

# VENTILATION (PROPOSED)

## EXTRACT SYSTEM SPECIFICATIONS

### 1) EXTRACT CANOPY

Double front s/steel canopies (W4100 x D1200 x H600/400) above cooking units with removable and washable standard grease filters.

### 2) ESP 3000E

Our Electrostatic Precipitators or ESP's have been specifically designed for kitchen extract systems and have integral sumps to collect the oil, grease and smoke particles filtered out of the exhaust. This not only simplifies servicing but eradicates potentially dangerous spillage from the bottom of the units and greatly cuts down on buildups of grease within the ducting.

The ionisation voltage has been designed to run at a negative potential which enhances the ionisation of particles and also produces more ozone which is helpful in reducing cooking odours. Our ESP units fit in-line with the kitchen ducting and can be configured modularly to cope with all extract volume requirements.

### 3) UV-O 1000

UV-O 1000 which can handle up to 2 m<sup>3</sup>/sec of air flow  
The UV-O range uses UV-C technology to produce ozone and hydroxyl free radicals to oxidise cooking odours through a process of ozonolysis.

Unlike other UV-C systems, our UV-O units are located outside of the kitchen extract duct and are connected via a spigot and small diameter ducting.

Our UV-O units the air flow does not come from the exhaust duct but from the ambient air around the unit, which is filtered on entry. This means that it is able to provide a uniform supply of ozone and hydroxyl free radicals into the extract system with an extremely low pressure loss.

This unit's tried and tested UV-C technology allows for the siting of commercial kitchens in locations such as residential areas and shopping centres, where previously planning permission may not have been granted. After extensive research and development Purified Air are able to devise the best combination of lamps to provide the most effective odour control.

### 4) EXTRACT BOX FAN GBD 560/4/4 EC –

#### 3PH GigaBox Centrifugal Fan – Helios

The Gigabox GBW 560/4/4 comes complete with discharge adaptor and flexible connector. It is three phase (400V), dual speed and speed controllable.

All Helios fans are a very high quality product with a huge reputation for reliability.  
See the data-sheet

This is an acoustically lined cubic ventilation box complete with intake and extract spigots and with flexible connectors to reduce vibration transmission.

Sound Pressure Breakout @ 4M - 44db(A) Watts : 2.5 kW R.P.M : 1410 min-1

### 5) 1 x SILENCERS/ATTENUATORS

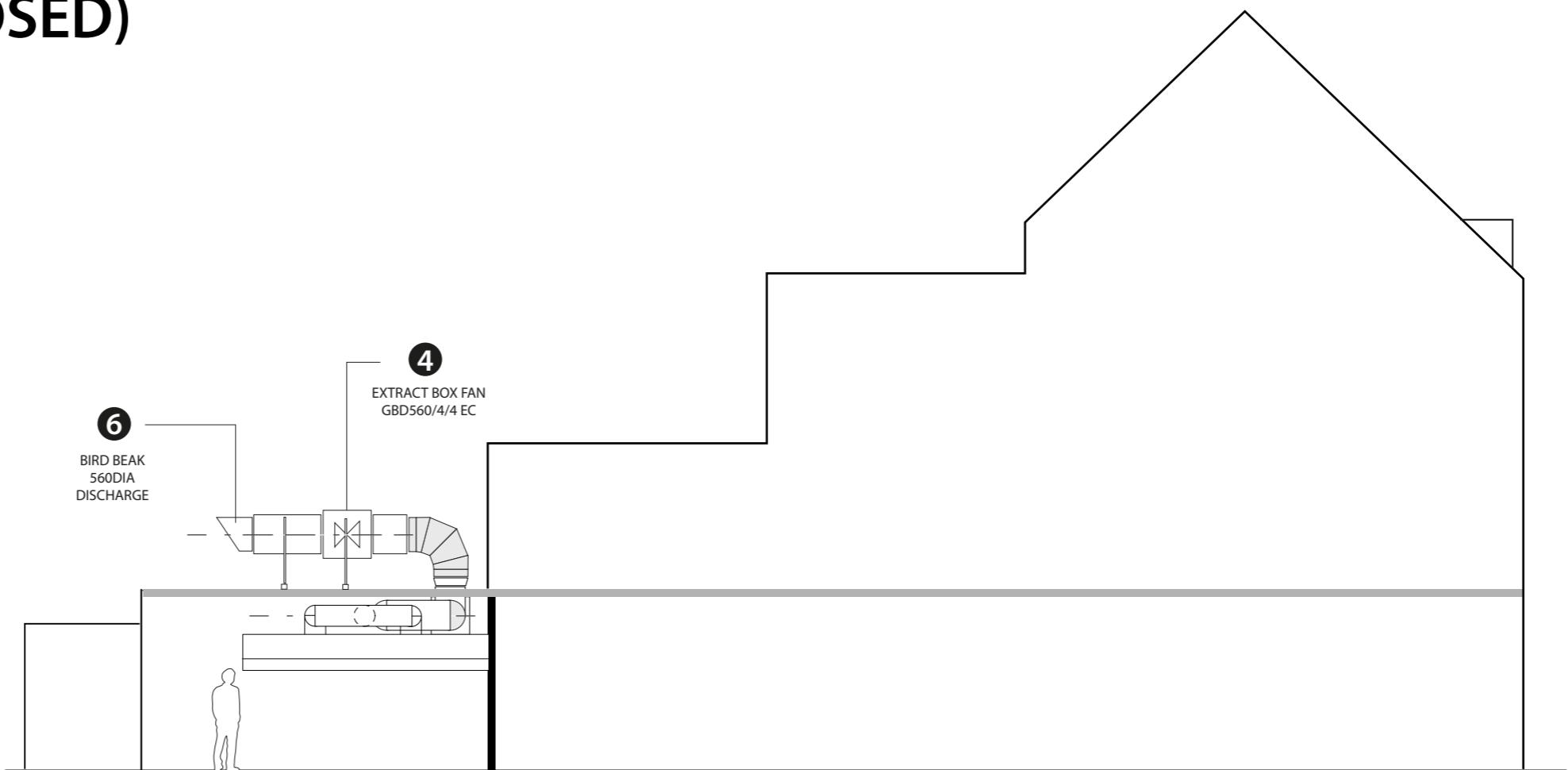
2 x CP03-C\*0560-2D SILENCER 560mm dia x 1120 mm long straight through silencer  
Can be supplied to either bolt directly to any manufacturer of cased axial or with spigots to mount inline with ducting. See data sheet

### 6) 2 x SILENCERS/ATTENUATOR

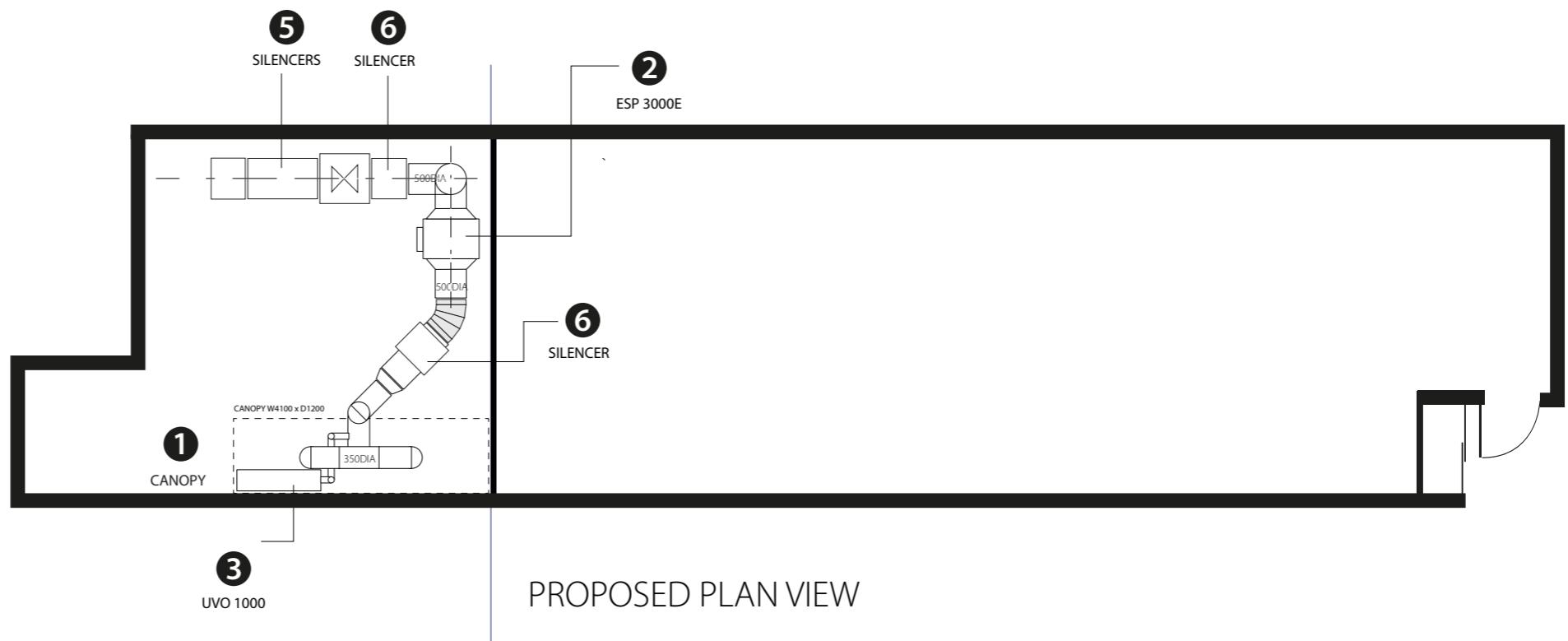
CP03-C\*0560-1D SILENCER 560mm dia x 560 mm long straight through silencer  
Can be supplied to either bolt directly to any manufacturer of cased axial or with spigots to mount inline with ducting. See data sheet

### 7) DUCTING WITH BIRD BEAK FLUE OUTLET

Galvanised steel ducting - flue riser (18swg) 400 & 560 dia mm of nominal cross sectional area with adequate stiffening and cross bracing discharging bird beak flue outlet over the front side. Ducting to be secured to the structure with duct support brackets with anti-vibration mountings.



PROPOSED SIDE VIEW



PROPOSED PLAN VIEW

SCALE 1:100 IN METERS