

M+E details

HVAC.

Heating and hot water

- 1- A new larger capacity gas installation would be installed from the remaining existing U16 gas meter, through the new kitchen where a 42mm copper/40mm steel isolation valve would be installed ready for the kitchen appliance pipework and interlock system. (these items have not been allowed for within this scope of works) The new gas pipework would continue round the kitchen and through the wall to the new boilers proposed location. The new pipework would be purged and tested to current gas safe regulations.

- 2- Our 49Kw commercial grade JLA boiler would be mounted to the agreed location and its new flue system would exit the property directly behind. This external wall kit system, would exit above the light well grate and rise to above 2.5m before turning through 45 degrees and suitably terminating. A JLA 300L commercial grade high recovery stainless steel unvented hot water cylinder would be installed below the boilers location and all connection pipework would be installed from the boiler to the cylinder, incorporating all water regulation control interlocks. Heating distribution pipework would be installed from the boiler to isolation valves below. The existing 22mm plastic mains cold water supply would be ran to the boiler/cylinders location and a fill point would be installed for the heating circuit. The boiler would be connected to the local 240v power supply, with all time and temperature controls, including an outside sensor for weather compensated heating installed and connected. Condensate waste water from the boiler would be taken to a local drain. The new boiler and hot water cylinder would be filled and tested up to installed outlet valves. Second fix of the basins, toilets within the toilet areas has not been allowed for within our scope of works. The boiler would be commissioned as per manufactures instructions and the remote monitoring data link would be installed to the buildings Wi-Fi router.

- 3- Upon completion of the above works, new standard pattern radiators would be installed to the ladies, gents and assisted toilets close to the boilers location. These radiators will have standard valves as the heating system would be weather compensated through the boilers integral time and temperature controls. New hot and cold water supply pipework would be installed from the existing isolation points near the cylinders location, to above the floor at the approximate bars location. Second fix of these supplies has not been allowed as this work might not be ready when we are on site.

Air conditioning

The air conditioning Total Care works are being completed by one of our contract partners Reader Air. They are based in the south and have completed work at a number of sites for ourselves.

Grant Reader and his team are wholly dealing with the A/C install and I believe the decision has been made to go with the free mounted option, using two large free blowing ceiling units within the main space, these in turn would be installed on a multi split system. The two private dining rooms and office are to be supplied via a three unit multi split and third multi split system is to be installed within the basement VIP areas. All internal cables, containment, pipework and insulation is included within our solution. Controls for all the installed A/C equipment is also included with remote links/alerts.

Power supplies for the three external units would be required by site electrician form the large existing distribution board. This wouldn't be part of the Total Care works and the site is to provide this I believe.

List of equipment and power requirements, all the installed equipment would be Mitsubishi electric components and controls.

Main area

25Kw Twin split ceiling suspended units (Power requirement 3 phase 32amp)

- 1-PUZ-M250YKA (External)
- 2-PCA-M125KA

Side Dinning

10Kw 3 room multi split cassette (Power requirement 3 phase 16amp)

- 1-PUMY SP112YKM (External)
- 1-PAC-MK34BC
- 1-SLA-M35FA
- 1-SLA-M50FA
- 1-SLA-M35VGW
- 1-MAC-3971F

Basement area dining

12Kw 3 room wall mounted multi split (Power requirement 3 phase 16amp)

1-PUMY SP125YKM (External)

1-PAC-MK34BC

1-MSZ-EF35VGKW

2-MSZ-EF50VGKW

3-MAC 3971F

Building Ventilation

The existing old ventilation for the purposes of the buildings previous use as a bank was a large supply fan ducted to various parts of the ground floor. Extracted air was ducted out of the property via various fans installed within the windows. We can confirm this will not meet the required air changes for the property use.

All areas of the building will require ventilation and extraction to maintain the correct air changes. Grant has provided us with a quoted solution for this using two Mitsubishi mechanical heat recovery units (one for ground and one for the basement). New duct work would be installed to achieve the necessary air changes throughout the property.

Mitsubishi equipment

1-LGH200RVX-E (Ground floor)

1-PZ61DR Controller

1-LGH100RVX-E(Basement)

1-PZ61DR Controller

There is an old supply fan installed above the current office area. This would be removed, with its existing louver intake used for the a new unit that would supply the ground floor. A second unit I believe (as per meeting last week) is to be installed within the basement toilets and provide coverage for the VIP areas. The external grills for this would installed at low level within the light well.

The issue is that the canopy extract, intake, flue for the boiler and both MHRU's all need to terminate in a small area to the rear of the property. I attended a Teams meeting last week to look at options for this. It was agreed that the kitchen extract would need to rise up out of the light well and terminate 2-3m above ground level pointing away from the building.

As noted in the heating section we are going to install the new gas supply from the meter through the kitchen (leaving a 42mm isolation valve) and on to the new boiler.

Kitchen

S/S WALL EXTRACT & SUPPLY CANOPY

Dimensions: 3900mm (l) x 1600mm (w) x 500mm (h)

Manufactured from satin finish (304 grade) stainless steel. Full length grease filter housing with standard baffle filters. The filters are suitable to be cleaned in most commercial dishwashers. The filter housing has an internal grease collection system with removable integral grease drawers. Ob-round perforated Grills are fitted to the front face of the canopy which has insulated supply plenums. Steam and condensation resistant recessed LED light fittings providing 500-lux to work surfaces below. The diffuser lenses are manufactured from 4mm toughened stippled defused glass to withstand high temperatures. All lights are pre-wired with 1.5m tail for connection by onsite electrician

Canopy Emergency Lights to comply with DW172

Manufactured to provide 10% of canopy lighting

S/S WALL CLADDING

Manufactured from satin finish (304 grade) stainless steel.

5.5 linear meters to the rear and one side of the canopy. Using liquid bonding to adhere to a smooth clean surface. Using a combination of H sheet joining trims and J edge finishing trims giving a clean, hygienic, and professional finish.

EXTRACT DUCTWORK

9 meters of galvanised mild steel ductwork and 3 meters of powder coated ductwork to run from the canopy plenum to an appropriate fan, with an allowance for discharging via a site-specific termination. Quick release access panels to suit TR/19 & DW172 requirements. Extract fan reference: PFP 355 1PH. 2 x silencers. Ancillary pack and associated uni-strut support system included.

SUPPLY DUCTWORK

6 meters of galvanised mild steel ductwork including 2 meters powder coated to run from the canopy plenum to an appropriate fan, with an allowance for discharging via a site-specific termination. Supply fan reference: DDM [10/10](#) EC. Filter housing including filters. Ancillary pack and associated uni-strut support system.

E/C FANS GAS INTERLOCK CONTROL PANEL

Kitchen gas interlock control panel, complete fan controllers. The front face of the panel includes an Emergency knock off button. On/Off key switch, fan speed selectors with a LED display to show the fan speed and gas status. The control panel is wall mounted, 180h x 255w x 80d and requires 13-amp 1 phase supply.

M+E SERVICES

Item	JLA Code	Elec Supply	Gas Supply	Water	Waste Water
Intelli-Cook Gourmet 1011E	C1-CM01L	3PNE 32A		¾" Cold	50mm heat resist
Underframe open all sides	C8-P095Z				
Water filter	C7-WF02A			¾" Cold	
Twin fryer			33.4kW, 2 x ½" BSP		
Chargrill			26kW, ¾" BSP		
Hob			38.9kW, ¾" BSP		
Dishwasher		1PNE 25A		¾" Hmax 55C or Cold	Trapped upstand
Dishwasher (OPTIONAL)		1PNE 25A		¾" Hmax 55C or Cold	Trapped upstand
Mobile hotcupboard		13A plug			
Under broiler fridge		13A plug			
3dr counter fridge (slimline)		13A plug			
Single upright fridge		13A plug			
Single upright freezer		13A plug			
Custom prep sink				H&C	40mm
Custom dishwasher sink				H&C	40mm
Hand wash basin				H&C	40mm
Custom hatch cap					