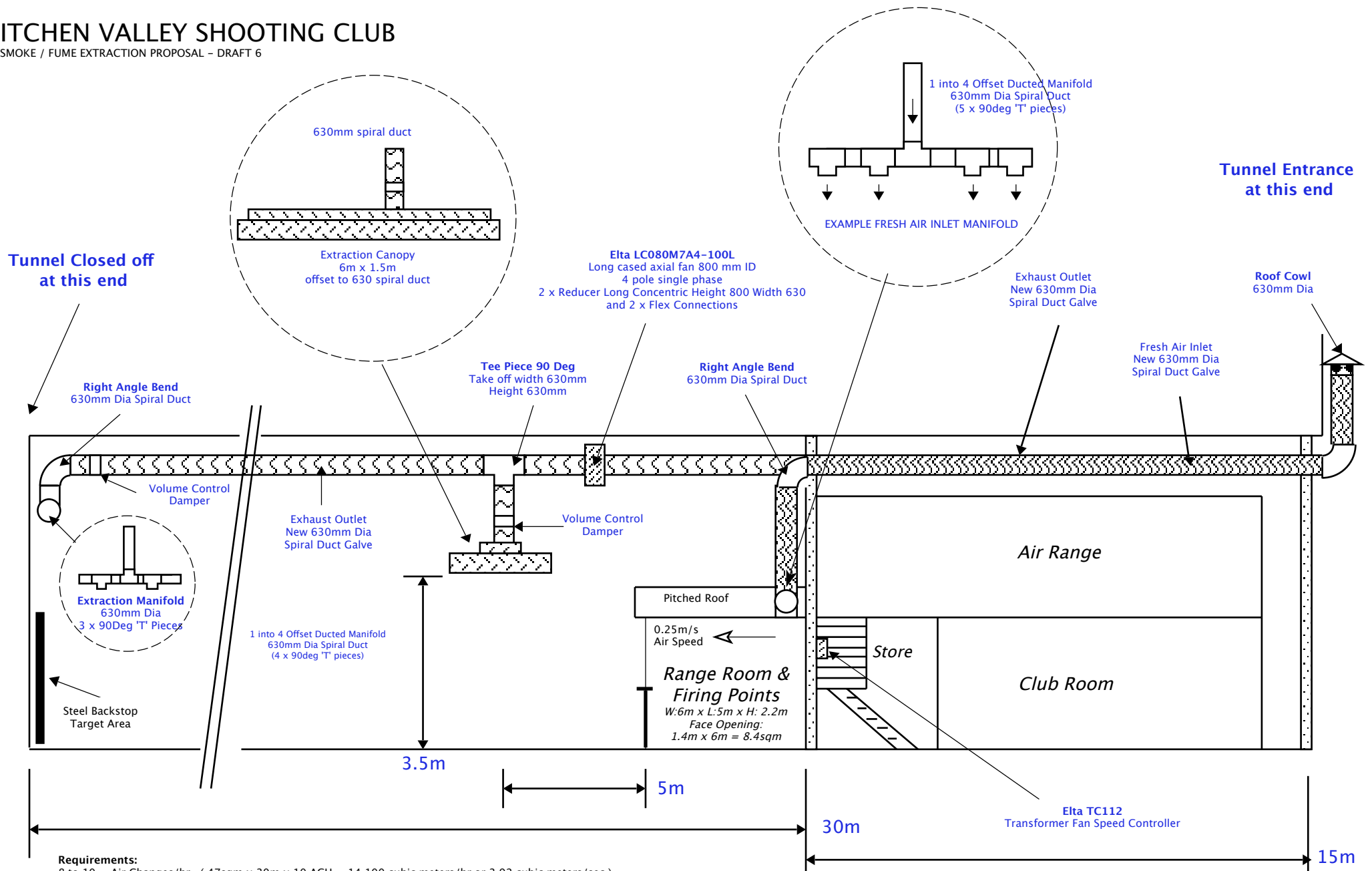


ITCHEN VALLEY SHOOTING CLUB

SMOKE / FUME EXTRACTION PROPOSAL - DRAFT 6



Requirements:

8 to 10 = Air Changes/hr (47sqm x 30m x 10 ACH = 14,100 cubic meters/hr or 3.92 cubic meters/sec)
 0.15 to 0.3m/s = Required Forward Air Speed at Firing Points
 Provide an Extraction Rate approximately 10% over Input to Ensure Laminar flow down range and Air leakage into range

Constraints:

Old Railway Tunnel with approx measurements of: 8m Width x 7m Height x 30m Range Length (approx 45m overall Length)
 Tunnel cross sectional area: 47sqm

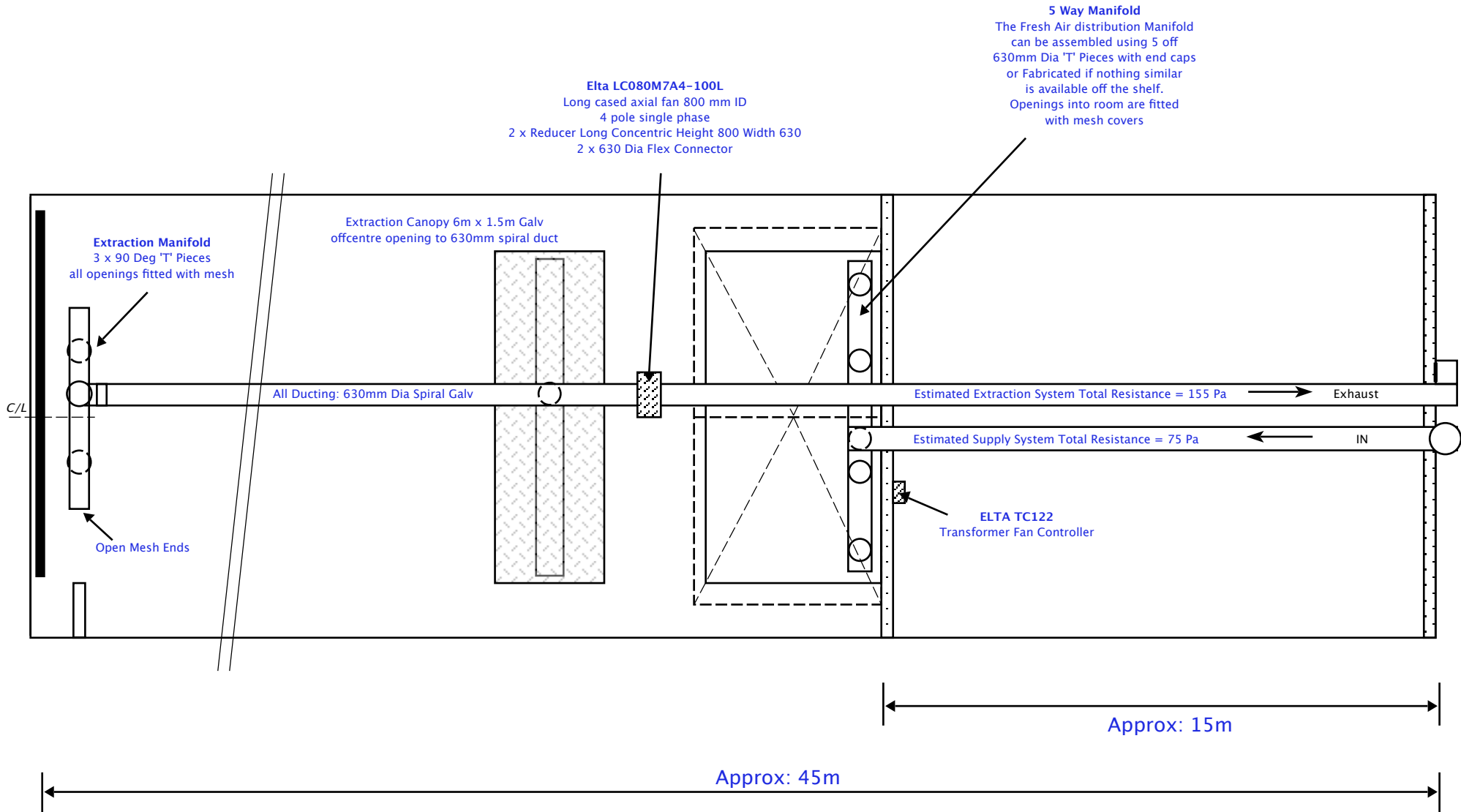
Estimated System Resistances:

Extraction at: 3.92m³/s = 155 Pa
 Supply at: 3.52m³/s = 75 Pa

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Aerial View



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