

STOCKTON HEATH PRIMARY SCHOOL

PROPOSED REPLACEMENT SCHOOL BUILDING

PRELIMINARY FEASIBILITY STAGE REPORT

REMIT : To advise / report on the health and safety issues associated with the site and surrounding land use for both proposed options (New Build and Refurbishment) and hazard identification associated with the site parameters, but excluding design issues (pending firm design proposals).

EXISTING CONDITIONS : The main school building is of traditional construction comprising a two storey brick built load-bearing structure with a slate covered pitched roof and large single glazed timber window frames, built in 1911.

The other three significant buildings on the site (Y6 classroom, Private Nursery and Dining Hall) are single storey concrete structured buildings (Horsa huts). These buildings were constructed in the early 1950's. There are a number of less significant buildings on the site of a less permanent nature.

The Horsa huts are now in a very poor condition and have reached the end of their useful life. The main school building, whilst in poor condition is considered to be structurally stable (subject to confirmation by Structural Engineer).

The existing school grounds are largely surfaced with tarmac, with the exception of the all weather sports pitch to the front of the building and a small landscaped area. The boundary is largely made up of brick / metal railings interspersed with some large trees. The site is of a sloping nature with a fall from West Avenue down towards the houses on the Northern boundary of the site.

Under the site lies the route of a roman road.

SURROUNDING LAND USES : The surrounding area is predominantly residential, with Stockton Heath's Forge shopping precinct and car park adjacent to the site

All adjacent roads are very busy with on street parking. Access to the site is limited and restricted.

OPTION 1 – NEW BUILD

This option replaces the existing school building with a new building, providing suitable accommodation to maintain the current 2 Form entry and accommodate the current on site private nursery, SEN unit and after school link club.

This redevelopment would be undertaken by maintaining most of the existing buildings, supplemented with some mobile accommodation. The existing single storey wings to the school, Y6 Classroom and Dining Hall will be demolished. The new build school will be developed around the extremity of the site and on completion of this the remainder of the existing school building and the nursery will be demolished and the external works will be completed.

ESPECIAL RISKS TO HEALTH & SAFETY

1. Demolition / Stripping Out / Removal Generally

Hazard : Collapse of unsupported elements of existing building

At Risk : Work persons, staff, pupils and visitors

Risk Assessment : High

Principles of Protection :-

- a) Carry out survey and investigation to establish details of construction and take specialist Advice on requirements for temporary propping (if required)
- b) Only experienced personnel should carry out the work
- c) Work should be carried out sequentially so that the overall stability is not affected
- d) Exclude unauthorised personnel from the vicinity of the works
- e) Suitable hoarding protection, warning signs / prohibition signs and the like should be introduced to safeguard the Contractor's work persons and the occupants of the remaining school building to suitably segregate the works from areas ambient to it
- f) Programme work for School holidays

2. Noise

Hazard : Nuisance and disturbance to adjacent school and neighbouring area / danger to work persons and the school staff, pupils and visitors

Risk Assessment : Medium

Principles of Protection :

- a) Follow Local Authority Environmental Health Department guidelines for working hours
- b) Use most upto date equipment with noise defenders and silencers etc
- c) Liase with adjacent residents and Headteacher regarding noisy works and ensure a good public relations exercise is carried out to avoid any disruption to the contract
- d) Operations resulting in significant noise are to cease at times stipulated by the Employer
- e) Consider 'out of hours' working as against programme issues

3. Dust

Hazard : Danger to work persons and the adjacent school staff, pupils and visitors

Risk Assessment : Medium

Principles of Protection :

- a) Minimise creation of airborne dust during drilling, chasing, cutting etc.
- b) Prevent migration of dust beyond immediate area of working by providing suitable hoarding protection etc.
- c) Provision of ear, eye and respiratory protection suitable to task

4. Moving / Falling Objects

Hazard : Danger to work persons and the adjacent school staff, pupils and visitors

Risk Assessment : Medium

Principles of Protection :

- a) Debris to be disposed of from high level areas via refuse chutes directly into skips
- b) Exclusion of unauthorised personnel from vicinity of works taking place – provision of warning signs / prohibition signs etc.
- c) Correct use of appropriate hoisting equipment
- d) Protection of scaffold lifts to prevent materials etc. falling
- e) Avoid stacking of materials
- f) Use of head protection

5. Fixed Items / Projections

Hazard : Danger to work persons and the adjacent schools staff, pupils and visitors

Risk Assessment : Medium

Principles of Protection :

- a) Avoid creations of projections to scaffolds generally
- b) Use of head protection
- c) Lighting of scaffolding / hoardings etc.
- d) Use of high visibility tapes to uprights, transoms of scaffolds where necessary

6. Exposure to Asbestos based materials

Hazard : Danger to work persons and the school staff, pupils and visitors

Risk Assessment : High

Principles of Protection :

- a) Consult report of Type 2 survey previously carried out at the school and take specialist advice on the removal and disposal of asbestos based materials identified in the report
- b) Commission a Type 3 survey on vacation of the existing buildings and prior to commencement of any dismantling / demolition works
- c) If the contractor uncovers materials, which he suspects to contain asbestos, he must cease work immediately on that element and notify the Contract Administrator and Planning Supervisor – If in doubt about the presence of asbestos, assume that it is present and work accordingly
- d) All work with asbestos and the precautions needed are covered by the Control of Asbestos at Work Regulations 2002

7. Adjacent Works / Structures – Unauthorised Access into Site

Hazard : Personal Injury – Danger to work persons and the adjacent schools staff, pupils and visitors

Risk Assessment : Medium / High

Principles of Protection : Traffic routes are to be agreed with the Employer, Contractor to securely enclose and isolate working area and site compound area and maintain safe and unrestricted means of access and usage to the school and nursery. Temporary hoardings, warning signs, lighting etc. to be provided to segregate contractor demised areas from those ambient to it.

8. Deliveries to Site / Movement of Vehicles

Hazard : Danger to work persons and the adjacent schools staff, pupils and visitors

Risk Assessment : High

Principles of Protection :

- a) Movement of vehicles onto or off site to cease at times stipulated by the Employer – Deliveries to be made outside school hours etc.
- b) Allocation of part of Forge Shopping Precinct car park to be used for parking of contractors and school staff's vehicles

- c) Banksmen to be stationed whenever vehicles are being manoeuvred onto or off site
- d) No 'on-street' parking permitted
- e) Close co-ordination with the School and Nursery at all times – School and Nursery to be given prior notification of all major deliveries and traffic movement – one way traffic system to be used with where possible, agreed delivery times – drivers to contact Site Agent prior to arrival on site

9. Use of Mobile Plant and Vehicles

Hazard : Danger to work persons, school staff, pupils and visitors

Risk Assessment : High

Principles of Protection :

- a) Movement of mobile plant and vehicles onto or off site to cease at times stipulated by the Employer
- b) All mobile plant and vehicles to be operated by suitably qualified personnel (written evidence to be provided)
- c) Banksmen to be stationed whenever plant and vehicles are being manoeuvred on site

10. Fire

Hazard : Danger to work persons and school staff, pupils and visitors

Risk Assessment : High

Principles of Protection :

- a) Prevention of accumulation of debris – burning of debris to be prohibited
- b) Regular inspection of all areas of works, skips etc. for signs of fire.
- c) Use of blowlamps, welding equipment etc. to be restricted to suitably trained personnel
- d) Fire escape routes from the buildings, fire assembly points and access to the site and neighbouring buildings for emergency vehicles to be maintained at all times (or if necessary alternatives approved by the Fire Authority provided)
- e) Waste skips, site cabins, storage containers etc. shall be positioned at a safe distance from each other, the works and any other buildings to prevent the spread of fire
- f) All hot work to cease at least 45 minutes before leaving the site
- g) Fire evacuation procedure to be agreed with the Headteacher and incorporated within the Contractors' Health and Safety Plan

OPTION 2 – REFURBISHMENT AND EXTENSION

This option extends, remodels and refurbishes the existing main school building, providing suitable accommodation to maintain the current 2 Form entry and accommodate the current on site private nursery, SEN unit and after school link club.

This redevelopment would be undertaken by maintaining most of the existing building, supplemented with some mobile accommodation. The extension to the existing building will be constructed, whilst the remainder of the existing school remains in use. (Yr 6 Classroom demolished). On completion some staff and pupils relocate to the new extension and the remainder decant to mobile accommodation. The existing school building is then refurbished and remodelled. On completion of this staff and pupils are relocated into the extended school building, the mobile accommodation is removed, the remaining (Nursery and Dining Hall) Horsa huts demolished and the external works completed.

ESPECIAL RISKS TO HEALTH & SAFETY

1. Stripping Out / Remodelling Existing Building

Hazard : Partial collapse of unsupported elements of existing construction

At Risk : Work persons, staff, pupils and visitors

Risk Assessment : High

Principles of Protection :-

- a) Survey/investigate existing load-bearing construction and take specialist advice on requirements for temporary propping
- b) Work should be carried out sequentially so that the overall stability is not affected
- c) Correct use of appropriate hoisting equipment when handling steel beams/lintels etc.
- d) Only experienced personnel should carry out the work
- e) Exclude unauthorised personnel from the vicinity of the works
- f) Suitable hoarding protection, warning signs / prohibition signs and the like should be introduced to safeguard the Contractor's work persons and the occupants of the new extension to the existing school building to suitably segregate the works from the adjacent occupied areas

2. Noise and Vibration

Hazard : Nuisance and disturbance to adjoining school and neighbouring area / danger to work persons and the school staff, pupils and visitors

Risk Assessment : High

Principles of Protection :

- a) Follow Local Authority Environmental Health Department guidelines for working hours
- b) Liase with adjacent residents and Headteacher regarding noisy works. Operations resulting in significant noise and/or vibration, likely to cause disturbance to the adjoining school to be carried out outside school hours
- c) Use most upto date equipment with noise defenders and silencing etc.
- d) Prior inspection to be made of the vicinity of all works involving vibration for fixtures etc; which may be disturbed. Arrange for removal, where appropriate – consider temporary evacuation.

3. Dust
Hazard : Danger to work persons and the adjoining school staff, pupils and visitors
Risk Assessment : High
Principles of Protection : Refer to Option 1
4. Moving / Falling Objects
Hazard : Danger to work persons and the adjoining school staff, pupils and visitors
Risk Assessment : High
Principles of Protection : Refer to Option 1
5. Fixed Items / Projections
Hazard : Danger to work persons and the adjoining school staff, pupils and visitors
Risk Assessment : High
Principles of Protection : Refer to Option 1
6. Exposure to Asbestos based materials
Hazard : Danger to work persons and the school staff, pupils and visitors
Risk Assessment : High
Principles of Protection : Refer to Option 1
7. Adjacent Works / Structures – Unauthorised Access onto Site
Hazard : Personal Injury – Danger to work persons and the adjoining school staff, pupils and visitors
Risk Assessment : High
Principles of Protection : Refer to Option 1
8. Deliveries to Site / Movement of Vehicles
Hazard : Danger to work persons, school staff, pupils and visitors
Risk Assessment : High
Principles of Protection :
 - a) Movement of vehicles onto or off site to cease at times stipulated by the Employer – Deliveries to be made outside school hours etc.
 - b) Allocation of part of Forge Shopping Precinct car park to be used for parking of Contractors vehicles – existing staff car park remains in use – no ‘on-street’ parking permitted
 - c) Banksmen to be stationed whenever vehicles are being manoeuvred onto or off site

- d) Close co-ordination with the School and Nursery at all times – School and Nursery to be given prior notification of all major deliveries and traffic movement. One way traffic system to be used, with where possible, agreed delivery times – drivers to contact Site Agent prior to arrival on site

9. Use of Mobile Plant and Vehicles

Hazard : Danger to work persons, school staff, pupils and visitors

Risk Assessment : High

Principles of Protection : Refer to Option 1

10. Fire

Hazard : Danger to work persons and school staff, pupils and visitors

Risk Assessment : High

Principles of Protection : Refer to Option 1

CONCLUSION

Both options clearly present a serious challenge from a Health and Safety management viewpoint. From our initial observations subject to more detailed site investigations/surveys by other parties to assess the buildability of the proposals, we would err to Option 2 from a Health and Safety management point of view.

Given the complexity of both options, serious consideration perhaps should be given to the procurement process, with the early appointment of a preferred contractor under a 'project partnering' ethos.

JH/MW/KH/SK/714
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James and Hague
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