Boothville Primary School
Planning Statement
March 2013

Construction of a new single storey, four classroom teaching block with covered play area staff room and enlarged car park at Boothville Primary School, to enable the school intake to increase from 420 to 630 places.

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Northamptonshire County Council
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1.0 Introduction

Architecture Initiative, on behalf of Northampton Schools Limited Partnership, has been commissioned to develop a proposal for the expansion of Boothville Primary School in Northampton.

Full planning approval is sought for the construction of a new single storey, four classroom teaching block with covered play area, staff room and enlarged car park at Boothville Primary School, to enable the school intake to increase from 420 to 630 places (2 to 3 form entry). The increase in pupil numbers is forecast to occur steadily over a seven year period to match demand.

It should be noted that the current school intake capacity is 420 pupils. This is based on 60 pupils per year, over 7 year groups. The current number of pupils on roll at the school differs from this school capacity figure.

Summary of Proposal

The application site area is 1667sqm. The proposal involves a single storey stand alone block located to the south of the existing school building, with a gross internal floor area of 434sqm. The existing school building has a gross internal floor area of 1515sqm.

This Planning Statement details the context of the proposal and specifies how it relates to relevant national, regional and local planning policies. Consultation undertaken in the development of the proposal is also detailed.

2.0 Submission

This submission for planning approval includes a Design & Access Statement which explains the proposed extension and associated works and also details how the design of the proposal developed from the initial brief set by Northamptonshire County Council (NCC).

A full set of drawings are also submitted, as well as the additional documents, required to meet local planning requirements as detailed in NCC’s Regulation 3 Applications: Local List Requirements document. These include:

**Drawing:**
- BV-01 Location plan
- BV-02 Existing site plan
- BV-03 Existing elevations
- BV-04 Proposed site plan
- BV-05 Proposed ground floor plan
- BV-06 Proposed elevations/sections
- BV-07 Proposed 3D views
- BV-08 Proposed site access plan
- BV-09 Site photos
- BV-10 Construction management

**Document:**
- Design & Access Statement
- Planning Statement
- Transport Assessment
- School Travel Plan
- Arboricultural Survey / AIA
- Noise Impact Assessment
- Drainage / Foul Sewage
- External Lighting
- Site Investigation Report

**Completed by:**
- Architecture Initiative
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- Architecture Initiative
- Architecture Initiative
- BCAL
- Boothville Primary School/BCAL
- Lockhart Garratt
- Ion Acoustics
- Michael Barclay Partnership
- Peter Sharp Associates
- Soiltechnics
3.0 Requirement for Primary Places

Decision to Expand: Overview

It should be noted that this application specifically concerns the built accommodation and associated works required to house the additional intake of pupils at the school.

The decision to enlarge the school is covered via a formal process undertaken by Northamptonshire County Council, which included a period of consultation with a final Cabinet Member decision in early 2013.

The proposed expansion is related to the general rise in the population of primary aged pupils living in the area, which is the result of the higher birth rate and inward migration being experienced by the County as a whole and Northampton in particular.

Recent census data demonstrates a 19% increase in the County’s under-fives population. Northamptonshire County Council has a statutory obligation to provide sufficient school places for all pupils living in the area. Current projections forecast that additional capacity is required in the local area and therefore extra places are proposed at Boothville Primary School.

Alternative solutions to the need for additional places considered by Northamptonshire County Council included:

(i) Providing ‘Portakabin’ style accommodation to house the additional intake. - It was concluded that this would not provide a long-term conducive learning environment for children and would separate them from their peers.

(ii) Transporting children to alternative schools outside the town. - It was concluded that there would be a negative impact on the welfare and education of children for them to be spending considerable parts of their day on buses and this does not support the healthy schools agenda.

(iii) Reconfigure the starting ages for children to attend school. – It was concluded that this would not adequate to meet the levels of school place demand and does not ensure that every child in the county has the same opportunities as their peers.

(iv) Increase class sizes. – Legislation precludes this option.

Therefore NCC made the decision that the best solution is to construct additional long-term teaching accommodation on the school site to accommodate the enlarged pupil intake.
Decision to Expand: Analysis by Northamptonshire County Council

Demand for school places

Analysis of the January 2013 surplus capacity for primary school places in Northampton is that there are 445 spare places across all age-groups (mainly at the higher end). This is a surplus of 2.7%, which is well below the recommended working capacity of 5 – 10%, and certainly undermines the Government agenda of providing choice and diversity for parents in the admissions process. The Northampton position is not a surprise given the rising birth rate, new housing and high levels of migration into the county; Northamptonshire County Council continues to make plans for an additional 4,400 pupils in Northampton primary schools by September 2014.

There is a national picture of rising pupil numbers, with Department for Education calculations that the primary school population is set to rise by 18% in the next 8 years, requiring an additional 450,000 new primary school places. As well as the rising birth rate as evidenced by the recent census data, a further indication of the continuing increase in school applications is the number of “In-Year” applications from families moving either within the county or into the county for the first time, but outside of the standard times for school place allocations. The figure for September 2012 was 459 children (primary and secondary) moving into the county for the first time. Indications for the September 2013 intake to reception classes are that numbers will continue to grow; by the end of January 2013, just under 9,000 primary applications had been received, which is approximately 500 more than the same time last year. Last year this figure was supplemented by 960 late applications.

Admission numbers at Boothville Primary

The published admission number at this school has been 60 pupils per year group (a total roll of 420 pupils) since the Northampton schools’ re-organisation was implemented in 2003 / 04. Prior to this it was a Lower School with a three form entry admitting 81 children into Reception each year. In September 2011, the school was required to establish a third Reception class as a result of the appeals process. In September 2012, the school again admitted three forms of entry at the request of the local authority. Postcode analysis of these 90 children’s addresses highlighted that they all resided within 1.432 miles of the school and were not being allocated a place at Boothville from outside the area. It is also noticeable that some new housing is under construction in the immediate area (e.g. Jubilee Mews off Lumbertubs Way) and may generate additional pressures.

The current pupil numbers at the school are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception</td>
<td>90</td>
</tr>
<tr>
<td>Year 1</td>
<td>90</td>
</tr>
<tr>
<td>Year 2</td>
<td>60</td>
</tr>
<tr>
<td>Year 3</td>
<td>60</td>
</tr>
<tr>
<td>Year 4</td>
<td>58</td>
</tr>
<tr>
<td>Year 5</td>
<td>60</td>
</tr>
<tr>
<td>Year 6</td>
<td>60</td>
</tr>
</tbody>
</table>

Permanent plans for Boothville

Public Notices were published on 8 November 2012 regarding a permanent increase in capacity to three forms of entry and the final decision to proceed was taken by Cabinet on 15 January 2013. The required extension to the accommodation will be delivered via a contract variation to the Northampton Schools PFI contract. In the meantime, the school is operating within its existing buildings and has had planning granted for the newly installed mobile classrooms for use from February 2013 until building works are completed.
4.0 Consultation

This Planning Statement has been prepared by Architecture Initiative, who have been appointed by Northampton Schools Limited Partnership to develop a proposal for Boothville Primary School on behalf of Northamptonshire County Council.

Northamptonshire Schools Limited Partnership (NSLP) is a Special Purpose Vehicle (SPV) set up to run the Northampton Schools PFI Scheme. The scheme, which was set up in 2005 following the Review of Education in Northampton includes the operation and maintenance of five secondary schools and thirty-six primary schools in Northampton over a 32 year period.

Boothville Primary is one of the primary schools covered under the PFI scheme.

Consultation has occurred with Northamptonshire County Council, local authority, PFI SPV (NSLP), the School, governors, parents and neighbours of Boothville as well as NCC planning department and other relevant consultees to the planning process.

The Consultation is summarised below.

Northampton Schools Limited Partnership (NSLP)
PFI SPV
Consultation throughout the development of the brief, and progression of the design via meetings, and discussions via email and telephone.

Amey
PFI Facilities Managers
Consultation throughout the design process.

Northamptonshire County Council (NCC)
The brief for the project was set, and the design developed in conjunction with NCC through regular meetings, and discussions via email and telephone.

Boothville Primary School
Head Teacher & School Governors
Consultation throughout the development of the brief, and progression of the design. Consultation occurred through meetings, and email.

Parents, pupils & neighbours of Boothville Primary School
An open consultation meeting was held for the pupils and parents at the school, as well as the local community and neighbours, concerning the expansion of the school. Details of the items raised and how they influenced the proposal are explained on the following page.

Northamptonshire Planning Department
Principal Development Control Officer, Planning Services
Consultation occurred regarding the principles and specifics of the design and the requirements of this planning application submission. Meetings were held regarding the proposal and regular discussions occurred.

NCC Highways Department
Highways, Transport & Infrastructure
Consultation regarding highways/transport at the school.
NCC Archaeological Advisor
Consultation via email and telephone regarding archaeology and heritage of the site. Refer to section 7.0 - Heritage / Archaeology later in this document.

NCC Environmental Planner
Senior Environmental Planner, Planning Services
Consultation regarding the arboriculture, ecology and landscaping of the site, via meetings, email and telephone. Refer to section 8.0 - Ecology and section 11.0 - Trees / Arboricultural, later in this document.

Northampton Borough Council HSE
Environmental Health
Consultation undertaken regarding site investigations and contamination.

Northamptonshire Police
Crime Prevention Design Adviser
Consultation via email and telephone regarding Secured by Design and crime prevention principles on the site. Refer to section 13.0 - secured by design later, in this document.

Sport England
Consultation via email and telephone regarding play space/ sports pitches on the site. Refer to section 10.0 - Impact on Playing field, later in this document.

Environment Agency
The Environment Agency has been contacted in regards to flood risk on the site. Refer to section 9.0 - Flood Risk, later in this document.

Consultation with Parents, Pupils and Neighbours
A public consultation evening was organised at Boothville Primary School on Tuesday 15th January between 7.30 and 9.00pm. The event was well attended by local residents, parents, school staff and governors. No concerns were raised regarding the development, but concerns were raised in regards to traffic, car parking and pupil number increase.

In response to these concerns the authority has produced a robust transport statement in conjunction with the school. This indicates that the development will not have significant adverse affect on traffic and additional car parking spaces will serve the increased staff car parking needs. Although there is increased adverse impact on the safety of neighbouring roads and junctions, the school travel plan clearly indicates active measures by the school to support a reduction in vehicular dependency, promoting alternative modes of transport.

The main points raised were from neighbours of the school who had concerns with the increased traffic the school will potentially receive.

Traffic at peak times of pupil drop-off and pick-up from school will be managed in accordance with the school traffic management plan.
5.0 Developing the Brief

The overall brief for the project, set by Northamptonshire County Council, was to develop a proposal for housing the additional intake required at Boothville Primary School to suit the specific constraints of the site and educational requirements of the school. To maintain external play space and deliver an expen
temporary, cost-effective and sustainable construction solution, whilst minimising the impact on the running of the school during construction.

The specific brief for the expansion which forms this proposal, was then developed through site analysis and consultation and dialogue with NCC, NSLP, Boothville Primary School and other consultants, listed in the Planning Statement.

Northamptonshire County Council gave specific request that the accommodation provided should adhere to the Department for Education’s Building Bulletins. The bulletins set out the types of spaces that school of a particular size should have and the areas of those spaces.

Northamptonshire County Council is also acutely aware of the potential traffic and car parking impacts that increasing school places can incur and in developing the brief the Northamptonshire County Council has engaged with the highways authority and the school to insure where possible impacts are limited by additional facilities provided on the school site.

Setting the Brief

In order to keep the impact on the day-to-day running of the school during construction as small as possible it was decided from the outset that all additional accommodation required be provided in a new stand-alone building and any works to the existing school building are minimised. This is also the best way to ensure that the expansion of the school can occur in the most cost effective manner (the budget for expansion is finite).

With this starting point, analysis of the existing spaces within the school was undertaken in order to identify the additional accommodation required to enlarge the school from 2 to 3 forms of entry. This was completed in conjunction with the school in order to ensure that the best educational solution was reached.
5.1 Existing School Analysis

The main circulation route in the main school building extends out towards the north and east from the centrally located hall. The classrooms are currently orientated around the west and south perimeters of the hall and circulation route with views out onto the landscape.

A main consideration in a 3FE school is that the three classrooms in each year group are kept as a group, so with this in mind 14 groups of classrooms are required in the enlarged 3FE school (as well as other support and shared accommodation).

As previously noted, Northamptonshire County Council use area and space standards as set out in the 2003 document Building Bulletin 99: Briefing Framework for Primary School Projects as a guide for primary school provisions in the County.

It was against these space standards that analysis of the existing building was undertaken in order to determine the additional spaces required.

The conclusion of this analysis was that four additional classrooms, with associated covered play area and accommodation (such as WC’s and stores) and a new staff room space, would be required for the school to enlarge to a 3FE intake of 630 pupils.
5.2 Expansion Options

The new building could potentially be located in a number of locations. However creating a successful circulation link back to the new building will provide the best possible solution of the proposed location as the link needs to run off the existing central circulation routes.

The next step was to analyse the most desired locations on the site for locating the new stand-alone block. This would ideally be as near to the existing school building as possible, whilst minimising the impact on sports and play space. Through discussion with NCC and the school three possible locations were indicated for the new classroom development.

The following principles and practises were employed in the analysis of location options for the additional accommodation:

(i) The location that would have the least impact on the private amenity of surrounding neighbours.
(ii) The location best suited due to site constraints e.g. protection of green spaces for sports, construction access, protection of the environment, etc.
(iii) The location best suited to support the circulation of pupils within their year groups and key stages.

The diagram below illustrates the potential locations that were identified for siting the building. Two of these options (shown in blue) were deemed less appropriate;

Option B is situated on an area of soft play area that is currently occupied by play equipment. It is also too far away from the existing school building and would require pupils to travel an unnecessary distance from the main school building. Option C takes up a large amount of hard play area and would require the relocation of sports provision.

Option A is the most favourable site for the new classroom block as it sits comfortably within the existing site and is most considerate to the current building arrangement. Option A is located on an existing area of soft landscaping; and would require the removal of trees, none of which have TPO’s. There was also a disused building in this location, which is to be demolished (note this is covered in a separate planning application).
5.3 Proposal

The basis of the concept revolves around the rationalisation of spaces. From this point the building layout was developed through an iterative process of consultation, design and redesign.

The form of the proposed new teaching block is designed to respond to the tight site and was directly inspired by the existing buildings of the school. The overall result is one that sits lightly within the landscape while providing a valuable and sensitive addition to the existing built fabric.

The external works involve the existing car park being extended, requiring the removal of an existing tree. Two trees are to be removed adjacent to the new building. These will be replaced by two new trees. New cycle racks will be added.
5.3 Proposal

Impact on Residential Amenity

The views below illustrate the impact the proposal will have on the neighbouring residential properties that bound the western edge of the school site.

Taken from the boundary between the neighbouring gardens and the school site, the massing of the proposed scheme is shown outlined in relation to the existing school buildings. Thus giving a clear indication as to the effect the new teaching block will have on these residential properties.
6.0 Planning Policy & Design

The diagram below identifies zones of land use surrounding the school site and details the relevant development areas.

As the map indicates, the area immediately surrounding the school site is mainly residential.
National Planning Policy Framework

Achieving Sustainable Development

The National Planning Policy Framework 2012 (NPPF) sets out a number of policies that constitute the Government’s view of what sustainable development in England means in practice for the planning system. Paragraph 7 of the NPPF outlines the three dimensions to achieving sustainable development:

- **1. economic** – contributing to building a strong, responsive and competitive economy
- **2. social** – supporting strong, vibrant and healthy communities
- **3. environmental** – contributing to protecting and enhancing our natural, built and historic environment

The proposed design aims to address these three core principles by:

- **1.** Once expanded the school will provide additional employment opportunities for full and part time members of staff. Refer to the West Northamptonshire Joint Core Strategy Policy S7 section below.
- **2.** The reason for the proposed expansion of the primary school is in order to meet the needs of the local community, to ensure that all children have the opportunity for high quality education in well-designed schools in the locality of where they live.
- **3.** The proposal is of high quality and of scale and appearance that is in keeping with the local area and existing school building and in this way maintains and enhances the quality of the built environment.

Delivering Sustainable Development

Boothville Primary School and the design team are committed to ensuring the sustainable expansion of the existing school building. The sections on the following pages outline how the proposed design addresses the relevant NPPF planning policies.
Promoting Sustainable Transport

The school site may be considered as a ‘development that generates significant amounts of movement’. Therefore paragraph 32 of the NPPF should be taken into consideration. It states that:

All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- safe and suitable access to the site can be achieved for all people;
- improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development.

The submitted transport statement and school travel plan demonstrates the NCC and Boothville Primary School’s commitment to promoting sustainable transport. The schools travel plan aims to encourage the use of more sustainable forms of transport and reduce the number of car journeys to the school. The school design changes reflect the commitment to give priority to pedestrian and cycle movements, create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians.

The school travel plan which aims to inform the travel choice of staff, parents and guardians and encourage the use of more sustainable forms of transport. The travel plan aims are set out below:

- Encourage safer routes to school for children.
- Reduce the number of car journeys to school.
- Encourage healthy lifestyles.
- Contribute to conservation by reducing the consumption of fossil fuels.
- Raise children’s awareness of the pollution and environmental issues associated with car use.
- Adoption of positive approach to walking to school.

It should be noted that the schools travel plan will be submitted as a draft document and final versions will be conditioned as part of planning approval.
The school extension to provide additional classroom space will extend the life of the existing school building, ensuring current school provision has a long term future. Using building form to create positive and attractive external space and appropriate and inspiring places for learning.

The design will meet the objective to provide high quality buildings and environments and a good standard of amenity and to support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change, and encourage the use of renewable resources (for example, by the development of renewable energy).

The school design considers the requirement for games areas and the proposal attempts to ensure no actual loss of total area. This is an example of how the school proposals take account of and support local strategies to improve health, social and cultural well-being for all, and deliver sufficient community and cultural facilities and services to meet local needs.

The design proposal reflects the character of the school site, and through its choice of location, scale and materials responds positively to the identity of the local surroundings - primarily residential houses. The proposal will use a brickwork that matches the colour of the existing building and be provided to a scale which will sit well with the school site as a whole.

The applicant is committed to providing a safe and accessible environment for learning and the prevention of crime and disorder. For further details please refer to the Secured by Design section of this document.

The proposal has been carefully designed to sympathetically respond to the existing school. The scale and rhythm of the existing elevations have been emulated in the proposed teaching block. However contemporary details have been added so that the teaching block is read as a modern addition to the school site. Therefore ensuring a visually attractive addition that is well consolidated in relation to the existing school building and surrounding grounds.
Promoting Healthy Communities

In terms of promoting healthy communities, there are several policies within the NPPF that the proposal would be required to address:

Paragraph 69 states that developments should aim to promote:

- safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion; and
- safe and accessible developments, containing clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas.

Paragraph 74 underlines the importance of existing open space, sports and recreational buildings and land, including playing fields and states that they should not be built on unless:

- an assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or
- the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location.

Paragraph 72 outlines the importance of ensuring that a sufficient choice of school places is available to meet the needs of existing and new communities. It states that local planning authorities should take a proactive, positive and collaborative approach to development that will widen choice in education.

The design has been developed to create safe and accessible learning environments where crime and disorder (but more generally antisocial and bullying behaviour) do not undermine quality of life with the school and wider community. For further information please refer to the Secured by Design section in this document.

The proposal has aimed to provide a safe and accessible master-plan design for the school site, containing clear and legible pedestrian routes, and allow for safe access for the wider community to the school facilities.

The school design has been developed to reflect the planning policy and aims to deliver the social, recreational and cultural facilities and services the community needs.

Access to high quality open spaces and opportunities for sport and recreation can make an important contribution to the health and well-being of communities. Through our consultation with Sport England we have ensured that the development will result in no loss of sports pitch.
6.2 Local Planning Policy

The Local Plan for Northampton Borough defines the school site in its Proposals Map for Boothville ward as a School/College Site. The area surrounding the school is identified as Primary Residential. Policy E20 is appropriate to the proposal and outlines the following main principles, which it is believed the proposal meets:

Northampton Local Plan, 1993-2006, adopted June 1997 and subsequent Schedule of Saved Policies, September 2007 Planning permission for new development will be granted subject to:

- The design of any new building or extension adequately reflecting the character of its surroundings in terms of layout, sitting, form, scale and use of appropriate materials.
- The development being designed, located and used in a manner which ensures adequate standards of privacy, daylight and sunlight.

The immediate context of the proposal is the existing school building, which is all single storey and of similar architectural language; monolithic rectilinear forms of brown tile cladding with blue spandrel panels.

The form and scale of the proposal relates to that of the existing building, being of single storey building with a flat roof. Its external appearance is derived from the existing building; the buff/brown brick exterior matched to the colour pallet of the existing brickwork. Although the specific architectural language of the openings within the façade differ from the existing building (the new building has taller windows to bring natural light to the rear of the classrooms) the buildings are very similar in all other aspects.

Refer to section 5.0 Design of the Design & Access Statement and submitted drawings for further details of how the proposal addresses the requirements of policy E20.
Policy E40 could also be considered as relevant to the proposal. It concerns reducing the likelihood of crime and vandalism and states that:

- **Planning permission will not be granted for development unless its design, layout and landscaping pay adequate regard to the need to deter crime and vandalism.**

The Northampton Borough Council Crime Prevention Officer has been consulted with regard to crime prevention, and the building has been located and detailed to the principles of the document Secured By Design Schools (2010). Principles include a secure school site boundary and use of robust and secure materials, natural surveillance and lighting.

Refer to the Secured by Design section of this document for full details of how the proposal meets the requirements for policy E40.
West Northamptonshire Joint Core Strategy

The policies listed below incorporate those from the West Northamptonshire Joint Core Strategy – Pre-submission document (Feb 2011) and the proposed changes as detailed in the document Proposed Changes to the Pre-submission Joint Core Strategy (July 2012). It should be noted that this policy has not yet been adopted by Northamptonshire County Council and is only to be used for guidance.

Policy S7 – Provision of Jobs

This policy is:

* Provision will be made for a minimum net increase of 16,000 jobs in the period 2010 – 2026 in order to maintain a broad balance over time between homes and jobs and to maintain a diverse economic base.

The proposed development for the expansion of the school will create new jobs at the school. After a number of years, once the school is at full capacity, an increase in full time employment is envisaged from 43 currently to 48, and an increase in part-time staff employment from 35 to 38.

Full time staff are likely to come from the wider Northampton area, while part-time staff often live in the locality of the school.

Policy S10 – Sustainable Development Principles

The key policy points are listed below in the left hand column. The right hand column describes how the proposed development will meet the policy.

| Achieved the highest standards of sustainable design incorporating safety and security considerations and a strong sense of place; | The proposal is well considered and is of high quality sustainable design, through passive measures incorporated as fundamental principles of the design. Secured By Design principles are utilised to achieve a safe and secure building and site with robust finishes and materials, the selection of which is derived from the local setting. |
| Be designed to improve environmental performance, energy efficiency and adapt to changes of use and changing climate over its lifetime; | The proposed new building is designed to achieve a lower ‘U’ Value and air infiltration rate than required by current building regulations in order to improve environmental performance. Energy efficient luminaries with automatic control are specified, as well as heat recover and use of low temperature hot water heating via energy efficient equipment, all of which reduce energy use during the life of the building. In this way the building is designed for longevity and not just to achieve the minimum standards of the day. Refer to the Sustainability Statement for further details. |
| Make use of sustainably sourced materials; | Sustainably sourced materials will be used where possible, utilising ‘A’ rated constructions/building elements from the BRE’s Green Guide. |
| Minimise resource demand and the generation of waste and maximise opportunities for reuse and recycling; | During its use, the building will be included within the school’s existing waste management strategy; pupils and staff separate waste for recycling to minimise landfill. During construction a contractor will have a waste management strategy to minimise landfill waste. |
| Be located where services and facilities can be easily accessed by walking, cycling or public transport; | The school is easily accessed by walking and cycling, as it mainly caters for pupils from the local community which it serves. |
Achieved the highest standards of sustainable design incorporating safety and security considerations and a strong sense of place;

Maximise use of solar gain, passive heating and cooling, natural light and ventilation using site layout and building design;

Maximise the generation of energy needs from decentralised and renewable or low carbon sources

Maximise water efficiency and promote sustainable drainage;

Protect, conserve and enhance natural and built environment and heritage assets;

Promote the creation of green infrastructure networks, enhance biodiversity and reduce the fragmentation of habitats; and

Minimise pollution from noise, air and run off.

<table>
<thead>
<tr>
<th>Entry</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieved the highest standards of sustainable design incorporating</td>
<td>The proposal is well considered and is of high quality sustainable design, through passive measures incorporated as fundamental principles of the design. Secured By Design principles are utilised to achieve a safe and secure building and site with robust finishes and materials, the selection of which is derived from the local setting.</td>
</tr>
<tr>
<td>safety and security considerations and a strong sense of place;</td>
<td></td>
</tr>
<tr>
<td>Maximise use of solar gain, passive heating and cooling, natural</td>
<td>Solar gains are maximised (and controlled through use of solar controlled glass and user controlled blinds internally). Windows are tall to maximise natural light penetration to the rear of the classrooms, and are situated on two external walls of each, again to bring daylight into the space. All teaching spaces are naturally ventilated.</td>
</tr>
<tr>
<td>light and ventilation using site layout and building design;</td>
<td></td>
</tr>
<tr>
<td>Maximise the generation of energy needs from decentralised and</td>
<td>Use of renewable energy technology such as air source heat pumps will be fully considered at detail design stage.</td>
</tr>
<tr>
<td>renewable or low carbon sources</td>
<td></td>
</tr>
<tr>
<td>Maximise water efficiency and promote sustainable drainage;</td>
<td>Water efficiency is maximised through the use of water flow restrictors to all taps and all WC cisterns shall be of low water volume type, to reduce water consumption.</td>
</tr>
<tr>
<td>Protect, conserve and enhance natural and built environment and</td>
<td>The design of the building is in keeping with the local surroundings in terms of mass, scale and materiality, and therefore is sympathetic to and enhances the character of the local built environment.</td>
</tr>
<tr>
<td>heritage assets;</td>
<td></td>
</tr>
<tr>
<td>Promote the creation of green infrastructure networks, enhance</td>
<td>n/a</td>
</tr>
<tr>
<td>biodiversity and reduce the fragmentation of habitats; and</td>
<td></td>
</tr>
<tr>
<td>Minimise pollution from noise, air and run off.</td>
<td>Water run off is combated through water attenuation measures.</td>
</tr>
</tbody>
</table>

Refer to the Sustainability Statement within this document for further details.

**Policy C2 – New Developments**
This policy pushes for new developments to achieve:

...the modal shift targets by maximising travel choice from non-car modes.

*Development will be required to be supported by a transport assessment and travel plan prepared in accordance with current best practice guidelines.*

A full transport assessment document and up to date school travel plan are submitted as part of this application. The school travel plan, sets out the school’s goals in terms of reducing use of motor vehicles both by parents and staff, and promoting cycling, walking and car share schemes.

**Policy BN7a – Water Supply, Quality and Wastewater Infrastructure**
This policy sets a requirement to reduce flood risk and to promote conservation of water.

The school site includes water attenuation measures to address issues caused by high levels of precipitation. Water efficiency is maximised through the use of water flow restrictors to all taps and low water volume WC cisterns, to reduce water consumption and conserve water.
Policy BN7 – Flood Risk

This policy calls for compliance with flood risk assessment and management requirements as set out in the NPPF and technical guidance for the NPPF to address current and future flood risks.

The Environment Agency has confirmed that school site is in a flood zone 1 and as the application boundary is under 1ha, therefore no flood risk assessment has been produced to accompany this application.

West Northamptonshire Joint Core Strategy Infrastructure Delivery Plan Update 2012

Within the document it is stated that:

*Primary schools by their nature are required to be provided close to the population they serve.* (6.39)

And that the

*...the need for primary school places within the existing urban area of Northampton is growing.* (6.41)

The proposed expansion of Boothville Primary School goes some way to addressing the growing need for primary places within Northampton and for the local community that the school serves.

The infrastructure requirement is Ref E1 within the Infrastructure Delivery Plan, which is described as: Extensions to Existing Primary Schools in Northampton Urban Area.

The date given for provision of this infrastructure is 2013/2014 onward. The programme for delivering this works detailed in this proposal are in line with the Infrastructure Delivery Plan; it is proposed that the enlarged school to be fully operational for the start of the school term in September 2013.
7.0 Heritage / Archaeology

An initial assessment of the site has shown that there are no Listed Buildings, Historic Environmental Assets, Scheduled Ancient Monuments, Conservation Areas, Registered Parks or Gardens, Registered Historic Battle Fields, Sites of Specific Scientific Interest mapped areas within the school site boundary.

NCC’s Archaeological Advisor was consulted regarding archaeology on the application site. It was concluded that no archaeological investigation would be required as part of this application.

8.0 Ecology

The Senior Environmental Planner at Northamptonshire County Council has been consulted with regard to ecology on the school site. Their view is that the proposals are unlikely to cause any significant negative impacts on ecology or biodiversity habitats, and therefore an ecology report is not required for the site.

Additionally it was advised that if any trees, hedges or shrubs are to be removed or are affected by the proposal between the months of March and September, a bird survey will need to be completed to avoid disturbance of breeding birds.

9.0 Flood Risk Assessment

The site is shown as being located within Flood Zone 1 (low probability of river and sea flooding as defined in the National Planning Policy Framework). The application site area is less than 1 hectare in size (0.13ha) and can be classed as “operational development of less than 1 hectare” located in Flood Zone 1. Therefore any applications should be considered under Flood Risk Standing Advice.

The Environment Agency has therefore been consulted and their advice is outlined below:

*We have produced a series of comments, known as Flood Risk Standing Advice (FRSA), for planning authorities and planning applicants to refer to on “lower risk” development proposals where flood risk is an issue to replace direct case by case consultation with us. Your proposal falls within this category.*

*As the increase in impermeable area will be less than 1 ha we recommend guidance in FRSA F5 “operational development less than a hectare in flood zone 1” is followed. Please be aware that the designed standard for Northampton is 0.5% (1 in 200) plus climate change.*

Following this advice from the Environment Agency a flood risk assessment is not required for this development and therefore has not been submitted as part of this document.
10.0 Impact on Playing Field

Sport England have been consulted with regard to play space/loss of pitches. They considered the proposal with regard to its affect on the schools playing fields in the light of its Playing Fields Policy: ‘A Sporting Future for the Playing Fields of England’.

This policy statement defines in planning terms what is considered a ‘Playing Field’, which is; the whole of a site that encompasses at least one playing pitch. A playing pitch is a delineated area, which together with any run off is of 0.2 hectares or more. The aim of this policy is to ensure that there is an adequate supply of quality pitches to satisfy the current and estimated future demands of the pitch sports.

The policy identifies five exceptions to the normal position of opposing development, which would result in the loss of playing fields. Sport England’s response to the proposal was;

1. The proposal results in the loss of part of a hard court area. It is proposed to replace the hard court area in a location within the school, which does not impact on the wider playing field area. There is no net loss of sports facilities and no impact on playing field area. On this basis Sport England would not object to the proposal.

In conclusion, placing the new build block to the south of the existing school successfully avoids the playing field and pitch area to the west. The pitch provision remains as existing and is therefore supported by Sport England.

11.0 Trees / Arboricultural

The development proposal for Boothville Primary School is spread over two locations within the site. The northern area, located in the existing car parking area, will require the removal of a small purple leafed plum that has little arboricultural merit. This has been categorised as a C grade tree and its loss will have no impact on the wider visual amenity of the area.

The main development area is on the southern side of the school, to the west of the existing nursery school. There is no requirement to remove any trees in order to accommodate the new building, but one group of trees is growing in close proximity to the covered play area. These trees have the potential to pose both above and below ground constraints to the proposed new building.

Retention of these trees is a key aspect of this development and protection measures will be required to ensure that they are not damaged either during the construction phase or in the longer-term once the development has been completed.
12.0 Sustainability

The following statement is in accordance with the requirements of the Joint Core Strategy Policy S10 and Schedule 1: Significant Proposed Changes (July 2012).

As a high priority for the Client, the design team strove to integrate sustainable issues into the design vision of the scheme. A strong sustainable design agenda from inception helped to develop a new building which minimises embodied energy and energy in use, within the constraints available in the budget. The Client and design team believe that passive and low energy sustainable measures should be addressed beginning at the concept design stage; sustainability should not be a ‘bolt-on’; rather it should be embedded in the principles of the building. Once these passive measures have been fully utilised, the team can then decide on the appropriate renewable / low energy technologies appropriate to benefit the project.

As a standalone building, the new construction shall be independently serviced with Mechanical and electrical services installations separated from the main school. The new building shall incorporate a new plant room. Any renewable energy or low carbon based systems considered shall initially be contained within the plant room. The detailed design may include for a ducted internal Air Source Heat pump which is contained within the plant room. Any renewable or low carbon systems considered in the detailed design for this project shall not have a visible or acoustic impact upon the Planning drawings or submissions.

Energy Use

Carbon emissions from energy use in buildings accounts for over 50% of our total greenhouse gas emissions. It can also be a significant financial cost for a buildings user. The proposed strategy for the new building at Boothville Primary School is summarised below.

The classrooms ventilation occurs through natural ventilation through openable windows and roof lights located upon opposite sides to provide low to high cross flow ventilation. The natural ventilation has been proposed in accordance with the requirements of Building Bulletin 101 Ventilation of Educational Buildings to achieve 3 litres/sec/per person background ventilation and 8 litres/sec/per person rapid natural ventilation. In accordance with the recommendations of BB101, occupants shall be made aware of CO2 levels within occupied spaces via means of CO2 detection. The detection provided shall make occupants aware that CO2 levels are rising and that windows and roof lights should be opened to increase natural ventilation.

(a) The scheme achieves sustainable design through construction measures through the incorporation of:

- Lower ‘U’ valves, than minimum Building Regulations
- Lower design air infiltration than minimum Building Regulations
- Control of building fabric in relation to quantity of external glazing area
- Quality assured Approved construction details for building joints/ intersections and linear thermal transmittance.
(b) The scheme achieves supply energy efficiently through specification of high efficient equipment:

- High efficiency luminaries and automatic control gear for internal and external lighting
- Specification of high efficiency mechanical fans incorporating heat recovery
- Low Temperature Hot Water Heating via high efficiency equipment
- Installation of effective automatic controls (BMS) & user friendly local controls
- Installation of inverter driven variable speed circulating pumps for heating and domestic water.

(c) The scheme incorporates passive design techniques:

- To achieve natural daylight where possible and practical, through positioning of glazing to give day light uniformity.
- Avoidance of solar overheating by reducing the amount of glazing in the south facade. The new building will be in compliance with BB101 and there shall be no more than 120 hours when the air temperature in the class bases rises above 28 deg C
- Extend roof over hangs to provide external solar shading to glazing in external walls.
- Orientation of new School building to reduce solar gain

(d) The scheme shall achieve Building Regulations Part L compliance. SBEM calculations shall be carried out to demonstrate compliance. The project shall be thermally modelled utilising recognised and compliant software to ensure the requirements of BB101 are achieved.

(e) Heating shall be generated by SEDBUK A rated gas fired boilers with low Nox emissions.

(f) The scheme shall incorporate as a design requirement water flow restrictors to all terminal water fittings e.g. taps, to prevent excessive water flow and hence saving water consumption. Further consideration in the design stage shall be given to the benefits of rainwater harvesting to this particular project. All taps shall be of the percussion type to operate on a fixed time period once activated. The WC cisterns shall be of low water volume type.

(g) The proposal will not increase noise levels on the site. There will be no loud external plant to the building, nor any features likely to increase the current noise levels on the site, other than children playing in the playground.
Low Carbon Technology

For feasible low carbon technology applicable to the school extensions, the following technology shall be considered when selecting appropriate systems, in conjunction with considering the feasibility of Traditional systems such as gas fired boilers, to meet the energy demands of the proposed extensions.

Air Source Heat Pump (ASHP)

The installation of internally mounted high efficiency ASHP(s) modules within the plant room shall be considered. Each ASHP module would be ducted to atmosphere. The inlet and outlet ducts would be via integrated weather louvers within external walls. Contained within the inlet and outlet ductwork would be attenuators to limit noise emissions to below background external noise levels.

ASHP’s would provide low grade heating for underfloor heating and generate higher temperature for domestic hot water generation. ASHP’s can generate a typical maximum Coefficient of Performance (COP) of 3.6.

Ground Source Heat Pump (GSHP)

Consideration will be given to the installation of a GSHP from boreholes. The feasibility of GSHP’s will depend upon the availability of suitable land and space to provide closed loop boreholes. The ground requires testing for thermal conductivity.

Closed loop circulation buried pipework from the borehole(s) would be collected into a concealed manifold chamber prior to entering the plant room below ground. The Heat pump unit would be contained within the plant room and requires no external louvers.

GSHP’s would provide low grade heating for underfloor heating and generate higher temperature for domestic hot water generation. GSHP’s can generate a typical maximum Coefficient of Performance (COP) of 5.

Photovoltaic Panels (PV)

PV panels could be integrated within the roof design of the new extensions, preferably on roofs facing in a southerly direction and with an optimum angle of 36 degrees. The facing direction and angle can be flexible but effectiveness will be reduced. The PV would generate on site electricity and attract fee in tariffs and export tariffs. Capacities depend upon the available roof areas.

Unlike the other technologies considered PV panels are not sized against a specific load. Any amount of electricity can be generated, space availability allowing, and used on site when there is a demand and exported when not used. To have an impact and a significant reduction in CO2 emissions, large areas of PV panels are required. Consideration shall be given to PV panels as a single installation or in combination with other systems, for example ASHP.

Solar Hot Water

Energy from sunlight is absorbed by the solar panel and converts it to heat energy. This is then removed by a heat transfer liquid, usually water or anti-freeze. In most systems, a small pump is required to circulate the heat transfer fluid to where it is immediately needed, or to a store from which it can be used later. In the case of solar hot water systems, this is usually a hot water cylinder. A back-up heat source is required to ensure that the water is heated to a sufficient temperature on days when light levels are limited. The water in the cylinder is then fed to your taps and showers to provide hot water.

Solar panels could be integrated within the roof design of the new extensions, preferably on roofs facing in a southerly direction and with an optimum angle of 36 degrees. The facing direction and angle can be flexible but effectiveness will be reduced. Consideration is required as to the effectiveness of solar panels as domestic hot water demand within the proposed extensions may be low.
13.0 ** Secured By Design 

The Crime Prevention Design Adviser was consulted regarding the proposals during the design process. The crime data received from them from the area around the school is summarised below:

> There have been no crimes or incidents related to the school premises in the last 12 months. I have no preference for the position of the new building as in both instances the building will be behind the existing airlock fence line. The new building should be protected by an alarm system linked to the existing with detectors in all ground floor classrooms as well as communal areas and corridors.

**Integrated Approach**

From the projects earliest stage the principles of Secured by Design have been followed: crime prevention and security issues have been considered throughout the design. These have been discussed with the Headteacher and governors of the school and NCC.

**Environmental Quality/ Ownership**

The surroundings of the school and its site are pleasant and the neighbourhood and local community friendly. Those who have ties to the school; pupils, parents, teachers and staff all take a great deal of pride in it and feel a great sense of ownership. Staff members are vigilant and the ethos of the school instils this vigilance into its pupils.

**Access + Security**

The school site is secured by a perimeter fence and secure gates. During the hours of 08:00 to 18:00 on a school day the main pedestrian and vehicular entrance gates into the school site off of Booth Lane are open to allow access into the ‘air lock’ zone beyond. At the beginning and end of the school day secure gates are opened and, monitored by members of staff, allow pupils to gain access into the secure part of the site.

At all other times access occurs via the main entrance to the school building, via secure, controlled access. Visitors are held in the entrance/reception area, only able to enter the building through an electromagnetically controlled door. Out of hours the entire site is secured and all access gates are locked.

The school building is protected by a security alarm system. The system will be extended to include the proposed new building.

**Lighting**

The lighting design provides a well lit exterior that promotes the open secure quality, however simultaneously respecting the surrounding buildings and minimising light pollution.

**Natural surveillance**

This concept is taken further as the interaction encouraged at the beginning and end of the academic day will promote natural surveillance from the community as well as the staff and teachers. The play space around the school is visible from the windows of the classrooms and can therefore be monitored.

**Additional**

The proposed building materials are robust, secure and resilient to wear and tear e.g. brickwork and aluminium framed lockable double glazed windows. The building is located away from any boundaries so is not susceptible to vandalism.
14.0 **Construction Management**

Undertaking buildings works on an occupied school site requires careful planning to ensure that the educational delivery of the school is not negatively impacted.

This section outlines a preliminary approach for the site management plan for the delivery of the proposed new building and associated works. Note that the building contractor appointed to undertake these works will complete, and submit for approval, a thorough construction management plan which has been worked up in conjunction with NCC and Boothville Primary. The plan will detail their methods to ensure safe, cost effective and on time delivery of the project, within the confines of the active school site. This plan will have to be approved by Northamptonshire County Council as a condition of planning approval.

Prior to commencement the contractor’s detailed proposal for the delivery of the works will be developed into a full Construction Phase Health & Safety Plan, a detailed Risk Assessment and Method Statements according to legislation and best practice guidance and submitted for approval by a CDM co-ordinator. The construction management plan will include details of of the tree protection required during construction phase.

An outline construction management approach is detailed below. Read in conjunction with the Preliminary Construction Management drawing submitted as part of this application.

**Accommodation and Set Up**

Upon commencement the contractor will secure the construction site area and contractors compound (as indicated in the Construction Management drawing) using ‘Heras’ type fencing. The line of which will vary depending on the stage of construction whilst being maintained as a secure boundary to unauthorised access for the duration of the works. This will also be used for tree protection.

Safety signage will be installed at key places as identified. Mobile site offices will be situated as indicated and will contain facilities including site office, induction room, secure storage and toilets. Drainage by preference will discharge to foul drain however where that is not practical a tank will be used. Connection to mains services will be provided.

**Site Works Access**

As construction traffic will share the site access road with school traffic the project manager will agree specific access constraints with the school prior to commencing on site. Access to the site will be through the main gate from Booth Lane with timing of access restricted to avoid the school pick up and drop off times. All deliveries to site will strictly adhere to these restrictions and a sign will be positioned permanently and prominently by the entrance gate detailing the restrictions. All construction traffic will be segregated from pupils and wheel washing will be in place to ensure the school site and surrounding neighbourhood are kept free of mud from the construction site.

**Sequence of Works**

Works will commence with clearing of the site, followed by excavation and earth works and superstructure and building envelope and external canopy. The final area of work is envisaged as the landscaping around the building and work to extend the car park.
15.0 Site Investigation

A preliminary site investigation report has been completed by environmental and geotechnical consultants Solitechnics. The report details site history, ground conditions and chemical and gaseous contamination found.

The table below summarises the potential chemical and gaseous contamination on the site.

<table>
<thead>
<tr>
<th>Known source of contamination identified</th>
<th>Potential source of contamination identified</th>
<th>Radon protection requirements</th>
<th>Comments/Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas</td>
<td>Chemical</td>
<td>Gas</td>
<td>Chemical</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Basic</td>
</tr>
</tbody>
</table>

Naturally occurring arsenic associated with Northampton Sand Formation deposits. Groundwater contamination associated with the former British Timken site toward the southwest.

SUMMARY TABLE OF POTENTIAL CHEMICAL AND GASEOUS CONTAMINATION AT CILTERN PRIMARY