

Calculation for Hip to Gable Roof Volume

32 WARRENDER WAY, RISLIP, HA4 8ED

Depth of main roof- (A)	9.0m
Height of main roof- (B)	3.60m
Ridge to Eaves in plan- (C)	4.7m

Formula: $V = \frac{1}{3} \text{ Base area } \times \text{ Height}$.

$$V = \frac{1}{3} (9.0 \times 4.7/2) \times 3.6$$
$$7.05 \times 3.6 = 25.38 \text{ m}^3.$$

Total Volume added to the existing roof = 25.38m3

Volume of additional Dormer

Depth of Dormer- (D)	3.65m
Height of Dormer - (H)	2.6m
Length of Dormer - (L)	4.85m

Formula: $V = \text{Depth} \times \text{Height}/2 \times \text{Length}$.

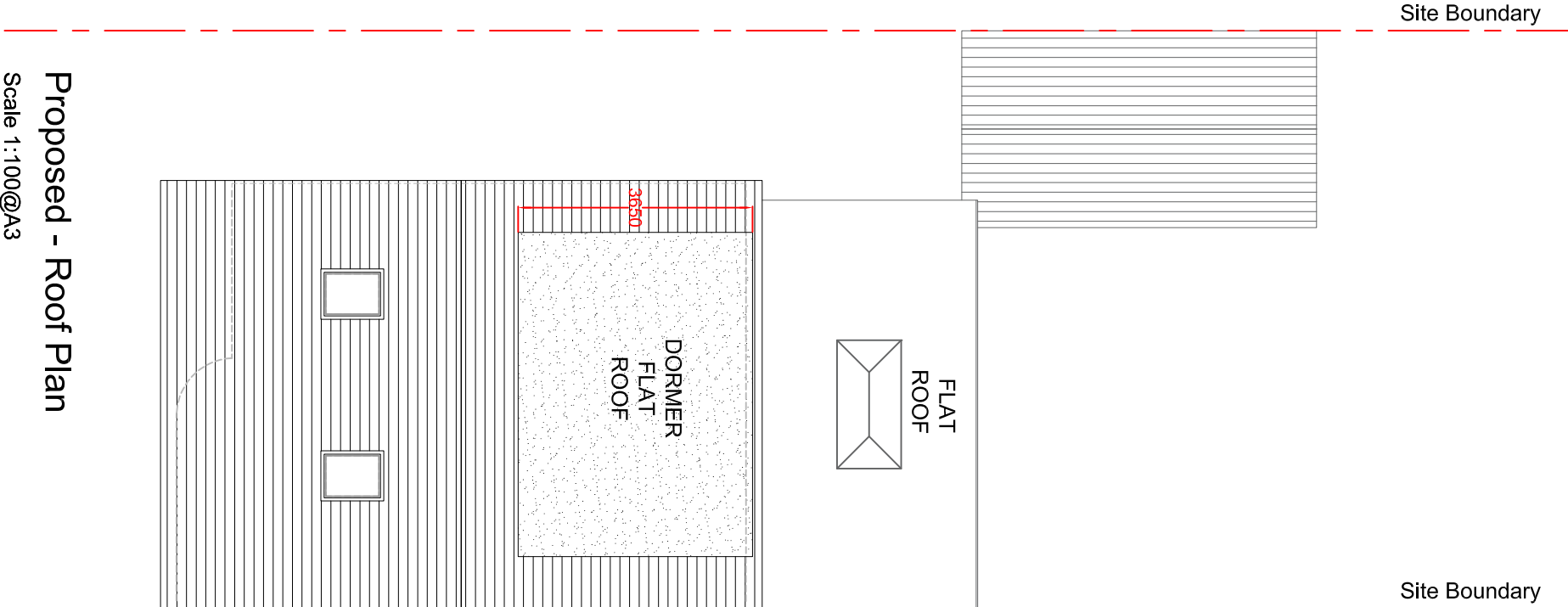
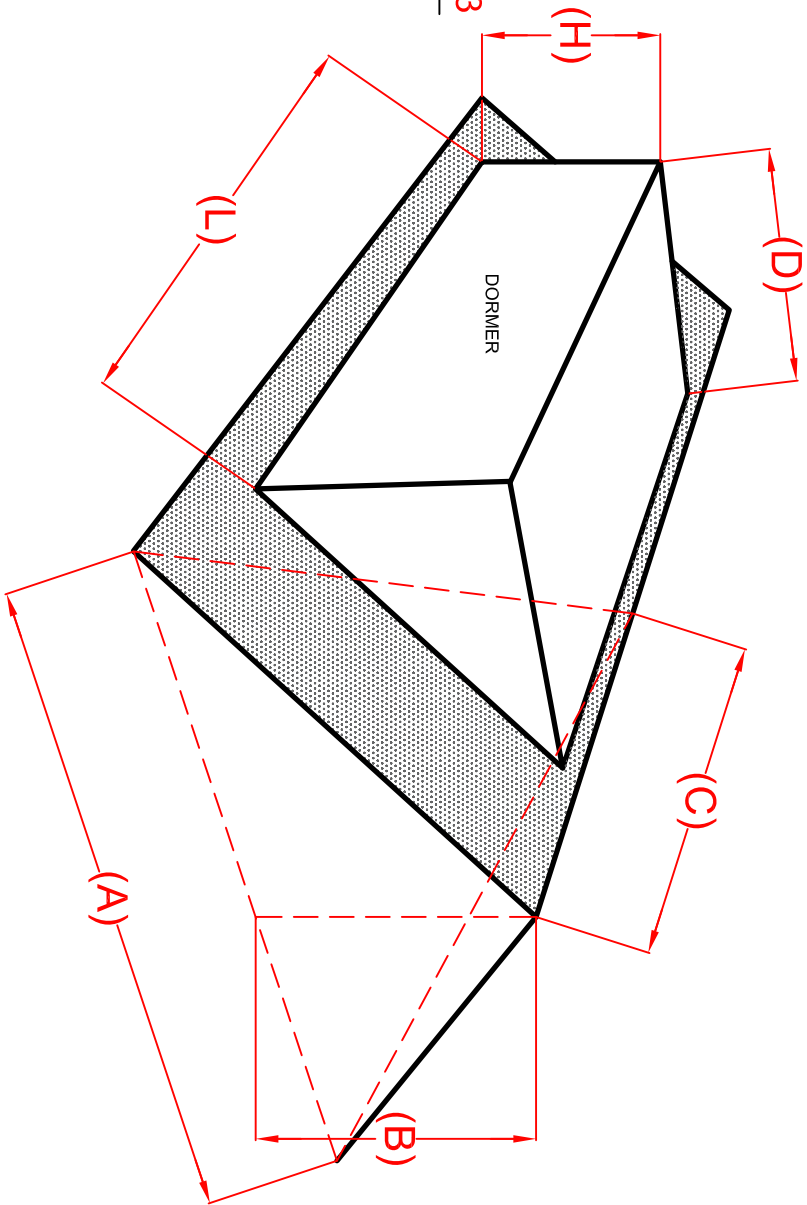
$$V = 3.65 \times 2.6/2 \times 4.85 = 23.01 \text{ m}^3.$$

Total Dormer Volume added to the existing roof = 23.01m3

Total Volume = 25.38m3 +23.01m3= 48.39m2

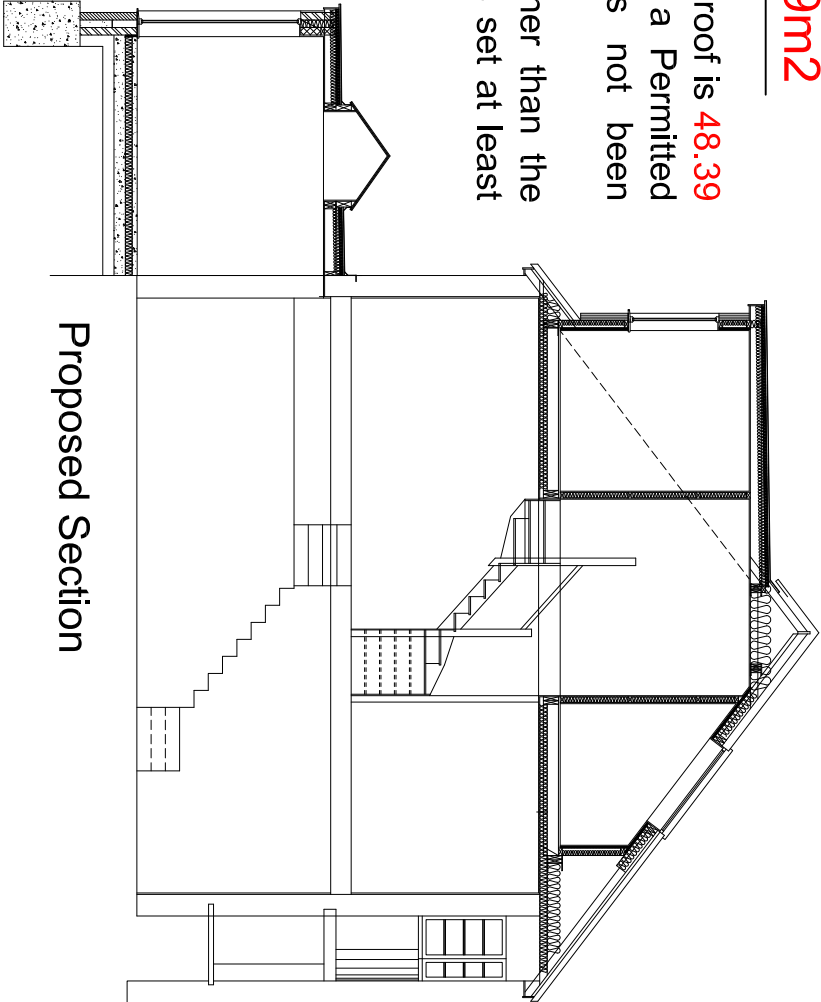
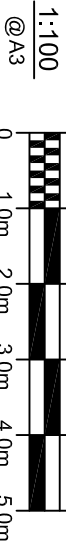
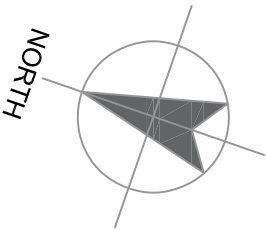
In the proposed development added volume to the existing roof is **48.39** cubic meters, which is within 50 cubic meters limit for a Permitted Development for a semi-detached property that has not been previously extended.

Also any proposed part of the roof alteration is not higher than the highest part of the existing roof. The Dormer extension is set at least 200mm from eaves.



Proposed - Roof Plan

Scale 1:100@A3



Proposed Section

NOTES:
ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT BUILDING REGULATIONS.
ALL DIMENSIONS / LEVELS TO BE CHECKED AND VERIFIED ON SITE BEFORE COMMENCEMENT OF WORK.
THIS DRAWING IS TO BE USED IN CONJUNCTION WITH PROJECT WORKING DRAWINGS, SPECIFICATIONS, DETAILS AND STRUCTURE DRAWINGS.
ALL MATERIAL USED IN THE PROPOSED EXTENSION SHOULD MATCH THE EXISTING BUILDING.

LAWFUL DEVELOPMENT CERTIFICATE

PROJECT: 32 WARRENDER WAY, RISLIP, HA4 8ED

DRAWING TITLE:
PROPOSED ROOF PLAN, SECTION
& VOLUME CALCULATIONS

SCALE:
1:100@A3

DATE:
01/02/2022

DRAWING NUMBER:

GA 2003

REV:

A