

ITEM NO: A02 APPENDIX 1

FOUNDRY LANE PRIMARY SCHOOL

**DINING HALL/KITCHEN FEASIBILITY
STUDY**

JULY 2008

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Brief

Undertake a feasibility study of the existing servery-type kitchen. Provide proposals and outline costs to upgrade the present arrangements to create a fully functioning kitchen providing hot cooked meals on the site, while maintaining the overall size of the existing dining area.

Background

The existing servery and dining hall are both within the same single storey building. The servery is approximately 20 m². With the remaining 94 m² providing the dining area

Description of the Existing Building.

The single storey building has been adapted from what was originally an external brick built shelter in the playground. The rear wall of the shelter would have formed part of the boundary wall of the site. The front and sides would have been open with intermediate brick piers or steel columns and steel beams spanning between them. The pitched roof structure is original but has been recovered.

There have been a number of alterations over its life, leading to the present building and its use as a kitchen servery and dining hall.

The front and sides have been infilled with brickwork. Windows and doors have been fitted.

A small kitchen has been installed in part of building. This has sinks etc, but there are no cooking facilities at present. The dining area has a false ceiling and gas space heating. Apart from the double-glazing to the windows and doors, no improvements have been made to the insulation. The floor internally has been levelled and a floor covering laid. The building does not meet current standards of building regulations.

Asbestos

There is asbestos present in the building, which is recorded in the Southampton site asbestos survey report.

We have requested a detailed survey of the existing servery and dining hall. We are awaiting this information.

The Requirements of a New Kitchen

It is expected that the new kitchen will have a staff of 3 Minimum kitchen working size requirements at 100m². This information was provided by the catering manager for the schools.

Building bulletin 99 sets out recommended sizes for kitchens in infant and junior schools.

Building bulletin 99 recommends that provision should be made in the kitchen as follows:

1. Facilities for preparing food and drink, and washing up afterwards
2. Facilities for catering staff, including toilets and changing areas
3. Chefs Office
4. Separate facilities for storing cleaning material in accordance with COSHH regulations
5. Separate secure storage for dry goods
6. Refrigerated and freezer cabinets or rooms
7. Adequate circulation for goods in and waste out
8. Additionally separate space will be required to provide for a dedicated servery area.

The above have been accounted for in the recommendation, with the exception of the staff changing area and WC's, which are already in existence at the far end of the dining hall. However these will be included in the new build and modular options

The recommended floor to ceiling height is 2.7 m high, with additional space being required where the cooker canopy is to be situated.

Options

There are several options, with each having its own limitations. In outline these are:

1. To increase the size of the servery within the existing building and extend the dining area by means of an extension.
2. To retain the existing dining area and extend the kitchen into the playground.
3. To retain the existing dining area and extend the kitchen into the car park.
4. To retain the existing dining area and extend the kitchen into part of the car park and part of the playground.
5. To retain the existing dining area, Strip out existing kitchen, revert back to dining area. Construct new independent kitchen, located at end of dining block.

6. To retain the existing dining area, Strip out existing kitchen, revert back to dining area. Install new independent Modula building, located at end of dining block. Extending into car park.

Site Constraints

1. The internal and external floor levels between the existing and proposed extension.
2. Retention of access for the fire brigade from the car park
3. Retention of the access from the street pedestrian entrance to the playground. (Adjacent to the rear of the hall and by the end of the dining hall).
4. The height of the existing steel beams
5. The location and construction of the gable wall to the existing servery

Options in Detail

1. To increase the size of the servery within the existing building and extend the dining area

This option would be to utilise part of the dining hall as the kitchen, and to extend the dining hall. By extending the kitchen into the dining hall, space would be lost in the dining hall. The dining hall could be extended into the area between the dining hall and the offices. This area could only be partially infilled because of the need to retain the route between the playground the exit from the school adjacent to the bin store. The overall width of the extension would therefore only be approximately 3m in width. There would be a difference in level between the extension and the dining hall, or the level of the dining hall would have to be raised. If the dining hall level was raised, then the floor to ceiling height to the underside of the steel beam would be approximately 2 metres.

2. To retain the existing dining area and extend the kitchen into the playground.

This option would entail keeping the existing kitchen, and building an extension into the playground. The problem with this option is that, in order to create a sufficiently large kitchen area, it would encroach on the vehicular (fire brigade) access into the playground. This is the only fire brigade access for the school. It is not considered feasible to create an alternative entrance.

3. To retain the existing dining area and extend the kitchen into the car park.

It would be possible to extend the kitchen into the car park. This would result in 4 or 5 car parking spaces being lost and a long narrow kitchen with limited circulation – almost a corridor. In order to maximise the space, the gable wall could be removed. This would however have considerable financial implications as the whole structure of the building might then need to be brought up to current building regulation standards.

4. To retain the existing dining area and extend the kitchen into part of the car park and part of the playground.

It would be possible to extend the existing kitchen both into the playground and into the car park. This would result in the loss of 2 car parking spaces, and would allow for the retention of the access into the playground for the fire brigade. The kitchen gable wall would still be retained. However, as the overall width of the kitchen is being increased the gable wall can be better designed into the kitchen, thus limiting the impact on the overall layout of the kitchen.

5. To retain the existing dining area, Construct new independent kitchen, located at end of dining block. into part of the car park and part of the playground. Strip out existing kitchen, revert back to dining area.

A new build kitchen block to match the existing design feature of the gym and admin block. To include matching brickwork, roof design and window character (in UPVC) The design will allow for removal of window and brickwork to the end wall of existing dining room, to allow the new kitchen to have a new servery and door By creating an independent kitchen, this will give several added benefits, The existing kitchen can be reverted back to a dining area, giving up to an extra 20-30 pupil's, depending on the seating arrangements. This will help the issue of improving the pupil's number, eating school meals.

6. To retain the existing dining area, dismantle existing kitchen, return to dining area. Attach a portable building extending into car park.

A new modular kitchen block to match the existing design feature of the gym and admin block. To include matching brickwork, roof design and window character (in UPVC)

The design will allow for removal of window and brickwork to the end wall of existing dining room, to allow the new kitchen to have a new servery and door. By creating an independent kitchen, this will give several added benefits, To enable future plans of demolishing existing dining room, and adding on a new modular dining block.

The existing kitchen can be reverted back to a dining area, giving up to an extra 20-30 pupils, depending on the seating arrangements. This will help the issue of improving the pupil's number, eating school meals.

Proposal

Given the overall constraints of the site there are three options, two of which involve extending into the car park and into the playground. Proposal 1 is to build out into the car park and into the playground. In this proposal the convection oven and the range ovens are set against the existing gable wall. There are no external bin stores and food preparation and circulation areas are limited. Proposal 2, is to build a slightly larger extension incorporating an external bin store. This would allow for the convection oven to be re-located to the opposite side of the room, allowing for better circulation and more work space by the ranges. Ventilating the steam oven separately is possible by venting the exhaust from the top and placing an ambient extractor on the adjacent wall.

Option 5, is to build a bespoke new kitchen, offering the latest and modern building methods, giving long term environmental and energy savings. Allowing more children seating and, larger dining area. Create a new bin storage area away from main kitchen.

This option gives the greatest overall floor area. provides a bin store away from main buildings; gives greater food preparation area and provides better overall circulation.

The other benefits will be the newly built kitchen can be constructed to meet current building regulations and increase working conditions and facilities.

By building the kitchen independently, in the longer term, it will be possible to demolish the existing dining room, rebuilding a new block and attaching it to the new kitchen.

Kitchen equipment can be designed to suit new building, or visa versa.

Logistically, there will be much less disruption, to the school and dining room, as it can remain in use, for most of the time. And works to the dining room, can be carried out during phased periods (half term)

Compliance with Building bulletin 99

However, the cost of this new build, is substantially higher than the allocated budget, and may not be a viable option. Therefore, perhaps the previous options should be reconsidered. Or option 6 which is the preferred option. At this stage the costs are much more favourable.

Costs

Option 5

The Estimated over all cost of the work to increase the size of the kitchen including fees would be approximately £ 483,000.00.

The cost is higher than other options considered, but there are added benefits and long term cost savings. Economically option 5 is better. Also taking into consideration future plans the school may have.

The price for the kitchen equipment is based on the costs of recent similar kitchens in schools in Southampton.

The cost of the building work is based on current building costs. Based on similar projects, carried out by capita. Costs have increased dramatically due to the economic climate.

Below is an elemental breakdown of the cost of the works.

Anticipated cost

- **Kitchen Equipment:** Based on fitting and fixtures recently carried out on similar schools
- **Demolition and protection:** Removal of flank wall of existing dining room, and making connection.
- **New ramp and access:** Access ramp for trolleys, bins, deliveries etc.
- **General new build cost:** Based on £3,000.00p/ m2 for new build @ 100 sqm £300,000.00. The cost of the building work is based on current building costs. Based on recently similar projects carried out by capita.
- **Trial Hole (structures);** Required to determine the type and extent of foundations.

- **Bin storage:** To be formed with hit and miss timber fencing away from main building.
- **Statutory fees:** Planning and building control costs.
- **Relocating railings:** relocate the existing railings and gate in car park to new line.
- **Contingency @ 10%** (ground conditions unknown at this stage and any other works)
- **Provisional sum:** provided for work whether or not identified as being for defined or undefined work.
- **Design and management:** @ 11.51%
- **client agent fees:** @ 22%

School to add cost of furniture, IT and telephone lines.

Total of the above £482,661.94 (Excluding VAT)

Schedule of Costs

| ITEM | ELEMENT | COST |
|-------|---|---------------------|
| 1.00 | Kitchen Equipment | £ 65,000.00 |
| 2.00 | Demolition and protection | £ 5000.00 |
| 3.00 | New ramp and access | £ 6000.00 |
| 4.00 | General new build cost | £ 300,000.00 |
| 5.00 | Trial Hole (structures) | £ 1000.00 |
| 6.00 | Bin storage | £ 1600.00 |
| 7.00 | Statutory fees | £ 1631.00 |
| 8.00 | Relocating railings | £ 3000.00 |
| 9.00 | Contingency @ 10% (ground conditions unknown at this stage) | £ 30,000.00 |
| 10.00 | Provisional sum: | £ 10,000.00 |
| 11.00 | Sub Total | £ 423,231.00 |
| | Fees etc: | £ 48,713.89 |
| | Plus client agent fees | £10,717.05 |
| | TOTAL | £ 482,661.94 |
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Option 6.

Modular Portable Building

Preferred option

The Estimated over all cost of the work to increase the size of the kitchen including fees would be approximately **£ 292,207.42**.

This cost is lower than option 5 due to off site assembly and fitout, less groundwork and shorter construction time.

A modular building, which can be attached to the end of the dining block, extending into the car park, taking up 5-6 spaces.

Using real brick tiles/slips fixed to the wall and pointed in cement, the finish can match the existing admin and gym block, by using the same brick and colours, it is very difficult to note any difference from a traditional construction.

The roof and brick cladding will be constructed on site. This can be done with no inconvenience to the school.

The final connection can be made to the existing dining room/kitchen during a holiday period. This will involve the cutting out of a doorway and serving hatch to the end wall.

The existing kitchen can be reverted back to a dining area, giving up to an extra 20-30 pupil's, depending on the seating arrangements. This will help the issue of improving the pupil's number, eating school meals.

The final connection will then be to the existing dining room/kitchen during a holiday period. This will involve the cutting out of a doorway and serving hatch to the end wall

Whilst specified for permanent use, these Systems are totally relocatable allowing the user flexibility unattainable with traditional construction techniques. Also allowing the attaching of additional units, which gives scope for the school to expand their dining room or create a whole new block, which will still be in keeping with the design.

- Clay brick slip cladding to external walls
- A 22.5° gabled lightweight **Decra Parctile** metal tile pitched roof installation complete with Aluminium/UPVc downpipe system.
- 'Decra Stratos' slate effect tile (optional)
- White plastic coated steel lined ceilings.

- Pre-finished internal linings to external walls and internal partitioning.
- Contract Grade floor finishes throughout.
- Robust pre-finished skirting's and architraves.
- Double glazed powder coated aluminium windows.
- Pre-finished Ash internal doors
- Steel external doors
- Electrical Installation
- Plumbing Installation
- Internal fixtures and fittings
- Delivery, crane offloading and on-site erection.
- Ground and External Works

ADDITIONAL BENEFITS

Modular building methods have developed significantly over the last 20 years. Constructed almost entirely from steel, These Systems have a design life of up to 60 years.

In response to the demand for more economic buildings, various companies have developed the ways of making their modular buildings more individual. These give the appearance of a traditional brick or render finished building.

A Pitch roof can be achieved to match the admin block, is also available, with different coverings, from anti vandal metal roof tiles, to traditional slate effect.

These units can offer a modern and hygienic school kitchen, complete with essential internal rooms, for office, toilets and storage. Packaged in an efficient, easy-to-install building unit.

Modules are constructed off site with internal fixtures, fittings, mechanical, electrical and ventilation services all completed within a factory-controlled environment. At the same time, the site is prepared in readiness for delivery.

This construction method ensures that the time spent on site is greatly reduced.

The roof and brick cladding will be constructed on site. This can be done with no inconvenience to the school.

Key Features:

- Health and safety regulations
- Food hygiene standards
- Building regulations
- Secure and lockable
- Gas or electric powered
- used extensively by the MOD, hospitals and industrial caterers
- Linking of portable units into existing buildings
- Units can be linked.
- High standard of interior finish and fittings.
- Factory controlled manufacturing process to ISO 9002.
- A highly durable building which will outlast timber-framed alternatives.
- Life expectancy, in normal environments, in excess of 60years as independently certified by BBA certificate number 03/SO32
- Shorter lead in and construction time than traditional build.
- Minimal disruption to school
- Existing kitchen operation can be maintained
- Dining room can continue to be used



Brick-slip Exterior type building, with pitch roof, this could blend in with school.

Below is an elemental breakdown of the cost of the works.

Anticipated cost

- **Kitchen Equipment:** Based on fitting and fixtures recently carried out on similar schools
- **Demolition and protection:** Removal of flank wall of existing dining room, and making connection.
- **Services:** Disconnection of water, gas and electricity to existing building.
- **General new build cost:** Based on £1,500.00p/ m2 for new build @ 100 sqm £150,000.00. The cost of the building work is based on current budget costs. Offered by manufacturer.
- **Trial Hole (structures);** Required to determine the type and extent of foundations.
- **Bin storage:** To be formed with hit and miss timber fencing away from main building.
- **Statutory fees:** Planning and building control costs.
- **Relocating railings:** relocate the existing railings and gate in car park to new line.
- **Contingency @ 10%** (ground conditions unknown at this stage and any other works)
- **Provisional sum:** provided for work whether or not identified as being for defined or undefined work.
- **Design and management:** @ 11.51%
- **client agent fees:** @ 22%

School to add cost of furniture, IT and telephone lines.

Total of the above £292,207.42 (Excluding VAT)

Schedule of Costs

| ITEM | ELEMENT | COST |
|-------|---|---------------------|
| 1.00 | Kitchen Equipment | £ 65,000.00 |
| 2.00 | Demolition and protection | £ 5000.00 |
| 3.00 | Services | £ 4000.00 |
| 4.00 | General new module cost | £ 150,000.00 |
| 5.00 | Trial Hole (structures) | £ 1000.00 |
| 6.00 | Bin storage | £ 1600.00 |
| 7.00 | Statutory fees | £ 1631.00 |
| 8.00 | Relocating railings | £ 3000.00 |
| 9.00 | Contingency @ 10% (ground conditions unknown at this stage) | £ 15,000.00 |
| 10.00 | Provisional sum: | £ 10,000.00 |
| 11.00 | Sub Total | £ 256,231.00 |
| | Fees etc: | £ 29,492.18 |
| | Plus client agent fees | £6,484.24 |
| | TOTAL | £ 292,207.42 |
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No costing has been allowed for in the restoration of the existing kitchen in any of these options, as this may form part of the works required by the school to increase child place size, along with the walkway canopy.

As requested the school Head teacher wished to keep his funding separate from this project.

Suggested use of school funding

- Existing kitchen: Remove all fitting and fixtures, white goods, asbestos removal. Refurbish the area to a standard for dining, to match existing.
Budget cost £ 25,000.00
- Walkway: Form a new external double doorway, from the new gym block, to the area outside the dining room, Construct a new canopy, with steel post's, and polycarbonate sheeted roof. Leading to both entrances of the dining block. Dependant on size and coverage, this could allow for some outside dining during summer months.
Budget cost £ 65,000.00

(all canopies fitted by SCC or Capita must comply with strict specifications, as defined by our structural engineers)

This should be discussed further with client and school head teacher.

