

(PART III)

Particular Specification and Scope of Work

1 Introduction

- (i) The project involves the refurbishment of the kitchen and associated areas and associated works, including:
 - (a) Stainless steel integrated supply and extract hood for the kitchen catering equipment.
 - (b) Controls, control panel and control wiring.
 - (c) Gas control system.
 - (d) Supply and extract ventilation plant.
 - (e) Supply and extract ductwork.
 - (f) Heating system to feed the supply ventilation plant heating coil and radiators, including pipework, valves, control valve, etc.
 - (g) Strip out existing redundant services.
 - (h) Builderswork including new ceilings, flooring, wall cladding, roof openings, structural supports, etc.
 - (i) All other works included in the accompanying tender documentation.

2 New Kitchen Canopy - Extract and make up air and condensing canopy

- (i) The new kitchen extract canopy shall generally be in accordance with DPL quotation ref: ek8307 dated 26th May 2010, and shall comprise the following:
 - (a) Integrated lighting - vapour proof light fittings.
 - (b) Full welded perimeter gutter.
 - (c) Internal perimeter grease trap.
 - (d) Removable grease tray filters.
 - (e) Hanging / support points.
 - (f) Make up / supply air intake connections.
 - (g) Extract air connections.
- (ii) **Note, the final canopy dimensions shall be agreed with the Client during the construction phase, in accordance with the final agreed catering equipment**

layout plan, and shall overhang the front and sides of the catering equipment by 300mm and 250mm respectively.

- (iii) In addition to the above, the canopy shall also incorporate:
- (a) Stainless steel sheet backing from the underside of the hood to floor level - 18 gauge.
 - (b) For cleaning purposes, an easily removable stainless steel rectangular section (nominal dimensions - 150x150x150mm) shall be fitted to the stainless steel backing to cover the gas pipework along its length. The rectangular section shall have openings strategically placed along its length to facilitate the individual gas connections to be made to the cooking equipment.
 - (c) 3600mm (long) x 1200mm (wide) x 6mm thick - aluminium chequer plate plinth to fit below the catering equipment, as shown on the tender drawings.

Note, as for the canopy, the final plinth dimensions shall be agreed with the Client during the construction phase, in accordance with the final agreed catering equipment layout plan.

- (iv) A new condensing canopy, complete with drainage, shall be installed for the sterilising sink. The canopy shall be same specification as the new canopy recently installed at Beckford school.
- (v) A specialist roofing Contractor shall be used to expose the roof / ceiling structure, to identify suitable anchor points for supporting the canopies from the roof.

All exposed areas of roof / ceiling shall be made good on completion to closely match the existing roof / ceiling structure.

3 Sink stations, wash hand basins, butler sink, w/c, shelving and racking

- (i) The existing sink stations, wash hand basins, butler sink, w/c shelving and racking shall be stripped out and replaced with new, as J. Scott and Sons quotation dated 27th May 2010.
- (ii) The new sink stations, wash hand basins, butler sink, w/c shall be connected to the new hot and cold water and waste pipework services and shall be secured to the walls and floor in full accordance with the manufacturers recommendations including levelling, alignment, positioning and fixing.
- (iii) The timber/wooden shelving / racking to be replaced consists of:
- (a) Shelving underneath the sink stations in the kitchen area.
 - (b) 9 No timber shelves along the walls in the main store room.
 - (c) 3 No timber shelves along the walls of the pot room.
 - (d) Worktops along the length of wall in the adjacent smaller store room
 - (e) 8 No 'built in' shelving in the lobby area adjacent to the dumb waiter.

4 New heating system

- (i) A new heating system shall be installed in the kitchen to provide LTHW for the supply ventilation unit and radiators.
- (ii) The boiler shall be 30kW, 82/71 Deg C, LTHW, wall mounted 'Valliant' un-vented heating boiler type 'Eco Tech Plus' shall be installed on the wall adjacent to fire exit, as shown on the tender drawings with flue through the wall, complete with flue terminal.
- (iii) The boiler 'Unvented kit' shall consist of:
 - (a) Temperature and pressure relief valve
 - (b) Expansion vessel - to suit heating system storage volume
 - (c) Mains pressure control valve (6bar to 0.5 bar)
 - (d) Check/expansion valve assembly
 - (e) Isolating valves, non-return valve, etc
 - (f) All other ancillaries as required by the specified (Valliant) boiler manufacturers
- (iv) A 15mm ϕ mains cold water feed shall be extended to the boiler, the new feed to be extended from the existing supply in the kitchen.
- (v) 22mm ϕ plastic drain pipework, complete with tundish and trap, shall be extended from the boiler to the local drainage pipework, for boiler condense and pressure / temperature relief.
- (vi) 28 ϕ main flow and return pipework shall be extended at ceiling level from the boiler to the ventilation plant and radiators, the pipework to extend through the roof to the vent plant to connect to the AHU heating coil and to drop to low level to the radiators.
- (vii) The pipework shall incorporate Crane Fig D171 isolation ball valves, Hattersley Fig 807 strainer, Crane D901/931 commissioning sets, control valve, pipework insulation, trace heating (inc 240V supply) etc.
- (viii) The new radiators (to be single panel, no fins, positioned under windows, complete with thermostatic radiator valves and lockshield valves) shall be 'Stelrad' steel panelled radiators - as follows:
 - (a) Staff room - 1300mm (l) x 600mm (h)
 - (b) Chef's office - 950mm (l) x 600mm (h)
 - (c) Underneath switchgear - 1100mm (l) x 750mm (h) – to be repositioned on opposite wall.
 - (d) Chemical store - 700mm (l) x 600mm (h)
 - (e) Halal fridge room - 700mm (l) x 450mm (h)
 - (f) Opposite dumb waiter - 1100mm (l) x 750mm (h)
 - (g) Toilet lobby - 700mm (l) x 450mm (h)
 - (h) Toilet - 700mm (l) x 450mm (h)

- (ix) A Fusible link shall be installed in a suitable position above the boiler to provide fire detection, to shut down the gas supply to the boiler on operation.
- (x) A 22mm ϕ gas supply shall be extended to the boiler from the existing gas supply in the kitchen.

Note:

- (i) All new pipework shall be insulated in accordance with the standard specification for insulation.
- (ii) All internal pipework insulation shall be finished in 'aluminium' Sheeting.
- (iii) All external pipework insulation shall be finished in 'Polyisobutylene' sheeting which shall form a vapour and water proof barrier.
- (iv) All valves, strainers, commissioning sets, regulating valves, isolation valves, control valves, etc, shall be insulated with 'Rockflex 4000' flexible jackets by 'The Energy Shop'.

Note; flexible jackets for external valves shall be fully waterproof.

- (v) On completion of the works, the new pipework system shall be thoroughly flushed out, chemically cleaned and chemically dosed by a specialist water treatment company in accordance with BSRIA AG 1/2001, 'Pre-commission cleaning of pipework systems', a commissioning sheet (by the specialist water treatment company) to be supplied on completion.
- (vi) Details of the system flushing and chemical cleaning/dosing shall be submitted to the Consulting Engineer for comment and approval (at least 5 days prior) before proceeding with this works.

Controls

- (i) The heating system is to be enabled from the new controls in conjunction with the kitchen occupancy times, operation times to be agreed with the Client.
- (ii) Boiler run, lockout and overheat signals are to be relayed from the boiler to the new control panel and indicated individually on the control panel facia, and an alarm configured in the new control system on fault status.
- (iii) An extended 'plant on' function is to be provided by the control system. When the extended day function is activated, the system is to perform its start up sequence and run under automatic control for the set duration.
- (iv) A temperature sensor is to be fitted in the kitchen to monitor the temperature of same to maintain a kitchen temperature of 19 DegC. When the temperature drops below the set point the control system is to modulate the 3-way heating control valve accordingly to maintain the set point.
- (v) A frost stat is to be installed downstream of the heating coil. If the supply air temperature falls to 5deg C (adjustable by +/- 5Deg C in 1 deg C steps) the

heating coil 3 port valve is to be driven fully open and an alarm indicated on the new control panel.

- (vi) If the supply air temperature falls to 3deg C, the supply air ventilation plant shall be shut down and an alarm indicated on the new control panel.

5 **New supply ventilation system**

A new supply and extract ventilation system shall be installed and shall comprise:

(i) **Supply ventilation**

The supply ventilation unit shall be by VES (details to follow)

(ii) **Extract ventilation**

The extract ventilation unit shall be by VES (details to follow)

(iii) **Supply and extract ductwork**

- (a) The supply and extract ductwork shall be installed in accordance with the current DW specification.
- (b) All bends shall have turning vanes, transition sections shall be installed as required, 6No access panels shall be installed to provide access at plant connections, dampers, sensors, etc, and for cleaning purposes, volume control dampers to be installed as tender drawings.
- (c) All external ductwork shall be insulated in accordance with the standard specification, and shall be finished in Polyisobutylene sheeting which shall form a vapour and water proof barrier. Note: external silencers shall also be insulated.
- (d) All un-insulated internal ductwork shall be 'spray' painted with proprietary gloss paint (ductwork to be painted prior to delivery, colour to be agreed).
- (e) Vertical ductwork supports shall be fixed to the existing building structure using proprietary fixings.
- (f) Horizontal ductwork supports shall be the structural specification (details to follow)
- (g) Supply and extract air flow rates shall be commissioned on completion and a full commissioning report produced.

(iv) **Controls**

- (a) The supply and extract ventilation systems are to be enabled from the new control panel in conjunction with the buildings occupancy times.

- (b) Differential pressure switches shall be fitted across both supply and extract fans.
- (c) The gas / ventilation control system is to monitor operation of the supply and extract fans.
- (d) Differential pressure switches shall be fitted across the supply air panel and bag filters and return air panel filter.

6 Gas control system and pipework

A new Ventilation/Gas interlock system by 'S & S Northern Limited' shall be installed and shall consist of:

(i) Merlin CT2000GD gas control panel complete with:

(a) Indicators: for Power, Gas on, Testing, Test fail, Gas pressure low, Gas detected, Emergency stop button, Supply fan, Extract fan, Fan fault, etc.

(b) Differential pressure switches

To monitor the supply and extract ventilation plant fans.

2No differential pressure switches shall be supplied and fitted to the supply and extract fans of the ventilation plant.

The pressure switches shall be wired with 2 core low voltage cable to the respective terminals of the gas control panel.

(c) Gas pressure transducer

A gas proving transducer shall be supplied and screwed to the output port of the gas valve, on the underside base of the valve.

The transducer shall be wired with 3 core low voltage cable to the respective terminals of the gas control panel.

(d) A CTX - N. gas detector

The gas detector shall be supplied and fitted above the cooking appliances, the exact position to be agreed on site.

The detector shall be wired with 4 core low voltage cable to the respective terminals of the gas control panel.

(e) 50mm ϕ gas solenoid valve

To be supplied and installed as shown on the tender drawings, and wired to the 240V terminals of the gas control panel.

Note:

(i) A new sp&n 240V feed shall be extended from the new distribution board to the new gas control panel.

- (ii) All the above hardware shall be supplied by S & S Northern.
- (iii) All wiring shall be carried out in full accordance with the manufacturer's requirements.
- (iv) Commissioning of the system shall be carried out by the manufacturers and full commissioning certification shall be provided.

(ii) Gas pipe work

- (i) The existing 50mm ϕ gas pipework shall be modified from its original position in the kitchen to suit the revised kitchen equipment layout, as shown on the tender drawings.
- (ii) The new gas main size shall be increase to 50mm ϕ along its complete length to allow for the increased capacity, the catering appliances to be fed from new branch connections off 50mm ϕ main.
- (iii) The redundant 15mm ϕ feed to the water boiler (1st connection) shall be removed.
- (iv) For cleaning purposes, an easily removable stainless steel rectangular section (150x150x150mm) shall be fitted to the stainless steel backing (as section 2) to cover the gas pipework along its length.
- (v) The rectangular section shall have openings strategically positioned along its length to facilitate the individual gas connections to be made to the cooking equipment.
- (vi) The gas pipework shall be complete with all necessary isolating valves, strainers, test points, etc.
- (vii) 20mm ϕ 'industry approved' flexible hoses and gas industry approved isolation ball valves shall be used to connect all cooking equipment to the gas main, including replacement of the 2No hard-piped connections to the 'Halal' oven with 20mm flexible connections
- (viii) The redundant 32mm ϕ gas main feeding the fat fryer shall be stripped out to the main 50mm ϕ branch at ceiling level above the toilet area on the floor below.
- (ix) All gas pipework, including branch feeds to the catering appliances, shall be rubbed down, painted and fitted with ID bands.

7 Mains cold water (Mcws), domestic hot water (dhws), domestic cold water (dcws) and waste pipework systems

(a) Mcws

- (i) A new 15mm mcw supply, complete with removable stainless steel flexible connection and ball valve, shall be extended to boiler for filling purposes.

- (ii) A new 15mm mcw supply, complete with stainless steel flexible connection and ball valve shall be extended to the steam oven from the existing supply, via the removable stainless steel rectangular section (as for the gas pipework above) and connected to same, including isolation valve and double non return valve.
- (iii) The 20mm mcw supply routed down the wall to the feed the tap above the sink station (window elevation) shall be cut back to high level, fitted with 20mm isolation valve and re-run to the sink station.
- (iv) The 25mm galvanised pipe (routed from externally to high level through the staff room, office and rooms behind the fridge freezers and finally into the ceiling void) is to be rerouted above the new false ceiling, complete with new isolation valves, and insulated throughout its length.
- (v) All new fittings and equipment shall be WRC approved.
- (vi) All existing pipework services that are to be reused shall be removed from the walls and cut back to high level prior to Whiterocking, and on completion of Whiterocking new services shall be extended from the high level connection points.
- (vii) The tenderer shall allow for isolation, draining down and filling the above systems to facilitate the works.

(b) Dhws and dcws

- (i) The existing domestic hot and cold water copper pipework to the wash hand basins, sink stations, butler sink, w/c etc; shall be completely stripped out prior to Whiterocking the kitchen walls and replaced with new (same size as existing) on completion.
- (ii) All existing pipework services that are to be reused shall be removed from the walls and cut back to high level prior to Whiterocking, and on completion of Whiterocking new services shall be extended from the high level connection points.
- (iii) All new branch connections (to whb's, sink stations, butler sink, w/c, etc; shall be c/w new WRC lever ball valves.
- (iv) All new fittings and equipment shall be WRC approved.

(c) Waste pipework

- (i) The existing waste soil and vent pipework to the wash hand basins, sink stations, butler sink, w/c etc; shall be completely stripped out to the wall termination points prior to Whiterocking the kitchen walls and replaced with new (same size as existing) on completion.
- (ii) The "boxing in" in the toilet area shall be removed to facilitate the works and renewed on completion.

- (iii) The drainage system 'vent' in the toilet / lobby area shall be modified so it is not on show in the lobby area.
- (iv) The new waste from the sterilising sink waste trap shall be copper, the float from the sterilising sink to be copper to its wall termination point.
- (v) The condensing canopy shall be connected to the new waster pipework system via 15mm copper pipework.
- (vi) A new 40mm waste shall be installed to the steam oven as shown on the tender drawings.
- (iv) The redundant waste opening (adjacent to the sink station on the window elevation) shall be removed and capped off.
- (v) The existing w/c shall be replaced with a new w/c (see J. Scott's quote dated 27th May 2010) and connected to the new waste pipework system.

8 Controls, control wiring and power wiring

(a) Control panel

- (i) A new control panel shall be supplied and installed to provide monitoring and control of the new supply and extract ventilation plant, control hardware for the heating system, i.e. control valve, sensors, differential pressure switches, etc.
- (ii) The control panel shall be installed in the lobby area as shown on the tender drawings , although the final position is to be agreed on site.
- (iii) The new control panel/MCC enclosure is to be supplied and installed by an approved panel manufacturer shall be of two-compartment construction, IP65, with protection maintained at IP30 between the compartments.
- (iv) All power, indicators and manual controls shall be housed in the upper section of the panel.
- (v) The controls modules shall be housed in the lower section of the panel.
- (vi) An EMC filter shall be fitted immediately after the control panel door isolator.
- (vii) The modular controls shall be by 'Seachange' and shall include all necessary hardware and software to control the specified plant and field controls. The Seachange controls shall be installed and commissioned by a Seachange approved partnering Company.
- (viii) Drawings shall be provided of the control panel layout, (diagrammatic) both externally and internally, together with the controls and electrical wiring diagram (schematic)
- (ix) Indicators and Manual Controls, Upper Section of Control Panel.
 - (a) Supply fan - 3 position rotary switch, with switching positions 'Auto', 'Off' and 'Manual'.

- (b) Extract fan - 3 position rotary switch, with switching positions 'Auto', 'Off' and 'Manual'.
- (vii) Door Interlock Isolator Switch, padlockable.
- (viii) Indicators for:
 - (a) Mains Power 'ON'
 - (b) Control circuit 'Live'
 - (c) Gas monitor activated
 - (d) Indicator for frost condition
 - (e) Fire alarm system activated
 - (f) 'Run' / 'Trip' for supply fan
 - (g) 'Run' / 'Trip' for extract fan
 - (h) 'Flow failure' of supply fan - DPS
 - (i) 'Flow failure' of extract fan - DPS
 - (j) 'Dirty Panel Filter' - supply air DPS
 - (k) 'Dirty bag filter' - supply air DPS
 - (l) 'Dirty Panel Filter' – extract air DPS
 - (m) All other indication and manual controls described throughout the tender documentation.
- (ix) Power Controls, Upper Part of Enclosure
 - (a) All necessary starters, contactors, relays, fuses, circuit breakers, etc shall be DIN rail mounted on a suitable chassis plate with sufficient free space between the equipment for maintenance and servicing.
 - (b) All wiring shall be run in open slotted trunking with 25% free capacity.
 - (c) All terminals shall be DIN rail mounted, typical SAK series with power and signal connection, clearly separated and sub divided into inputs and outputs.
- (x) Operator's Interface, Lower Control Panel.

The operator's Interface shall allow operating conditions to be interrogated by an operator 'scrolling' up or down to view the display data.

- (xi) **Programmable Control Modules, Lower Part of Enclosure**
 - (a) All necessary modules, for controlling and monitoring the above referenced plant and equipment (as specified) shall be DIN rail mounted on a suitable chassis plate with sufficient free space for maintenance and servicing.
 - (b) Space shall be left for fitting the network module for communicating with a remote BMS network at later date.
 - (c) A 13a 240V socket, metalclad, single gang switched unit (MEM ref. M3141) shall be conveniently mounted in the control section of the panel, on chassis plate and protected with 5A fuse. This socket outlet is to be suitable for connecting a portable PC for interrogating the new DDC control system.

(b) **Field controls**

- (i) All field controls shall be supplied and installed as described throughout the tender documentation.
- (ii) All field controls shall be fully compatible with the 'Seachange' system, and shall be selected from a reputable and good quality field controls hardware supplier, i.e. Honeywell, Satchwell, Trend etc.
- (iii) The controls package is to include for a Web server - (smart server)
- (iv) The new and existing controls shall be fully commissioned on completion of the works with full commissioning certification submitted.
- (v) **Note; the Contractor shall ensure that all pre-commissioning and final commissioning procedures have carried out (in accordance with the tender documentation) and shall submit a detailed report thereon to prove this, prior to demonstration and handover of the installed systems to the Client and Consultant.**

(c) **Control and power wiring**

- (i) All control and power wiring shall be installed by the contractor, including control wiring from the field controls to the new control panel.
- (ii) Power wiring shall be extended from the new existing distribution board (position as shown on tender drawings) to the following:
 - (a) Ventilation plant main control including supply and extract fans.
 - (b) Gas/ ventilation system control panel including gas valve.
 - (c) Boiler.
 - (d) Small power and lighting including canopy lighting.
 - (e) Halal cooker, food mixer, note the connection between the starter and the mixer motor shall be rewired, sterilising sink heater – new starter to be installed on wall adjacent to sink station, chest

freezer, 2No fridges, 2No upright freezers, insectocuter, food slicer, hot cabinet, etc.

- (f) Lift motor
 - (g) Earthing and bonding including bonding to new false ceiling grid.
 - (iii) New lockable isolating switches, cooker plugs and switched wall sockets shall be to IP65 shall be installed and mounted at a suitable position adjacent to all items listed above, and for catering equipment shall be mounted to the side of the stainless steel canopy.
 - (iv) The new control/power wiring shall be installed in new containment, i.e. trunking and conduit, throughout its length, final electrical containment runs from the new trunking/conduit to the new equipment shall be in flexible stainless steel conduit.
 - (v) The existing power and small power wiring system shall be completely stripped out.
 - (vi) The phone point and associated cabling shall be reinstated in the chef's office area.
 - (vii) All wiring shall be sized and installed in accordance with the IEE Regulations as Current.
 - (viii) All control wiring shall be installed in full accordance with the controls specialist requirements.
 - (ix) Refer to the electrical specification (to follow) for further details of the electrical specification and scope of works.
- (d) **Gas / fire / safety systems**
- (i) The exiting fire alarm system shall be extended to the new control panel and gas control panel and interfaced with the control wiring of same.
 - (ii) All fire alarm system devices (call points, smoke detectors, sounders, etc; shall be disconnected to facilitate the works and reinstated in conjunction with the new works.
 - (iii) The tenderer shall include costs for the work to the fire alarm system which shall be carried out by the Client's specialist fire alarm system company.
 - (iv) 2No emergency stop buttons (ESB's) shall be installed in the kitchen (position to be agreed on site) the ESB's - to be 'hardwired' to the new control panel and gas control panel.
 - (v) The emergency stop buttons shall have proprietary covers, to avoid accidentally operation by the kitchen staff.
 - (vi) In the event of an emergency stop button (ESB) being depressed or activation of the building fire alarm system, all kitchen plant is to be shut down including closure of the gas valve.

- (vii) The individual fault status in (d) shall be indicated on the new control panel facia, monitored by the new control system and an alarm configured in the new control system.
 - (viii) On normal status being returned to the fault status, the plant shall be started up in a logical fashion.
- (e) **Remote audible alarm system**
- (i) A remote audible common alarm system shall be installed, the system to make the school staff aware when faults are developed, so that the appropriate maintenance personnel can be called out to rectify the faults.
 - (ii) The alarm panel shall be installed in the school caretakers/reception room and wired back to the new control panel, complete with all necessary conduit and containment, etc.
- (f) **Lighting**
- (a) New lighting shall be installed in the kitchen and peripheral areas and shall include:
 - (i) Automatic control including lighting controllers, light sensors and PIR's, etc, for control of the lighting levels in the kitchen and lobby area, in conjunction with the installation of the 'Suntubes'.
 - (ii) New modular recessed lighting, surface fittings and emergency lighting.
 - (iii) PIR's, light switches, override switches and grid switches (for emergency light testing and PIR override).
 - (iv) Wiring and containment – all to be extended back to the new distribution board.
 - (v) All existing power and lighting containment shall be stripped out in all areas.
 - (vi) Note, all the existing wiring shall be checked at the start of contract to ensure all cabling is identified.
 - (vii) Refer to the electrical specification (to follow) for further details of the lighting specification and scope of works

9 **Builderswork**

- (a) The builderswork element of the project comprises:
 - (i) **Ductwork openings**

- (a) Create 6No 500x300mm openings in the kitchen roof to facilitate the installation of the new supply and extract ductwork through the roof into the kitchen area below.

(ii) **Suntubes**

- (a) Remove the 2No existing skylights in the main kitchen area and convert the roof openings and install 2No 'Suntubes'.
- (b) The roof opening conversion to be in full accordance with 'Monodraught' requirements.
- (c) Integrate the remaining skylights into the new false ceiling by constructing ceiling bulkheads around the skylights.

(iii) **Fan openings**

- (a) Remove the 2No 'through the wall' extract fans above the catering equipment and the 1No 'thru the roof' extract fan above the fat fryer canopy.
- (b) The resulting openings are to be made good (weather proof and water proof) to the same standards as existing and shall closely match the existing brickwork and roofing materials.

Note:

- (i) The roofing works shall be carried out by a specialist and experienced roofing Contractor who shall expose the roof and kitchen ceiling to identify the best method of installing the new ductwork, modifying / blocking up the skylight and fan openings and to identify suitable anchor points for supporting the kitchen extract canopy. All exposed areas shall be made good on completion to closely match the existing roof.
- (ii) The existing roof (trusses, beams, joists, etc) shall be modified to allow the ductwork and 'Suntubes' to be installed. Additional roof trusses, beams, joists, etc; shall be installed as necessary to maintain the structural integrity of the roof.
- (iii) Weather proof and water proof upstands shall be created in the roof for the ductwork and 'Suntubes' installation.
- (iv) When removing the fans and skylights care should be taken to be aware of any asbestos gaskets that may be present.

(iv) **Existing canopies**

- (a) Completely remove / strip out the existing steel and glass canopies.
- (b) Expose the roof / ceiling structure, to identify suitable anchor points for supporting the new kitchen extract canopy. All exposed areas shall be made good on completion to closely match the existing roof / ceiling structure.

(v) New ceiling

- (a) Completely strip out all existing ceilings in the kitchen and peripheral areas.
- (b) Replace (in all areas) with a modular 600x600 ceiling complete with corrosion resistant grid, hygienic 600x600mm ceiling tiles, fixings, etc; and any other accessories to complete the new ceiling installation.
- (c) Form all necessary bulkheads, upstands, thresholds, fillings, etc; for windows, Suntubes, skylights, cooking area canopy, doorways, etc.
- (d) The new ceiling (complete with Armstrong Hygiene tiles) to be as ENVIRO-TEK quotation dated 28th May 2010.

(vi) New flooring

- (a) New 'Altro' flooring shall be installed to all floors throughout the kitchen area.
- (b) The new flooring in the main kitchen and lobby areas (through to the dumb waiter) shall be 'Altro Stronghold'.
- (c) The new flooring in the chef's office, staff room, store rooms, toilet and toilet lobby shall be 'Altro XPRESSLAY'.
- (d) The new flooring shall be as Rudge Brothers & James quotation ref: 1005/86 dated 28th May 10.
- (e) All floor surfaces shall be prepared in full accordance with the manufacturers requirements.

(vii) Wall cladding 'Whiterock'

- (a) All walls in the kitchen areas shall have a proprietary wall cladding 'White rock' installed to provide a hygienic cleanable surface.
- (b) All existing mechanical and electrical services shall be stripped out prior to the wall cladding.
- (c) Any existing services that are to remain shall be taken off the walls prior to the 'Whiterock' wall cladding and reinstated on completion.
- (d) The walls shall be prepared in full accordance with the wall cladding manufacturers requirements prior to installation of the cladding.

- (e) The wall cladding shall be installed from floor level to new false ceiling level and shall be complete with all proprietary finishing's including trims, ends, corners, top and bottom sections, etc.
- (f) The Whiterock' wall cladding 'shall be as Rudge Brothers & James quotation ref: 1005/86 dated 28th May 10.

(viii) Steel supports

- (a) Provide adequate steel support structures to support the ventilation plant and ductwork, kitchen canopy, gas, heating and hot and cold water pipework, etc.

Note:

- (i) The new steelwork shall be secured to the building structure using 'Ramset' proprietary steel to concrete fixings, of adequate size and strength.
- (ii) Weatherproof anti-vibration 'tico pad' shall be installed between the new steel work and the ventilation plant, to prevent vibration transmission to the building fabric.
- (iii) All new steel work shall be primed undercoated and finished in high quality gloss paint prior to delivery to site, the paint to be proprietary, and specifically suitable for the application.
- (iv) All ductwork and silencers supports on the roof shall be made using proprietary base plates specifically suitable for the roof structure and to pose no potential problem for damage to the roof structure.

(ix) Chequer plating

- (a) Install a new aluminium chequer plate plinth (12mm thick x 4600mm long x 1200mm wide) below the kitchen equipment, the final dimensions to be agreed on site.
- (b) The new chequer plate shall be bonded to the new 'Altro' flooring to ensure it is securely fixed throughout its entire footprint.

(x) Catering equipment

- (a) Remove all catering equipment, fridges, freezers, worktops, benches, etc; from the kitchen and peripheral areas to allow the works to proceed and replace the same to suit the Client's final kitchen layout plan.
- (b) The removal location is to be agreed but is to be assumed to be the school dining room.

- (c) The catering gas appliances shall be removed and reinstated by a registered specialist Contractor.
- (d) The fat fryer shall be repositioned under the new canopy and refurbished.
- (e) New restraining straps shall be fitted to all appliances where none exist at present.

(xi) **Painting**

- (a) All exposed walls, doors and architraves in the kitchen area and peripheral areas (staff room, office, store rooms, toilet, lobbies, etc) shall be undercoated and painted to a high standard.
- (b) Prior to painting, the condition of the walls and timber works shall be checked and any damage made good to a high standard.
- (c) High quality paints shall be used, the paint to be specifically suitable for kitchen environments.

(xii) **Miscellaneous**

- (a) All necessary holes shall be created through walls, ceilings, floors, and doors, etc; as necessary.
- (b) The tiled shelving and concrete behind the sink stations shall be broken out and a flat surface achieved for the wall cladding.
- (c) All crane age and transportation shall be provided to deliver and position the specified plant and equipment to the project area.
- (d) All areas where the works are carried out shall be made good and painted to a high standard, including walls, ceilings, floors, etc. Note, the paintwork shall closely match the existing paintwork and shall be at least 3 coats of high quality washable emulsion.
- (e) All access requirements associated with the project works shall be provided.
- (f) All other works as detailed in the tender drawings and specifications.
- (d) On completion of the works the kitchen and peripheral areas are to be thoroughly cleaned by a professional kitchen cleaning company.
- (e) All existing steel window opening mechanisms (all areas) shall be thoroughly serviced and overhauled and left in good operational order.
- (f) Refer to the structural specification (to follow) for further details of the structural works and associated builderswork.