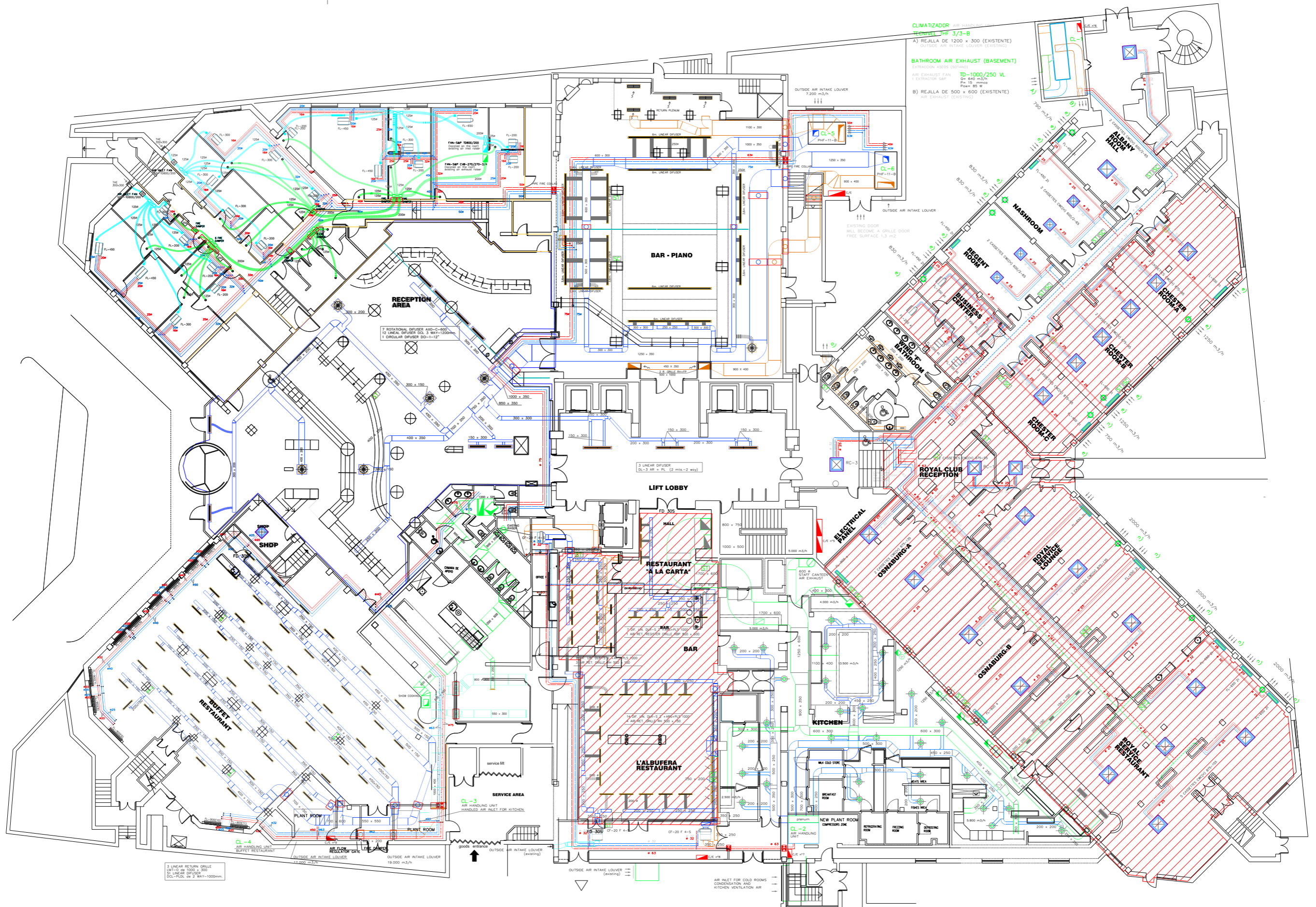


5.1 MEP Services - Existing / Mechanical / Humiclima / Made in 2001

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5.1 MEP Services - Proposal / Designed by MH Associates / Made in 2018

67

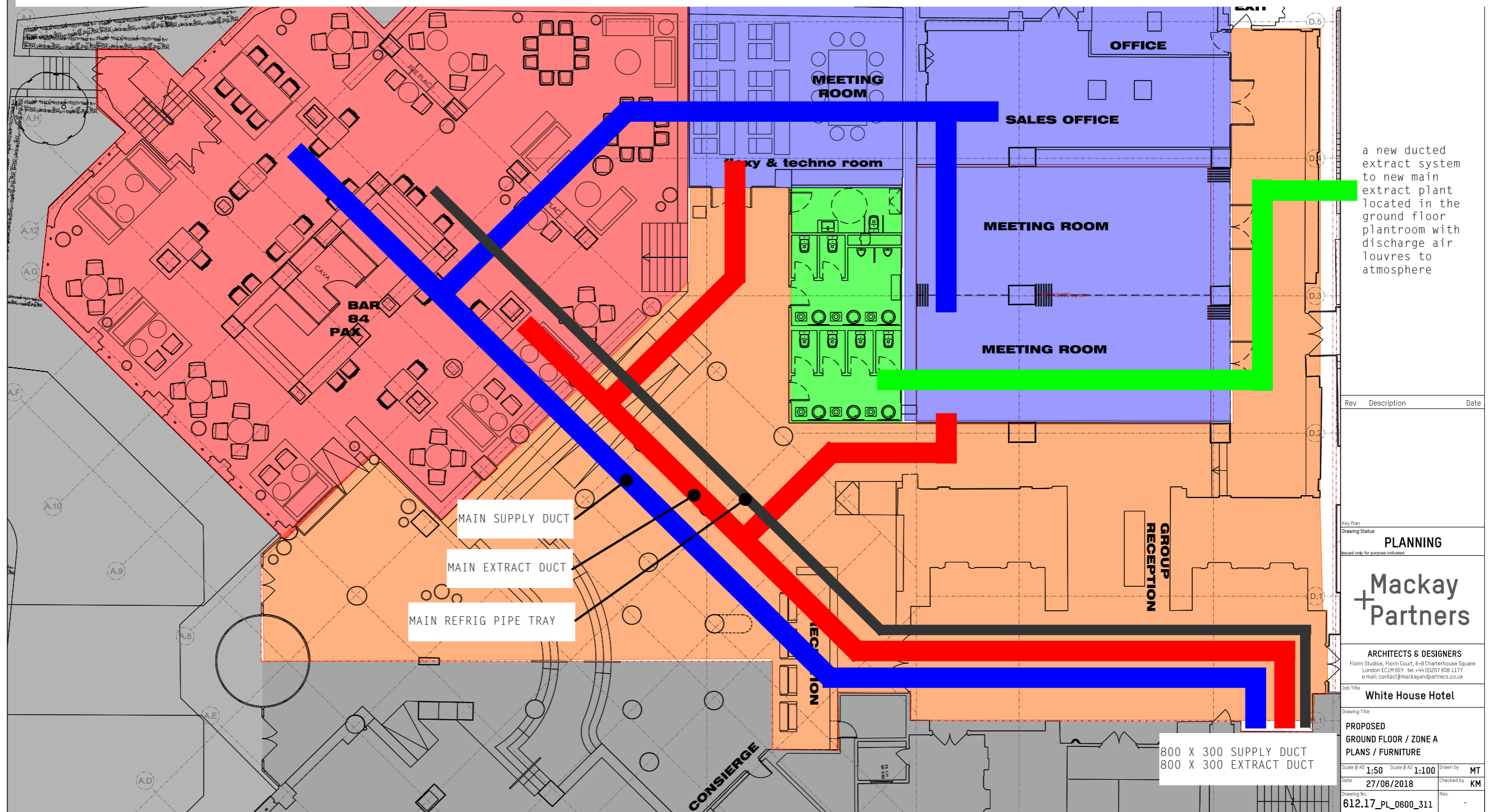
The ventilation principle for each area will be to provide fresh air supply and extract air from central plant at roof level with distribution ductwork in the ceiling void serving final ceiling mounted diffusers. The supply air is filtered, heated and cooled centrally and ducted directly into the rooms. The extract air is returned to main plant from the ceiling void via distribution ductwork. The supply and extract ductwork runs to the spaces in the ceiling void from the new services riser. The heating and cooling to each area will be via recirculating local ceiling void mounted VRF fan coil units again ducted to ceiling diffusers.

The ceiling void will be used for ductwork distribution, the maximum main duct depth is 350mm. Ceiling void should initially be set to give 500mm clearance for services. This assumes no major cross overs such as foul waste pipe runs in the void.

The refrigerant pipework will run from roof mounted VRF outdoor units, down the new services riser and into the ceiling void to serve the indoor VRF units

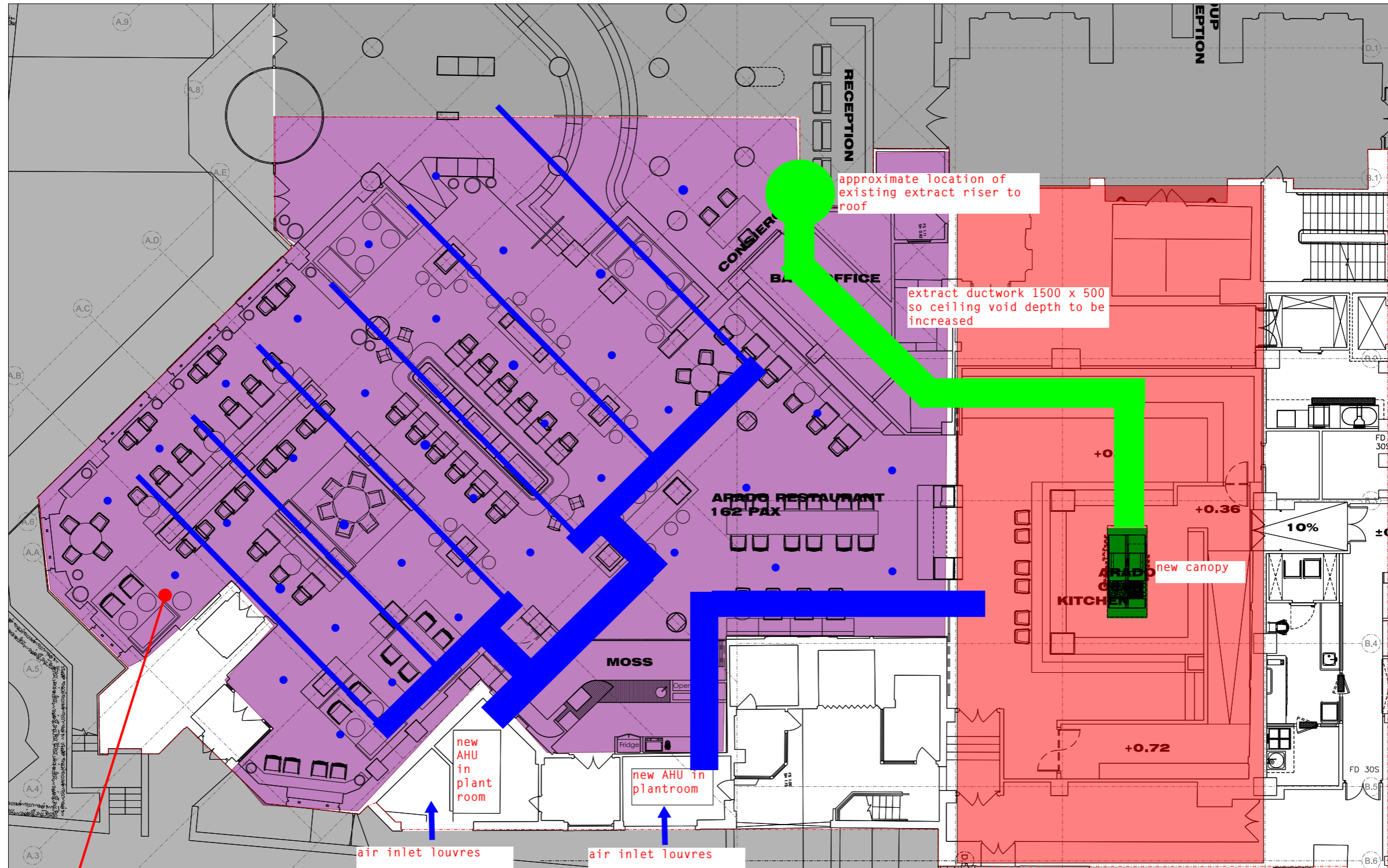
The systems shall be set up with local motorised air volume control devices to enable the correct amount of fresh air to suit occupancy levels. Energy efficient is then made at main plant by varying the supply and extract volumes to suit.

Toilet areas will be provided with a new ducted extract system with the main plant located in the ground floor plantroom which house the existing HVAC AHUs



5.1 MEP Services - Proposal / Designed by MH Associates / Made in 2018

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DO NOT SCALE FROM THIS DRAWING ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO BUILD. DIMENSIONAL DIFFERENCES TO BE CONFIRMED WITH THE ARCHITECT. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL CROSS-DATA'S INFORMATION, PACKAGES AND PARTNERS LLP RETAIN THE COPYRIGHT OF ALL INFORMATION WITHIN THIS DRAWING.

approximate location of existing extract riser to roof

extract ductwork 1500 x 500 so ceiling void depth to be increased

new canopy

new AHU in plant room

new AHU in plant room

air inlet louvres

air inlet louvres

the ARADO restaurant zone to be served as a single zone via a recirculatory air handling unit located in the plantroom. Basically as per the previous restaurant HVAC design. Using similar principles for plantroom, air inlet louvre and distribution ductwork. Could again use site chilled water and LTHW if available and in sufficient quantity. Therefore the ceiling void will be used for ductwork distribution to terminals (slots or swirls to be agreed). Minimum ductwork depth set at 150mm. Ceiling void should initially be set to give 400mm clearance for services. This assumes no major cross overs such as foul waste pipe runs in the void. return air could be from false ceiling or plantroom wall grille.

the ARADO open kitchen zone to be served as a single zone via a recirculatory air handling unit located in the plantroom. Basically as per the previous restaurant HVAC design. The unit works in conjunction with the restaurant AHU and only operates when the canopy is in use. Using similar principles for plantroom, air inlet louvre and distribution ductwork. Could again use site chilled water and LTHW if available and in sufficient quantity. Therefore ceiling void will be used for ductwork distribution to the vicinity of the canopy. Minimum ductwork depth set at 250mm. Ceiling void should initially be set to give 400mm clearance for services. This assumes no major cross overs such as foul waste pipe runs in the void. return air could be from false ceiling or plantroom wall grille.

Rev	Description	Date

Key Plan
Drawing Status
Issued only for purpose indicated

PLANNING

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Job Title
White House Hotel

Drawing Title
**PROPOSED
GROUND FLOOR / ZONE B
PLANS / FURNITURE**

Scale @ A0: 1:50 Scale @ A2: 1:100 Drawn by: JS
Date: 26/06/2018 Checked by: KM
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