EFA Contractors Framework

Baysgarth School, Barrow Road, Burton-upon-Humber, Lincolnshire, DN18 6AE
URN 118109

PSBP North & North East Lincolnshire Capital Batch

Feasibility Study for Schemes to be delivered via the EFA Contractors Framework

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Document Control

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TABLE OF CONTENTS

Baysgarth School

Section 1: Overview of Project

1.0 Strategic Overview

This is a feasibility study for Baysgarth School. The Framework User is the Education Funding Agency (EFA) via the EFA Contractors Framework.

Baysgarth School is a Local Authority maintained school for pupils aged 11-16 with an additional 60 post-16 places. The capacity of the School at present is 1059 pupils however the new School is to accommodate 960 pupils, reflecting the current pupil numbers of 861.

Baysgarth School is currently located off Barrow Road in Barton-upon-Humber, Lincolnshire; the new development will be constructed on the existing site. The large site houses a large main school building with a number of smaller blocks to supplement the education space. There is in addition a sports hall that is due for refurbishment and extension under the proposed scheme. The buildings are a mixture of single double and three storey buildings with a combined gross external building foot print of approximately 7124m2. The main structures are surrounded by hard play area, interconnecting pathways and soft landscaped areas. The remainder of the site is playing field.

The new predominantly three storey school building will be located to the west of the existing main school building. The existing sports block will be refurbished and extended to include a gymnasium. The proposal will result in a total of approximately 7500m2 of floor space to be used for education over a footprint for the new building in the region of 2885m2.

The main access will remain from Barrow Road and the existing car park area re-configured to accommodate staff, visitor and accessible parking as well as drop-off and service area. It is envisioned that the car park will also be used by the community in conjunction with out-of-hours use of the sports facilities. The main school entrance is located adjacent to the bus drop-off facility, and the existing pedestrian access points are to be retained.

The school head teacher, leadership team and the North Lincolnshire Council have been supportive of the proposal to deliver the new school through the Priority School Building Programme. The target start on site date is March 2015 with a completion date of May 2016. It is anticipated that the works would be completed in three phases summarized as follows:

- Demolish the existing Administration/teaching and dinning block. Prior to commencement the school will decant these facilities to alternative facilities in the existing school
- Building of the new school and refurbishment of the sports facility
- Demolish existing School and complete external works

1.1 Framework User Commitment

The Project Director will ensure that the North & North East Lincolnshire Capital Batch will follow established EFA procedures and utilise the standard suite of documents for procurement. This includes the use of the Design & Build Contract Development Agreement, Future Schools Agreement and Design and Build Contract.

A timetable is in place to ensure stakeholder approvals are given in a timely manner (e.g. signing of a back to back agreement) and a Memorandum of Understanding between the EFA and the School is in place.

1.2 Procurement Strategy

Oasis Academy has been selected as the Sample Scheme in the batched procurement.

Although the initial procurement relates only to the Sample Scheme, as other schemes may follow, the Framework User anticipates making provision for a Future Schools Agreement to enable the delivery of these futures schemes. The full list of schools within the batch is:

School Name	Type of School	Type of Institution (eg Academy, Free school etc)	Indicative D&B contract sum
Sample school			
Oasis Academy	Primary	Academy	£5,544,021
Future Schools			
Baysgarth	**Secondary**	**Maintained**	**£11,580,888**
Brumby Junior School	Junior	Maintained	£3,998,371
Burton Upon Stather Primary	Primary	Maintained	£2,123,314
Crosby Primary School	Primary	Maintained	£4,611,783
Grange Lane Primary	Junior and Infants joining to form a Primary	Maintained	£3,817,132
Great Coates Primary	Primary	Maintained	£3,101,510
The Vale Academy	Secondary	Academy	£13,381,989

The Scheme will utilise the Lump Sum Option. The scheme will be procured via the EFA Contractors Framework covering the North Sector. The bidders' day and sample school site visit is scheduled for the 2 June 2014.

In addition to the schools listed above, the following Type B Schools have been identified from the North East 3 Batch:

School Name	Contracting Counter Party	Type of Institution (e.g. Academy, Free school etc.)	Indicative D&B contract sum
Sample school			
Charles Thorp Comprehensive School	Secondary	Academy conversion due 01.09.14	£17,445,636
Future Schools			
John Spence Community High School	Secondary	Maintained	£10,918,156

Marden High School	Secondary	Maintained	£11,121,188
Prudhoe Community High School	Secondary	Maintained	£11,759,317
St Joseph RC Primary School	Primary	Voluntary Aided	£1,594,935
Whitehouse Primary School	Primary	Maintained	£2,312,821

The schools listed as Type B schools have been included principally in the procurement of at least one other batch which does not form part of this procurement. They are included here so that if there is a material issue in the delivery of the batch within which those schools principally fall, the Contractor appointed under this procurement may be asked to deliver one or more of the Type B schools. For clarity the Type A schools (those listed in the table above) which are for delivery under this procurement have been or will be included in another procurement for the same reason.

1.3 Delivery timeline

A procurement and delivery timeline is set out in the table below:

The dates on this timeline are based on the assumption that all of the schools will be completed concurrently following on from the sample scheme and Selected Panel member appointment. The contractor may programme this differently.

Procurement stage	Target Date	Comments/notes
SPM Appointed on sample scheme	29/08/14	
Issue ITT	01/09/14	
Client Engagement meetings	01/09/14-10/10/14	
ITT submissions	10/10/14	6 week period allowed for ITT to be submitted following shortlist panel member date
Evaluation complete, appoint SPM	27/10/14	2 weeks allowed for ITT evaluation
Planning Submission	14/11/14	3 Weeks Preparation for Planning submission allowed following SPM appointment
Planning Determination	13/02/15	13 week planning approval duration.
Complete detailed CPs	29/12/14	Detailed design work and development of Contractors Proposals to continue during the planning period.
Contract Award	23/02/15	Same day as FBC approved
Mobilisation/Start on site	24/02/15	1 day following Contract Award

School Buildings Complete	17/02/16	New build complete
School buildings open[1]	31/10/16	Allows 2 weeks decant
Final completion on site[2]	24/01/16	Demolition and external works

A Gantt chart is included at **Appendix 1**.

[1] *Date when new build building is occupied by pupils*
[2] *Date when contractor vacates site*

Section 2: Education Brief

2.0 Demand- Capacity of School proposed

It is essential to ensure that all schools have a sustainable demand. As part of the application process all schools were asked to state the size of the school they were applying for. Robust checks are being undertaken on all schools accepted to the programme to demonstrate they have a sustainable future at the stated size.

To undertake this check all schools/local authorities have been asked therefore to provide year group projections data for all local schools in the same educational phase as the application school for the next 10 years. It has been found that looking at demographic projections beyond 10 years does not provide robust analysis.

Local is defined as within a 2 mile radius for a primary application. These distances are standard catchment areas used for this type of analysis.

The data was then analysed by education specialists within the EFA to determine whether the size of school being proposed was likely to have a sustainable future. In instances where the demand was not proven the schools/local authorities were asked to provide any supporting data. If the size of school applied for was not justified then the education specialists calculated an appropriate size which was then agreed with the LA/school. It is this size of school that would then be provided by the programme.

2.1 Education Brief

Please note: the following vision has been provided by the School. During the engagement meetings, the School has been advised, where their aspirations are beyond the EFA standard specification or funding parameters, for example, the provision of external canopies, or major departures from the baseline designs. In respect of these matters the school has been informed that there is provision within the programme for scope to be added providing it is funded by the School (or Academy sponsor or Local Authority as the case may be).

The aims of Baysgarth School are to:

a. Become outstanding by providing the best possible teaching and learning, which will be supported by effective use of ELearning and ICT in its widest sense, to further raise pupils' achievement. It is our strong desire to make teaching challenging, demanding, and enjoyable; a tall order but one we seek to attain with new technologies at the heart of this drive.

b. Raise the aspirations of all our pupils and community by recognising their success through celebrating and rewarding personal and academic achievements as much as possible.

c. Ensure all pupils achieve their full potential by providing both a curriculum and learning environment that meets all needs, so enhancing the employment prospects of our pupils. Collaboration with local schools, colleges and employers will enrich the teaching and learning opportunities for our pupils.

d. Be a fully inclusive school and centre of learning for all at the heart of our community. We encourage and develop good relationships based on mutual respect between all members of our school community through taking responsibility, using their initiative and being adaptable, both in and out of school. The personal approach is very important to us.

This sense of community is why we have a House system with mixed aged tutor groups. We are conscious many of our parents came to Baysgarth as pupils themselves and so the family tradition is important to us. We are also very aware of our responsibility in enabling and supporting the growth and development of our pupils in preparing them to take their place in society when they leave us. So it is very important for us to work closely with parents to ensure that between school and home, life at Baysgarth is enjoyable, demanding and rewarding for the youngsters involved.

It's also why we encourage our pupils to be actively involved in, and contribute positively to, the local community and actively encourage our site to be extensively used by community groups outside of school hours, especially Performing Arts groups and sports teams.

We believe it is important our pupils experience the wider, world community. In recent years trips have gone to London, Paris, Iceland, the WW1 Battlefields, New York, Hong Kong, and skiing in Austria and Italy. Small groups of our older pupils have also undertaken World Challenge expeditions to Tanzania, Costa Rica, Cambodia and Thailand having raised the money themselves for such ventures. 2015 will see a group go to Namibia.

We are very much North Lincolnshire based and the Governors and I have made a conscious decision that we work collaboratively with local schools and not those as part of a chain run by people in other parts of the country. Consequently, we work closely together with 8 of our local primary schools as members of a trust and 8 secondary schools as part of a consortium in North Lincolnshire. Both collaborative arrangements focus upon the schools involved working closely together to improve what we can do for the benefit of our pupils.

Our pupils' success is based on strong relationships with their teachers and form tutors who constantly track and monitor their progress but with challenge, care and support, enable them to achieve their ambitions.

Ultimately, the personal and social development of our pupils into mature, responsible and well-rounded citizens during their time with us at Baysgarth is just as important to us as their academic success. At Baysgarth School we want to educate our children to be caring citizens, mature adults and fulfilled people in their own right.

We work hard at making Baysgarth a safe and enjoyable place for our pupils to be. We want them to be happy, successful; proud of whatever they do and enjoy learning and life.

For such aspirations to be met the quality of the new build will make a huge contribution. Consequently, we will be very keen to look at the 'heart' of the new build as an area to celebrate the success of our pupils and the maintenance of the grounds at the front of the current building. The school is very fortunate to have such a variety of flora at its main entrance and we want to maintain this 'green' appearance as much as possible.

2.2 Curriculum Analysis, Adjacencies & Accommodation Schedule

Adjacency Requirements

Please note: The following text has been taken from the SSDB completed by the School. Again, the School has been advised, where their aspirations are beyond the EFA standard specification or funding parameters.

- Keen to see the adjacencies of the STEM subjects along with Computer Studies and ICT facilities. STEM subjects are taught as an integrated course one period per week in Years 7 and 8. Having the subject areas next to each other will greatly facilitate a more integrated approach for particular projects at KS4 and 5 as well as KS3.

- Computer Studies will be developed far more, linking in to the employment opportunities rapidly developing on the north bank around Hull. These employment pathways are being developed in conjunction with Sir John Nelthorpe School in Brigg and North Lindsey College in Scunthorpe. One consequence of this collaboration, in addition to providing more courses, will be some of our students visiting the other two institutions for the courses they host as part of their overall programmes of study.
- Keen to develop an adjacency between the Expressive and Performing Arts subjects (Art, Photography, Music, Dance and Drama) to enable more project based work than occurs at present with the subject areas in rooms distributed around the main site. In addition, if they could be placed around the main hall/stage and theatre even greater flexibility in the use of space will occur, not only for our pupils but the local theatrical and dance groups who regularly use our facilities for amateur dramatic performances and rehearsals.
- PE and sports facilities - we offer a significant range of PE and sporting opportunities, and are successful with our academic results as well as sports teams. Our sports facilities are well used by community groups and, naturally, we are keen to see this continue and expand even further. A significant feature we would wish to see in the new build is a gym rather than an activity room because of the specialist resource it provides for our programmes of study in PE and sport.
- Inclusion Centre. This will be a series of small adjacent rooms enabling group work for pupils with Special Educational Needs but also intervention with behavioural modification courses for some of our more disaffected pupils. We have been especially successful with such programmes and off-site provision during the past three years and a purpose built suite of rooms will support a more integrated approach for a significant number of our pupils.
- Learning Resource Centre (LRC) - this is the old library but has evolved over time into a flexible learning resource used by many subject areas. It is very well used by pupils at break and lunchtimes and for special House events held in the evenings. Our LRC manager is keen to see the LRC develop even more to support whole school learning and so a central location at the heart of the school would raise both its status and profile.

<u>Schedule of Accommodation</u>

For this exercise we have used the interactive SoA version 5.5 dated July 2013 provided by the EFA;

- 900 no. 11-16 pupils
- 60 16-19 pupils
- No additional SEN provision
- Curriculum model - typical
- Classrooms – all standard except post-16
- Science - all labs
- Dining in specific area
- Community School

This gives a total gross floor area of 7491m2

Section 3: Surveys, Warranties and Title

3.0 Surveys and Investigations

The development of initial options has taken into account pre-existing Asset Management Plan (AMP) data, record drawings, and previous surveys and investigations.

These records have been supplemented by the additional surveys listed in the table below. Where indicated, the surveys have assignable collateral warranties capable of being assigned to the Framework Panel Member and to the School.

Survey	**Date**	**Status (or rationale for survey not being completed)** *For findings – please see summary after this table*	**Cost Implication (Yes/No)**	**Collateral Warranty Provided (Yes/No)**	**Location of Survey Report**
Topographical survey	March 2014	Completed by Amethyst Surveys Ltd	No	Yes	Huddle
Underground utilities investigation, including drainage survey	March 2014	Completed by Amethyst Surveys Ltd	No	Yes	Huddle
Statutory Utilities searches	Jan 2014	Completed as part of the Envirocheck Desk Study.	No	No	Huddle
Fully dimensioned measured building surveys, including floor plans and elevations					
Building Condition survey	March 2014	Completed by EC Harris for the retained Sports Centre	No	No	Huddle
Asbestos Survey	May 2013	Management Survey was completed on behalf of the Council by Redhills	£91,270 inc. in cost plan	No	Huddle
Desk top ground investigation and intrusive investigation scoping including Previous land use desk top study	March 2014	Completed by ARCADIS.	No	No	Huddle
Intrusive ground investigation including factual and interpretive report	May 2014	Completed by ARCADIS.	No	Yes (factual report only)	Huddle
Unexploded Ordnance Survey	Jan 2014	Completed by 6Alpha Associates.	No	No	Huddle
Site noise survey and assessment	March 2014	Completed by Acoustic Design Technology	Inc. in rate	No	Huddle
Phase 1 Ecology Habitat Survey	March 2014	Completed by e3 Ecology	No	No	Huddle
Tree Survey	April 2014	Completed by e3 Ecology	£8000 inc. in cost plan	No	Huddle
Transport Assessment	n/a	Not required..	No	No	n/a
Flood risk Assessment	n/a	Not required	n/a	n/a	n/a

Survey	Date	Status (or rationale for survey not being completed) *For findings – please see summary after this table*	Cost Implication (Yes/No)	Collateral Warranty Provided (Yes/No)	Location of Survey Report
Drainage Attenuation Assessment	April 2014	Mason Clark Associates	£136,000 inc. in cost plan	No	Huddle

Key Survey Findings:

Topographical survey

The site slopes from North to South in the location of the Control Option from 18.17m – 20.20m, the architects have taken this into account, and the slope can be dealt with by both cutting and filling across the footprint or by considering a split level building.

Underground utilities investigation, including drainage survey & Statutory Utilities searches

Utilities present on the site are:

- Gas – connected to the NE of the main building from Barrow Road
- Mains water and sewage from Barrow Road
- 2 BT connections, one to admin block, which is to be demolished before new build construction commences, and the other to the main building to the NE.
- Electrical substation on site, connected to NE of main building

Gas Supply

The total heating load for the proposed redevelopment is estimated at 652 kW, based upon 87 W/m2 GIFA of 7491 m² with an additional hot water load of 307 kW giving a total heating demand of 959 kW. The above was calculated using BSRIA rules of thumb for space heating and domestic hot water loads. In addition, a 20% “uplift” on the total heating demand was allowed to future-proof development plans for the school i.e. catering, classroom gas provision, etc. Infrastructure works are not envisaged by the Utility provider..

Water Supply

The water storage requirement was calculated on a total water consumption of 20 Litres / student / day, as determined using BSRIA rules of thumb. The above figure accommodates for catering, sports (shower facilities) and general water usage throughout a typical 12 hour day. The total estimated cold water storage load for the proposed redevelopment is 9600 Litres/day. Infrastructure works are not envisaged by the Utility provider.

Electricity Supply

The electricity supply for the proposed redevelopment is estimated at 585 kVA, based upon 0.05kW/m^2; power factor correction and 25% was added to accommodate for possible future loads. Given the uplift in usable floor area, the utility shipper has allowed for potential substation works for the new development.

Please refer to the cost plan for budget costs of new connections, infrastructure works and redevelopment.

The above services will need to be altered, extended or terminated as required by the final development proposal. The searches do not identify any public services crossing the site in the location of the Control Option.

Condition Survey

The AMP report provided by the school, shows that the cost of maintenance in the next 5 years equates to £4,849,000. Combined with the cost of temporary accommodation and disruption to the school if refurbishment was undertaken, this proposal is for the school to be newly built. The condition overview from the survey is noted below.

The building is a two-story concrete frame with a flat roof. There are major structural defects to the floor slab which require further investigation by a Structural Engineer. The existing flat roof is asphalt overlaid with one layer of felt.

In addition, a condition survey was undertaken for the Sports Hall. The cost of maintenance for the Sports Hall over the next 5 years equates to £199,350. The Sports Hall is to be retained and refurbished under the proposals and will incorporate a new activity studio. The condition overview from the survey is noted below.

This sports block is constructed from a steel frame design enclosed by a mixture of steel and brick cladding with the inclusion of a single story brick/ block changing room attached, which dates back to circa 1970. The surveyors were advised that both the flat roof covering and timber sprung sports hall floor have been replaced within the last 5 years. Generally, the internal fabric requires redecoration and general repairs as specified within the survey.

Asbestos Survey

Type	Date	Company
Management Survey	May 2013	Redhill Analysts Limited

The surveys covers the main buildings, however some areas were not accessible during the survey as is to be expected, and it should be assumed that these areas contain asbestos until proven otherwise. The main bulk of asbestos was identified in the following locations:

- Ground – packers to steelwork, walls, insulating panel firebreaks, ceiling panels/boards, floor tiles and adhesive, cement flue, packers to joists, fuse flash guards, cement boxing, gaskets, cisterns, damp proof course, bitumen membrane
- First – packers to joists, ceiling panels/boards, packers to steelwork, floor tiles and adhesive, sink pad, cement flue
- Second – joists, ceiling panels, cement flue
- External – soffits above all windows, underdrawing to canopy, underdrawing to entrances, cement flue

Desk top ground investigation and intrusive investigation scoping & Previous land use desk top study

- **Preliminary Geotechnical**
  Provided scope for ground investigations but results are superseded by intrusive ground investigation results below

- **Previous land use**
  Records indicate that the land was used as primarily agricultural land until 1930 with part of a quarry pit noted to the North-East of the site. There was also an embankment present at this time to the South-West of the site. In 1930, allotments were developed on the South of the site but the land remained largely unchanged until 1968 when school buildings, tennis courts and playing fields were recorded at

the North of the site. Also at this time, a landfill utilised the expanded embankment to the South-West of the site and a small pond was recorded along the slope of the 'Old Quarry' to the North-East.

Intrusive ground investigation including factual and interpretive report

The key findings and conclusions from the above are as follows:

- **Contamination Risk**

  The results of the preliminary laboratory analysis were compared to the ARCADIS in house Generic Assessment Criteria (GACs) for residential end use and aquifer receptors. This presents a conservative assessment of risk indication for the proposed end use.

  Generally concentrations of contaminant of concern were below the GAC protective of human health and environmental receptors. However, localised impacts were identified as noted below.

  Recorded Landfill

  None of the samples taken from the historic landfill were found to exceed the GAC protective of human health or environmental receptors and concentrations of organic compounds were generally below the laboratory detection limit. Additionally, no evidence of landfill type waste was observed in any of the boreholes or trial pits excavated in this area. It is therefore concluded that remedial works to the historic landfill area are unlikely to be required.

  Area Surrounding the Existing Oil Tank Fill Point

  Aromatic hydrocarbons and various PAHs were identified as being in exceedance of the GAC protective for human health in the made ground in WS8. These contaminants and phenol were also detected above the GAC protective for water resources. No groundwater was identified in WS8 during the site investigation; however, as a major aquifer is present at relatively shallow depth beneath the site, it is recommended that the impacted shallow soils are removed from site following decommissioning and demolition of the above ground tanks. Following removal of the impacted soils, sampling of the material remaining in situ should be carried out and a validation report prepared by an environmental consultant.

  Bituminous surfacing

  Core samples of bituminous surfacing material taken in the western playground, a parking area and hard standing around the oil fill point were analysed to determine whether they were derived from coal tar. Samples taken from the playground and parking area recorded elevated levels of several polycyclic aromatic hydrocarbons (PAH), indicating that this material is likely to be derived from coal tar and will be classed as hazardous waste if disposed off site. It is recommended that the macadam is segregated from other materials requiring disposal. It may also be necessary to carry out additional sampling and screening of the soils underlying the macadam to confirm their waste classification.

- **Groundwater**

  The investigation did not identify groundwater beneath the Site and subsequent groundwater monitoring visits to the Site have recorded the majority of the wells to be dry.

- **Ground Gas**

  Carbon Dioxide and Methane

  To date, maximum concentrations of carbon dioxide of 4.2% and maximum methane concentrations of 1.2% with gas flow rates up to 1.8l/hr have been

recorded. Additionally, maximum carbon monoxide concentrations were recorded at 34ppm. This would place the Site into Characteristic Situation 2 (low risk) as defined in CIRCA 665, and it is therefore likely that limited ground gas protection measures will be required and will include the use of a proprietary gas membrane with all joints and penetrations sealed.

Radon

The Site is in a lower probability radon area, as less than 1% of homes are above the action level and thus no radon protection measures are necessary in the construction of new dwellings.

- **Mining Risk**
  According to the Coal Authority a coal mining report is not required for the Site.

- **Foundations**
  Ground conditions in the vicinity of the proposed school include a thin layer of glacial till overlying Chalk. SPT results were noted to increase rapidly with depth and it is anticipated that competent Chalk will be encountered at relatively shallow depth across the site

  Preliminary calculations indicate that for a pad footing, bearing within grade Dc Chalk at approximately 2.0m to 2.5m depth, an allowable bearing capacity of 225kN/m2 will be appropriate in order to satisfy the ultimate and serviceable limit states in accordance with Eurocode 7 - Geotechnical Design. All foundations will need to fully penetrate any made ground and be founded a minimum of 150mm into the founding stratum. The weathering profile of Chalk can vary significantly over short lateral distances. It is therefore recommended that the foundation excavation be inspected by an appropriately trained geologist or engineer prior to pouring concrete.

- **Floor slabs**
  Given the relatively high density of the underlying granular natural soils, and assuming all made ground material is either removed or formation level is prepared and treated in accordance with the 600 Series Earthworks Specification for Highways Works, it is considered that ground bearing floor slab could be adopted.

- **Buried Concrete**
  Based on the reported laboratory data, concrete should be designed for Design Sulphate Class DS-1 ACEC class AC-1s as defined in BRE Special Digest 1.

- **Flood Risk**
  The Envirocheck report indicates there is no risk to the Site of flooding from rivers or sea, However, areas of the playing fields are indicated to be at risk from surface water flooding.

Drainage Attenuation:

Drainage assessment calculations have been carried out to determine the most likely volume of attenuation required on the site and the most cost effective solution, looking at soakaways, swales, ponds and tanks. Attenuation requirements were calculated based on a 1:30 year return period and a cellular storage tank structure having 95% void ratio. We have based our estimations on two possible scenarios which have been weighted towards the suggested likelihood ratings of what the Water Authority may accept. This will be subject to further site assessment and liaising with Anglian Water during the detailed design development.

Soakaway Assessment:

The desktop study report by Arcadis dated March 2014 revealed the site geology make up in the area consist of 'WeltonChalk' formation, leading the way to potential use of soakaway tanks within the school grounds. However it is recommended that a ground investigation / percolation test is undertaken by the contractor to fully determine the design parameters for the soakaway.

Unexploded Ordnance Survey

The Preliminary UXO Risk Assessment undertaken by 6 Alpha indicated that no further action was warranted to address the level of risk at the Site.

Site noise survey and assessment

An indicative assessment of external noise intrusion has been undertaken. Standard forms of building envelope should be acoustically suitable, along with natural ventilation using open windows in all areas other than special needs teaching rooms. In these areas it may be possible to achieve the requirements by means of a passive stack ventilation system, but mechanical assistance or full mechanical ventilation may be required.

New building services plant is expected to be the only significant environmental noise source. As none of the plant has been selected at this stage, environmental noise limits have been defined with reference to the existing background levels, according to the principles agreed with North Lincolnshire Council.

Phase 1 Ecology Habitat Survey

Extended phase 1 survey indicated that the site is predominantly of low ecological value, dominated by amenity grassland, hard standing and buildings. The native mature trees on site are considered to be of local value due to their potential to support nesting birds and roosting bats.

Great crested newts
Great crested newts have not been recorded within 2km of the site boundary. A single small pond is present 400m northwest of the site, however the pond was concluded to be of below average suitability for this species. Furthermore, the pond is severed from the site by roads and built residential development, and no habitats are suitable for this species on site. Great crested newts are therefore considered most likely to be absent.

Bats
No evidence of roosting bats was recorded during surveys, with the majority of the buildings being concluded to be between low and moderate risk for supporting roosting bats. There are a small number of crevices around the school complex suitable for use by individual day roosting bats. These were inspected for field signs and evidence of bats and none was found, however intermittent use at some time during the year cannot be ruled out. There are two mature trees within the site that are considered to be of moderate risk.

The surrounding habitat offers moderate quality foraging opportunities within treed areas to the west and wetland habitats associated with the River Humber 1km to the north. Habitats on site however, are generally poor for foraging comprising mainly amenity playing fields. Connectivity to better quality habitats in the wider area is poor, given the urban nature of the site and well lit roads.

The ecological value of the site to bat species is likely to be low given the urban setting. Further emergence survey work of the school buildings and mature trees is required to determine the presence or otherwise of roosting bats.

Birds
The area of grassland is managed for amenity purposes and used on a frequent basis by school pupils. It subsequently provides little opportunity for ground nesting species due to low sward height and high levels of disturbance. The school building, in addition to ornamental shrubs and broadleaf trees within and around the site, will provide opportunities for nesting birds. Such species include house sparrow and starling, both red listed Birds of Conservation Concern and UK BAP and LBAP priority species, in addition to other species typical of urban environments. The red listed and UK BAP species herring gull, as well as other species, will nest on flat roof buildings in urban settings.

The site is likely to be of limited value during winter months with only a small number of fruit bearing shrubs present. The amenity grassland will provide limited foraging for gulls with approximately 100 common gull utilising the playing field at the time of survey.

Birds observed or heard during the survey included goldfinch, robin, chaffinch, house sparrow, dunnock, greenfinch, black-headed gull, great tit, blackbird, herring gull, wren, woodpigeon, carrion crow, common gull and lesser black-backed gull.

Badger
No setts or field signs of foraging activity were recorded and the site is in an urban setting and poorly connected to any other habitat for this species. In addition, the security gates and surrounding fencing are likely to preclude any large species from entering the school grounds. Suitable foraging habitat is present on site; however, no habitat is suitable for sett creation.

Red Squirrel
Historic records of red squirrel are found across the area, though this species is now considered absent, given the lack of conifer dominated habitat and the presence of grey squirrel.

Invasive Species
A small stand of Cotoneaster horizontalis is present on site. This species is listed under Schedule 9 of the Wildlife and Countryside Act, 1981, as invasive and must be removed to a method statement to avoid causing the spread of this species in the wild and subsequently committing an offence.

Tree Survey

Consultation with North Lincolnshire County Council planning department highlighted that the trees are not within a Conservation Area and that no specific Tree Preservation Orders (TPO's) have been served on any of the trees surveyed within the site.

Root Protection Areas (RPAs) were calculated for each tree to allow a Tree Protection Plan (TPP) to be created where conflicts with any aspect of a future development may occur (a scale diagram should be provided in an annexed TPP report).

For the purposes of this survey, each significant tree was assigned a category of retention in accordance with BS5837:2012. In summary, eight trees were category 'A' (High Quality), thirty-three trees were category 'B' (Medium Quality), five were category 'C' (Low Quality) and two were category 'U' (unsuitable for retention).

None of the trees assessed were considered to have a risk of supporting roosting bats. Overall, within the context of the surrounding area, the trees within the site are assessed as being of moderate to high landscape, amenity and ecological value. Of particular note is tree T/873, which is of particular landscape importance within the site and within the surrounding landscape.

If works are not likely to start within 12 months of this report, it is recommended that an updating survey is undertaken to ascertain any changes which may have occurred to trees surveyed, where failure to carry out the prescribed works within the specified time frames has occurred.

Transport Assessment

A transport assessment was not undertaken. A transport assessment may be required for planning, however this is the responsibility of the contractor in preparation of a planning application.

3.1 Land and Title

The EFA Commercial Manager (CM) nominated for the North and North East Lincolnshire Batch specifically deals with derogations for the EFA across the PSBP programme. Therefore the CM and PD confirm that they fully understand the obligations in the D&B contract with respect to warranting of title information. This position is also fully understood in the warranting of survey information.

A plan of the proposed site is included at appendix 3. Title information and replies to CPSE forms have been requested and included in appendix 3 as provided by the North Lincolnshire Borough Council (Council) in respect of the site.
The EFA external legal adviser, Bond Dickinson, has produced a Report on Title; the annexures from the report on title are attached at Appendix 3. The Report has been reviewed by the CM, PD and Technical Advisor. The key issues in respect of the Report on Title for Title Number HS334131 are as follows:
1. There are two electrical substation leases which affect the Property and there is also a Form of Consent in respect over-head cables:

a) By a Lease of an electrical substation dated 5 December 1961 made between (1) The County Council of Lincoln Parts of Lindsey and (2) The Yorkshire Electricity Board the location of which is shown edged and numbered 2 in blue on the title plan, the Property is subject to the rights granted:
i) a right lay and maintain electricity conduits under the substation and to break up the surface of the substation so far as may be reasonably necessary from time to time for the purpose of laying, re-laying, repairing, maintaining, renewing and removing the electrical conduits doing as little damage as possible and restoring the surface as soon as may be reasonably practicable; and
ii) a right, where necessary, to enter upon the Property for the purpose of erecting, repairing, maintaining and removing the western, northern and eastern brick screening walls of the substation.

b) By a Lease of an electrical substation dated 9 October 1961 made between (1) The County Council of Lincoln Parts of Lindsey and (2) The Yorkshire Electricity Board the location of which is shown edged and numbered 1 in blue on the title plan, the Property is subject to the rights granted:
i) a right of way to pass, with or without vehicles over the land coloured green and the land coloured brown on the plan attached to the Lease;
ii) a right to lay and maintain electricity cables and conduits or ducts for containing the same under the land coloured green on the plan attached to the Lease; and
iii) a right to break up the surface of the land coloured green on the Lease plan so far as may be reasonably necessary from time to time for the purpose of laying, re-laying, repairing, maintaining, renewing and removing the electrical cables and conduits or ducts doing as little damage as possible and restoring the surface as soon as may be to the reasonable satisfaction of the Council.

c) By a Form of Consent dated 26 January 1956 made by the Urban District Council of Barton upon Humber consents to electric lines being placed along the route shown by the red line in the plan attached to the Form of Consent. The Consent is subject to the Yorkshire Electricity Board (the YEB);
i) to keep the owner and the occupier of the land indemnified against any losses incurred by reason of negligence or omission on the part of the YEB;
ii) making good any damage caused to the land or property;
iii) if the owner wishes to build premises on the part of the land crossed by the electric lines the owner may give not less than 6 calendar months' notice to the YEB and the YEB will remove the electric lines provided that the lines may be re-routed across the owners land.

To mitigate this risk, we propose that full site surveys will need to be carried out to establish what pipes, drains and other conducting media run under the site. This would be necessary in any event because even if there were no rights referred to on the title it would not mean that there is nothing running under the site that serves other property. The results of the surveys will be analysed alongside this title information and incorporated into the design solution as necessary.

2. The Property is affected by a Tree Preservation (Caistor Road, Barton) Order dated 24 July 2002 and Tree Preservation (Barton-Upon-Humber) Order dated 28 January 1955. The EFA short form enquiries also reveal a Tree Preservation (78 Barrow Road, Barton-upon-Humber) Order dated 11 January 2006.

We propose that mitigation of this risk is achieved in the same manner as proposed in paragraph 1 above.

3. There is a Licence, dated 21 June 2011 made between (1) Baysgarth School Governing Body and (2) North Lindsey College for the College to use the skills centre as shown edged in red and share use of the communal dining facilities and staff room/office as shown edged in blue on the plan attached to the Licence, for certain hours during the school term time. The Licence expired on 31 August 2011, but it will continue to roll over on each anniversary for a further year unless either party gives notice of termination in writing. Notice should be given not less than 14 days prior to the anniversary date.

Has this Licence been terminated and if so is there a record of such termination or is intended to continue during the works?

4. The Drainage and Water search indicates that there are sewers mains or drains and water mains, resource mains or discharge pipes within the boundaries of the Property.

We propose that mitigation of this risk is achieved in the same manner as proposed in paragraph 1 above.

5. There appears to be gas, electric and BT apparatus within the boundaries of the Property.

We propose that mitigation of this risk is achieved in the same manner as proposed in paragraph 1 above.

6. The Search of the Index Map has identified areas within the Property boundary that do not form part of title HS334131.

7. The Property is underlain by running sand, shrinkable clay, natural compressible deposits and soluble rocks.

We propose that mitigation of this risk is achieved in the same manner as proposed in paragraph 1 above.

8. An area of land within the northern part of the site falls within the 250m buffer zone of the Church of St Peter which is an area of archaeological interest.

We propose that mitigation of this risk is achieved in the same manner as proposed in paragraph 1 above.

The CM confirms that the relevant searches have been carried out and no significant delivery issues have been identified in relation to those searches. The PD confirms that the site area matches the plans provided in the title information.

Section 4: Site Analysis and Control option

4.1 Option appraisal

Introduction

Baysgarth School is a 900 place secondary school with a 60 place sixth form.

The existing school and brief

Baysgarth School is located off Barrow Road in Barton-upon-Humber, Lincolnshire, close to three neighbouring primary schools to the North-West and South-West.

The School is to accommodate 960 pupils including a 60 place sixth-form college. There are no proposed changes to existing pupil numbers.

Site Analysis

The site is in a primarily suburban residential area, with houses backing onto large parts of the site. Caistor Road runs along the southern boundary of the site. Main access is provided off Barrow Road to the North of the site. A secondary access also off Barrow Road services the Skills Centre and associated car parking

Control Option – Site layout

The proposed control option locates a new predominantly three storey school building to the west of the existing main school building accessed from Barrow Road. The new school will still address the existing main access from Barrow Road but will provide a more compact and rationalised layout. The secondary access off Barrow road to the Skills Centre will also be maintained.

The main access will remain from Barrow Road and the existing car park area re-configured to accommodate staff, visitor and accessible parking as well as drop-off and service area. The car park can also be used by the community in conjunction with out-of-hours use of the sports facilities. Service access will be off the remodelled car park.

The main school entrance is located adjacent to the bus drop-off facility, and the existing pedestrian access points are retained.

The existing AWPs will be retained and available for community use. The MUGAs lost to the new build will be replaced in a similar location and adjacent to the main informal hard play area.

The extensive playing fields will be retained, and the remaining areas over the existing building footprint will be grassed over to create areas of informal soft play and provide the opportunity for developing habitat areas.

The proposed site layout will also allow site security to be rationalised and improved.

Existing trees will be retained wherever possible.

In summary the considered benefits of the proposed Control Option location are:

- Gives the school presence on the site, overlooking the grounds
- Restricts the amount of new infrastructure required

- Retains the existing sports facility and some MUGA facilities
- Allows easy access for community and sports use
- Improved parking and access for staff and service vehicles
- Less disruption and safer site during construction
- Optimum orientation for main teaching/learning spaces
- Playing fields retained so no overall reduction in Sport England Areas
- Trees retained/ protected where possible and re-planted if removed

Control Option – buildings

The control option is a bespoke two and three storey building based on the baseline 'finger' block principles. Communal areas are located towards the main entrance and front of the building to allow out of hours use whilst not compromising security.

The existing sports complex will be retained and refurbished and include the provision of a new gymnasium.

The unused teaching block to the west of the site will be redecorated prior to commencement of the main work to allow the decant into the building to accommodate the services being provided by the two buildings to be demolished prior to the construction of the new school building.

The sports field will remain un-changed

Phasing, decant and construction access

In consultation with School, the proposal for the site is as follows:

Phase 1:
- Redecorate the unused school building to the west of the site – Consideration may be given to undertake this works as part of an Early Works Order

Phase 2
- Demolition of Dining and Teaching/Administration Block

Phase 3
- Construction of new building and local external work

Phase 4
- Demolition of existing school and completion of external work

Construction access
- Via the main entrance on a controlled access basis to avoid beginning and end of the school day

Site compound
- Assume on the playing fields to the West or North of the site.

A copy of the proposed phasing plans is included in **Appendix 1**.

Conclusion

The proposed Control Option is considered to be a feasible option, based on existing information, and will provide modern and up to date facilities. The new building will have a Gross Internal Floor Area of 6,706m2 plus the additional 820m2 provided through the refurbishment of the existing Sports Centre. The site area is currently 128,000m2.

The table below summarises the proposed changes to gross areas of buildings and playing fields[3]

	Existing m^2	Proposed m^2
Gross area of site	128,000	128,000
Existing gross footprint area of buildings	7124	2885
Playing field area	87,500	88,500
Proposed area - demolition		2830
Proposed area –no work		0
Proposed area- refurbishment		820
Proposed area –new build		6706
Total proposed gross internal floor area of buildings		7526

A control option has been developed to inform affordability and to demonstrate deliverability, this is included at Appendix 4.

4.2 Statutory Processes

Planning and Highways

Following a meeting with North Lincolnshire Planning Department William Hill being the Local Planning Authority (LPA), the LPA have provided a letter of comfort that whilst detailed proposals have not been presented to the council at this stage, issues such as scale, massing, likely site configuration have been reviewed and are considered, subject to further scope of works identified, to be acceptable in principle.

The letter provides feedback under the following specific headings:

Design and access Statements
Archaeological Assessment
Heritage Statement
Economic Regeneration Statement
Environmental Impact Analysis
Land Contamination Assessment
Green Travel Plan
Landscape Proposals
Transport Assessment
Tree Survey

A copy of this letter is included in Appendix 4.

Sport England

The proposed site contains land currently or previously designated as playing fields. Accordingly advice has been sought from Sport England about the impact of the scheme on playing field land and an enquiry was logged with Sport England on 14/04/14and a response was received on 14/05/14.

[3] The interpretation of 'Playing field' should be defined as in Annex E paragraphs 3 and 4 the following document:
http://media.education.gov.uk/assets/files/pdf/a/advice%20on%20the%20protection%20of%20school%20playing%20fields%20and%20public%20land.pdf

A copy of the Sport England initial response is included in Appendix 4

Sport England would have no objection to the proposal as there is no loss of sport facilities. The new area of playing field[3] would need to be fit for purpose as it will be used to offset losses on other PSBP school sites

Section 5: ICT

Legacy ICT will be transferred to the new and/ refurbished accommodation.

As no separate ICT procurement is taking place this project will not have a traditional ICT requirements document or output specification. The infrastructure requirements for the builder are contained in the ICT Design Guide and Responsibility Matrix (appendix 5).

The ICT audit for Baysgarth School has been completed and is available within the School Specific ICT Equipment Summary Document at appendix 5.and will be made available to bidders at ITT. This audit includes information regarding any new equipment that the school wishes to purchase with its own resources to ensure that timings do not impact the construction project.

The school have been made aware that they will not need to develop ICT requirements/Output specification for the construction procurement and that no separate funding will be made available for ICT equipment.

The ICT risks are included in the Risk Register in Appendix 8.

Section 6: Affordability

6.0 The EFA funding available for this scheme is £3,707,068 including the LA funding contribution.

6.1 The table below sets out the affordability of the scheme. The EFA acknowledges the funding for the scheme is capped at the amount stated in the table below and accepts their responsibility to administer and manage the D&B Contract within the sum stated in the table.

Category	Fixed Funding Allocation	EFA Estimate	Variance
Construction Costs	£7,981,651	£7,971,029	-£10,622
External Works	£957,798	£653,290	-£304,508
Abnormal Costs	£399,083	£660,630	£261,547
Fees	£1,167,316	£937,715	-£229,601
FFE	£734,240	£734,240	£0
ICT Infrastructure	£297,600	£297,600	£0
ICT Commissioning/Decant	£43,200	£43,200	£0
D&B Contract sub-total	**£11,580,888**	**£11,297,704**	**-£283,184**
D&B Contract Total	**£11,580,888**	**£11,297,704**	**-£283,184**

Cost estimates are included at **Appendix 6**.

Abnormal costs include:

- Removal of Fuel Tank (£15,400)
- Excessive Demolition (£38,470)
- School decant (99,000)
- Cut and fill to existing site (66,000)

Section 7: Lifecycle and Facilities Management

7.0 Brumby Junior School has included in their letter at Appendix 1, confirmation that these costs can be met from their budgets

	Cost range £/m^2 pa
Soft FM	25-35
Hard FM	8-15
Lifecycle	7-15

Total	**40-65**

Section 8: LA Resources, Project Management and Risk

8.0 Project Resources

The Framework User has established a fully resourced project management regime for the successful delivery of the Scheme through to completion on site.

Role on Project	Position	Name	Time Commitment (days/month)
School Representatives	Head Teacher	C Saywell (from Sept 2014 R Briggs)	As required
	Business Manager	K Bassindale	As required
LA Representative	Principal Capital Officer	Steve Piper	As required
Project Director	EFA Project Director	Paul Clegg	As required
Project Manager	EFA Project Manager	Ross Bellingham	As required
Technical Advisers	Technical Adviser	Peter Brotherwood	As contracted
	Technical Adviser	Emma Cochrane	As contracted
CDMC	CDMC	Tim Britton	As contracted
Design Advisor	EFA Design Adviser	Stephen Hill	As required
ICT Advisers	EFA ICT Adviser	Steve Cutting	As required
Commercial Manager	EFA Commercial Manager	Mike Sturgeon	As required

8.1 Procurement Documentation

The Framework User can confirm that the procurement documents have been prepared and will be available to issue to the Framework Panel Members in line with the dates as set out in the table at section 1.3.

These include the:

- PITT
- ITT (including draft D&B contract with derogations agreed by EFA)
- ICT requirements spreadsheet including ICT responsibility matrix

8.2 Risk Management

The Framework User's risk management process is applied to all major projects and for this scheme is managed on a day to day basis by the Project Manager. A detailed risk register, including procurement and ICT risks is included at **Appendix 8**.

The particular site risks which have been identified at this stage are:

1. Planning conditions

2. Ecology including bats and Great Crested Newts
3. Additional asbestos finds not apparent in current Management survey
4. Constrained development area adjacent to existing school
5. Construction access and management
6. Phasing to refurbish the hard standing to car park outside of school term
7. Fuel Tank Removal
8. Trees
9. Attenuation costs- final percolation tests indicate ground unsuitable for soakaways
10. Retained sports hall requires significant work in excess of that identified in the Condition Survey

APPENDICES

APPENDIX 1
- Memorandum of Understanding
- Project Programme
- FM letter

APPENDIX 2
- School Specific Brief
- Schedule of Accommodation
- Adjacencies Diagram

APPENDIX 3
- Plan of site to be developed
- Phasing plan

APPENDIX 4
- Control option drawings
- Letter of Planning support
- Sport England Response Letter

APPENDIX 5
- ICT Equipment Summary
- ICT Design Guide and ICT Responsibility Matrix

APPENDIX 6
- Cost Estimates

APPENDIX 7
- Report on Title and Annexures to the Report on Title
- Title Plan

APPENDIX 8
- Risk Register

APPENDIX 9
- LA Funding Confirmation
- Section 151 Letter