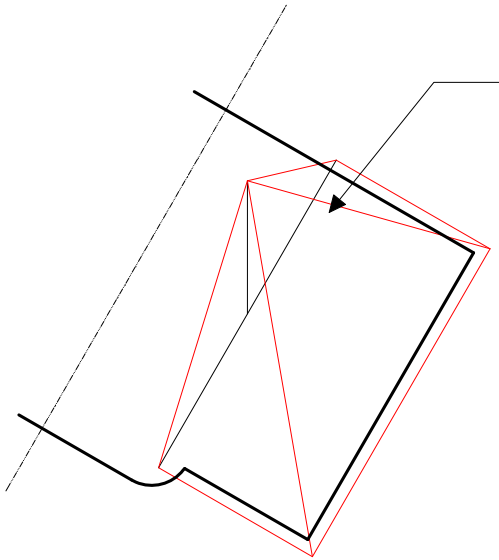
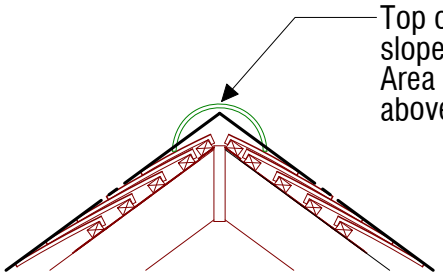
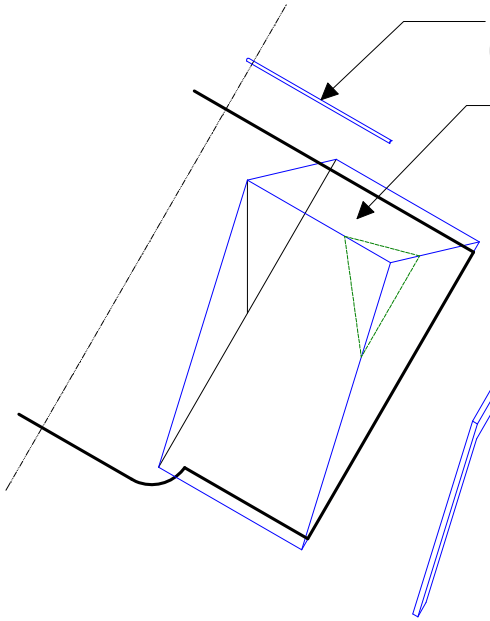


Existing Hipped roof
base area 9.40 x 4.70 metres
Altitude 3.55 metres
Volume = 9.4 x 4.7 x 3.55 / 3 = 52.28 cu mtrs

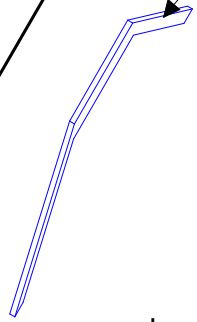


Top of ridge tile 25.2mm above
slope line of tiles.
Area of cross section
above slope line = 10600 sq mm

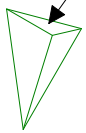


Ridge above roof slope:
0.0106 x 4.55 = 0.048 cubic mtrs

Entire enlarged gable, including residual existing roof space
Base area = 4.37 x 9.4 Altitude = 3.55
Gross volume = 9.4 / 2 x 3.55 x 4.37 = 72.91 cubic mtrs



Projection of Roof
and Bargeboard
= 10.62 x 0.15 x 0.25
= 0.4 cubic mtrs



Pollarded hip
Width 3.05 Length up slope 1.78
Altitude perpendicular to slope 0.88
Volume removed = 3.05 / 2 x 1.78 x 0.88 / 3 = 0.79

Increase due to enlarged gable = 72.91 + 0.05 + 0.4 - 52.28 - 0.79 = 20.29 cubic metres

124 Greenwood Crescent, Shoreham - Alteration of hip end to form Gable