}^3$

Extn footprint = 38.2m². Half of roof height = 0.9. $38.2 \times 0.9 = 34.4\text{m}^3$

Total rear extension volume = **126.1m³**

Total additional volume = 188.7m³



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3. Percentage increase = $188.7 \text{ div by } 411.8 = 0.45$ or **45%**

Increase in dwelling size justification

Whilst these calculations show that the percentage addition in volume of this proposal is greater than the 33% normally considered allowable, we offer the following mitigation.

The rear extension as proposed could be built under permitted development rules, subject to a Prior Notification application for larger extension (distance from back of house being 5m). If this part of the proposal was built first and therefore not included as part of this application, then the volume increase of the roof alteration would only be 15%.

The Client had previously wanted to change the house into a full two storey house, and Prior Approval for this proposal was obtained earlier this year (application ref 68668). This would have resulted in a volume increase of 329.6m³ (117.7m² footprint x 2.8m additional storey height) which is an 80% increase.

Also, looking at other permitted development rights which could be exercised at this property, without the need for prior approval namely side extensions to both sides, rear extension 4m deep, and a porch there is a potential volume increase of 262m³. Together with the additional storey which has already received prior approval, this house could be extended by 591m³ which equates to 143%.

The scheme put forward was a result of the Clients review of the two storey house design when they realised they did not require that much extra space. The current proposal is to effectively carry out a loft conversion (thus utilising the dead space in the loft), but just with a change of pitch of the roof to make this feasible. The rear extension is then required to provide additional living space. We consider this scheme to have far less impact on the openness of the green belt (with the ridge line only being raised by approx 1m) than the full two storey proposal.

Therefore, we consider the 45% increase in volume presented in these proposals to be very moderate compared with the 143% volume increase that they could build now without any further approvals being required.



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