

A = Depth of main roof	= 7.02
B = Width of main roof	= 6.5
C = Height of main roof	= 2.80
D = Ridge to eaves in plan	= 3.70
E = Projection of Rear Dormer	= 3.30
F = Height of Rear Dormer	= 2.55
G = Width of Rear Dormer	= 6.40

Volume of the triangular prism area of the triangle x its length

$$A \times C / 2 \times (D \times 2) = 7.02 \times 2.80 / 2 \times (3.7 \times 2) = 72.7 \text{ cum}$$

$$\text{Volume of the pyramid base area} \times \frac{1}{3} \text{ Height}$$

$$A \times (D \times 2) \times \frac{1}{3} C = 7.02 \times (3.7 \times 2) \times 0.933 = 48.47 \text{ cum}$$

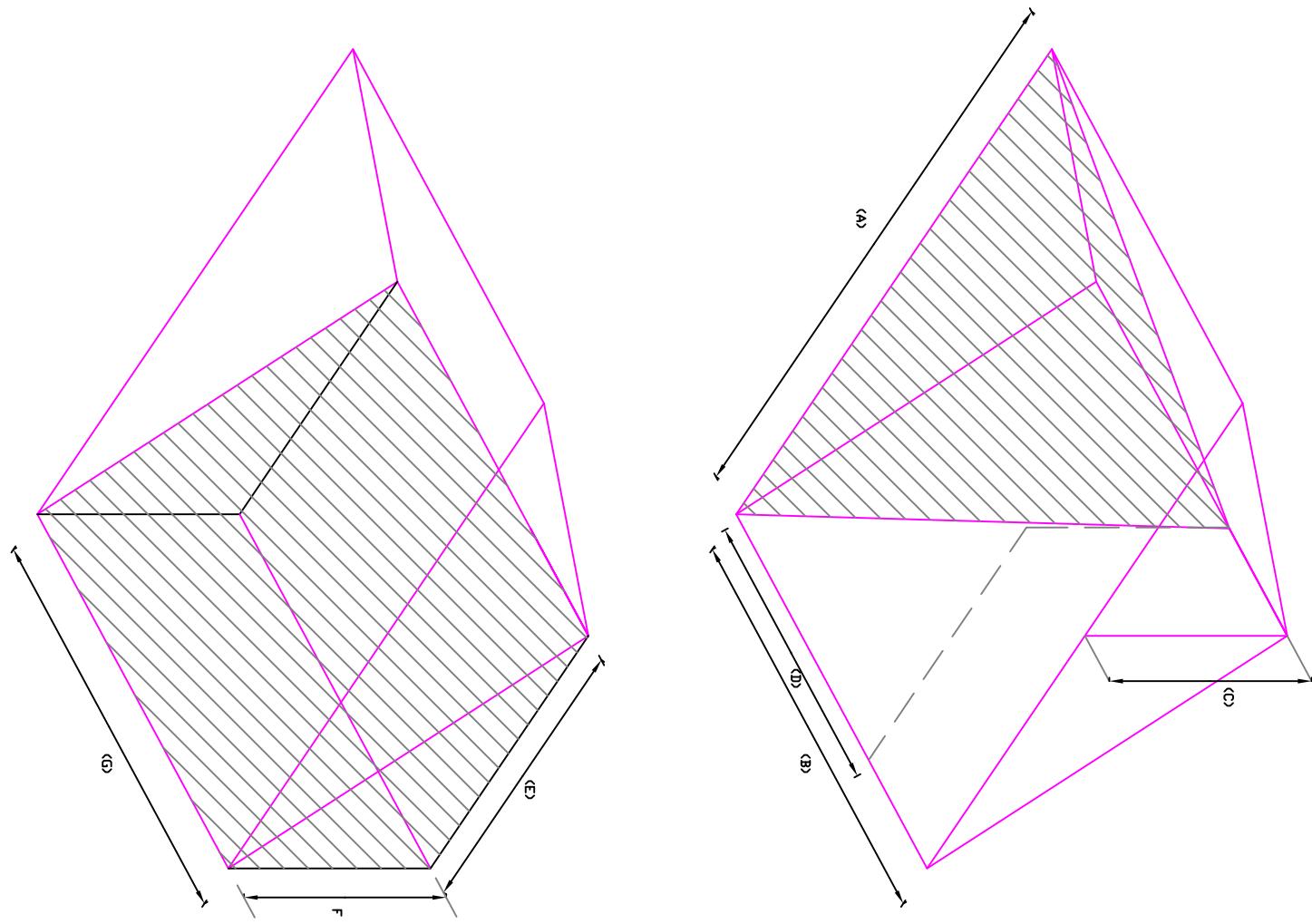
$$\text{Volume of additional section segment Hip to Gable Prism} = \text{Pyramid} / 2$$

$$= 72.7 - 48.47 = 24.23 / 2 = 12.12 \text{ cum}$$

$$\text{Volume of additional rear dormer area of the triangle} \times \text{its length}$$

$$E \times F / 2 \times G = 3.30 \times 2.55 / 2 \times 6.4 = 26.93 \text{ cum}$$

Total Volume of development within roof = 39.05 cum



Ref. Date Revision Preliminary Drawing

Hip to Gable Roof Volume Calculation

Scale	Drn. By	Rev.
NTS	R.D.	RV-01

Nov'25

Job No.

225168

Chkd. By M.F.

Client

Sarah

Project

39 Broadhurst Gardens Eastcote

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