SPRINGWELL SEN

Design and Access Statement

October 2009

ATKINS BARNSLEY Barnsley Partnership for Learning

Contents

1.0 Introduction

1.1 Purpose of Statement

This Design and Access Statement is in support of a Reserved Matters Approval for the construction of a new school building on the site of the existing Springwell School, Carlton Road, Barnsley. The proposal also involves the demolition of the existing building fabric following completion of the works.

This development will greatly improve both the facilities available to the school and the quality of the landscape and buildings on the site.

This Design and Access Statement includes proposals that comply with the current Barnsley Metropolitan Borough Local Planning Policies. These are listed below:

Local Plans and Policies

- Barnsley Unitary Development Plan, Adopted December 2000
- Barnsley Local Development Framework, Barnsley Education Sites Development Document, Adopted January 2009

Transport Policies

- Home to School Transport Policy 2009-2010

In order to comply with national guidelines and to meet the requirements set out by the DCSF the proposals have been developed with reference to the national Building Regulations and the following Building Bulletins:

- BB102 - Designing for Disabled Children and Children with Special Educational Needs
- BB98 - Briefing Framework for Secondary School Projects
- BB85 - School Grounds, a Guide to Good Practice
- BB95 - Schools for the future, Designs for Learning Communities

1.2 Scope of Proposals

Springwell Special School is located to the North East of Barnsley town centre and lies to the East of Carlton road. The site is fringed to the North by a residential area consisting of predominantly semi-detached houses and Park/woodland known as Springwell wood on the eastern boundary. To the South is St Helens Boulevard which provides the main point of access

Fig. 1 – Aerial photo of the site as existing

Fig. 2 – Diagram of Proposed Development

to the school and to the neighbouring Holy Cross Deanery CoE Primary School. Accessed from Carlton road to the East is leisure building and Bowling centre, which is raised above the site. The site has an overall area of 24,750m^2.
The proposal involves the demolition of the existing school building and the construction of new accommodation to the North. The Gross Floor Area for the new school is 3530m^2.

Fig. 3 Aerial of the site form the South

Fig. 4 The existing building viewed from the main entrance looking North

The number of pupils currently on roll at The Springwell Centre is 65. Once completed the new school will provide places for 77 pupils aged 5 to 16 from the Local Borough with a range of disabilities including Behavioural, Emotional and Social Difficulties (BESD), Autistic Spectrum Disorder (ASD) and pupils with challenging behaviour. The specialist nature of the school means that it is significant within the Barnsley area with students attending from across the whole Borough.

2.0 Contextual Appraisal

2.1 Assessment:

Springwell School is located in a suburban area about 2 miles to the North East of Barnsley town centre. The area is suburban in character with residential settlements located close to the North and West of the site. As a result of its location on the outskirts of Barnsley the site offers a large amount of amenity space including external sports pitches, nature areas and open space and affords views over Springwell wood and the rolling countryside beyond.

To the North of the site is St Helens Well which is a religious monument associated with the dioceses of Wakefield, and is noted as a place once visited on historic pilgrimages. The well is visited every few years and access to the public must remain, but may be under controlled conditions to provide security for the school. The landscaping proposals look to develop the area surrounding the well into a nature/ sensory garden for use by the pupils and occasionally the general public.

Fig. 5 Site location map (1 mile rings)

The site is very green and as well as offering external sports pitches has a number of mature trees and hedge row varieties around the borders. The proposed scheme looks to enhance this planting, establishing the site as a haven for nature and treating it as a learning resource for staff and pupils. The school also have horticulture within their curriculum and currently use a poly tunnel for growing and teaching which will be developed and incorporated within the landscape proposals.

The site is located approximately 95m above sea level, the topography of the site being relatively flat with the levels falling gradually toward the North East of the site. The biggest change in level is along the Eastern boundary where the ground drops steeply toward Springwell wood. The change in level offers excellent views over the neighbouring valley, Springwell wood and the distant countryside beyond. Buried services have, as far as possible, been identified.

Low level noise pollution from Carlton road to the East has been considered in the development of the design.

Fig. 6 Site Plan

A full tree survey has been carried out on the site. No trees on or directly adjacent to the site are protected by tree preservation orders; there are however two high quality Category A trees which are Black Poplar on the Northern boundary and a significant number of Category B and C trees along the existing boundaries. The new building and associated works will require the felling of a few Category C and B trees to allow development.

2.2 Design Policy Assessment:

PPS1: Creating Sustainable Communities

PPS1 sets out the Government's commitment to sustainable development, highlighting the importance of urban regeneration, prioritising the re-use of previously developed land, securing mixed-use development and concentrating new development in town centres and locations similarly well-served by public transport. It also promotes the efficient use of land through higher density mixed use development.

PPS1 states that to ensure sustainable development, high priority should be given to development proposals in locations that are easily accessible by foot, by bicycle or by public transport, rather than by car. This includes access to jobs, health, education, shopping, leisure and community facilities.

Within PPS1, Local Planning Authorities are encouraged to:

- Give priority to re-using previously developed land;
- Create sustainable patterns of development;
- Create usable, durable and adaptable places;
- Make more efficient use of land, and
- Promote good design in development.

PPS1: Climate Change Supplement

This statement supplements PPS1 by setting out how planning should contribute to reducing emissions and stabilising climate change and take into account any unavoidable consequences of planning.

Consideration of the environmental performance of a proposed development, particularly taking into account the climate that the development is expected to experience of its projected lifetime, is encouraged.

The design of new development should therefore:

- Take account of landform, layout, buildings orientation, massing and landscaping to minimise energy consumption
- Deliver a high quality local environment
- Provide public and private open space as appropriate
- Give priority to the use of sustainable drainage systems
- Provide for sustainable waste management; and
- Create and secure opportunities for sustainable transport

The effects of the proposal on existing and proposed development in close proximity should also be taken into consideration.

By Design (DETR/CABE)

It is now a requirement of PPS1 that regard should be given to good practice guidance set out in 'By Design'.

'By Design' highlights the fact that good design is important everywhere and the creation of successful places depends on the skills of designers and commitment from those who employ them, as well as input from the planning system. The key aspect it focuses upon includes the design of buildings and spaces, landscapes, roads and movement systems. It also ties in with both PPS3 and the Urban Task Force report by seeking to enhance the quality of urban development through a move from reliance on prescriptive development standards towards a more design led approach with a positive emphasis on place making.

'By Design' states that successful streets, spaces, villages, towns and cities tend to have characteristics in common. These factors have been analysed to produce principles or objectives of good urban design. They help to remind us what should be sought to create a successful place. 'By Design' lists the objectives of urban design as follows:

- Character – a place with its own identity. Planning should promote character in townscape and landscape by responding to and reinforcing locally distinctive patterns of development, landscape and culture.
- Continuity and enclosure – a place where public and private spaces are clearly distinguished. Planning should promote continuity of street frontages and enclosure of space by development which clearly defines private and public areas.
- Quality of the public realm – a place with attractive and successful outdoor areas. Planning should promote public spaces and routes that are attractive, safe, uncluttered and work effectively for all in society, including disabled and elderly people.
- Ease of movement – a place that is easy to get to and move through. Planning should promote accessibility and local permeability by making

places that connect with each other and are easy to move through, putting people before traffic and integrating land uses and transport.
- Legibility – a place that has a clear image and is easy to understand. Planning should promote legibility through development that provides recognises routes, intersections and landmarks to help people find their way around.
- Adaptability – a place that can change easily. Planning should promote adaptability through development that can respond to changing social, technological and economic conditions.
- Diversity – a place with variety and choice. Planning should promote diversity and choice through a mix of compatible developments and uses that work together to create viable places that respond to local needs.

CABE Schools Design Panel

CABE also produce specific guidance on the design of Schools brought forward under the BSF programme. In this regard schemes are assessed against 10 criteria as they relate to design and form:

- Identity and context: making a school the students and community can be proud of;
- Site plan: making the best use of the site;
- School grounds: making assets of the outdoor spaces;
- Organisation: creating a clear diagram for the buildings;
- Buildings: making form, massing and appearance work together;
- Interiors: creating excellent spaces for learning and teaching;
- Resources: deploying convincing environmental strategies;
- Feeling safe: creating a secure and welcoming place;
- Long life, loose fit: creating a school that can adapt and evolve in the future; and
- Successful whole: making a design that works in the round.

CABE assess proposals and each scheme is given an overall rating of 'excellent', 'good', 'not yet good enough', 'mediocre' or 'poor'. CABE consider that only schemes with an overall design quality rating of 'excellent' or 'good' are regarded as acceptable.

PPG 13

PPG 13 sets out the government's objectives that integrate planning and transport at the national, regional and local level. The guidance seeks to;

- Promote more sustainable transport choices;
- Promote accessibility to jobs, shopping, leisure facilities and services by public transport, reducing the need to travel especially by car.

A key objective of PPG 13 is to ensure that jobs, shopping, leisure facilities and services are accessible by public transport, walking and cycling. Local Planning Authorities should give particular emphasis to accessibility, in identifying preferred areas and sites where such land uses should be located, to ensure that they are located where they will offer realistic, safe and easy access by a range of transport modes, not exclusively by the car.

The Development Plan

Regional Spatial Strategy
The issued RSS offers little in terms of design guidance which is relevant to this proposal. Policy ENV5 seeks to encourage green technologies and requires 10% of energy to be sourced from decentralised or renewable / low carbon sources. This policy also encourages the orientation and layout of development to maximise passive solar heating.

Barnsley UDP (2000)

In accordance with Policy GS8, the construction of new buildings in the green belt will not be permitted unless these are for:

- Agriculture or forestry;
- Essential facilities for sport and recreation, for cemeteries, or for other uses which preserve the openness of the green belt and which do not conflict with the purposes of including land within it;
- The replacement of existing dwellings.

Other development in the green belt is not acceptable except in *'very special circumstances'*. Policy GS9 requires that any development within the green belt should be an appropriate design and siting so that it does not incur significant harm to the visual amenity of it.
In terms of landscape design, Policies GS22, GS23 seek the retention of existing trees and the creation of new woodland, hedgerows and habitats as part of development proposals.
Policy BE6 requires that the council achieve good design standards for all types of development. Proposals will be assessed according to:

- The quality of layout and suitability of scale of the development;
- The use, quality, design and landscape treatment of open land within the site and the area around buildings;
- The standard of detailed design and facing materials of proposed buildings;
- The suitability of the whole development for its proposed context and its relationship with adjoining land uses.

Supplementary Planning Guidance 25 Landscape Design

This supplementary planning guidance note provides further details on landscape design. This document sets out that good landscape design should:

- Soften the impact of new buildings on the surroundings;
- Integrate new development into its surroundings; and
- Provide an environment which is pleasant to live and work in.

2.2 Involvement

Throughout the design process consultation has taken place between the designers, school and stakeholder groups including community users. This has taken place through a series of 'Engagement' meetings where the school meet with the designers to discuss and develop the design. This dialogue with the school has helped us, as designers, to understand the unique and specific requirements of the school. These specific requirements relate to the specialist needs of the students and their varying levels of Behavioural and Social Disorders. Students of this type require a variety of different types of internal and external space in which to work, play and interact. The spaces created also need to offer differing levels of segregation from other students to avoid unnecessary distractions from occurring. We have been able to use the knowledge we have gained to develop a bespoke design solution tailored to the learning needs of the school. The design captures the vision and ethos of the school in a way that will reinforce the culture of learning and aspirations for the future.

Fig. 7 Part of a 'Vision Panel' created with the school

In order to ensure that the development of the design has been in line with the requirements of the BMBC Planning Department, a series of meetings have taken place with Planning Officers as the design progressed. The design has also been audited by a Building Control Adviser.

A process of independent design review has taken place at various stages of the project and the feedback received from these reviews has been incorporated into the final design.

2.3 Evaluation

Opportunities

- Respond to the specific needs of school and BESD pupils.
- Provide the facilities required for the extended curriculum that Springwell deliver to the borough.
- Respond to the site including natural features and views.
- Design an environmentally aware school for the future.
- Provide the school with an identity and 'something to be proud of'.

Constraints

- Limited site due to the occupied existing building.
- St Helens Well to the North
- Residential area to the North

The new School will reflect within its design the ethos of the school, the teaching staff and also respond to the landscape and context of the site. The school has been formed to offer views over the site landscaping and to the wider countryside beyond, and with the intimate courtyards offers a number of different views and environments for inspiration, relaxation and learning. The placement of the building on the site has been carefully considered to balance community face and inner sanctum, as well as avoiding the existing schools footprint.

The simple and modern form of the building utilises modern materials and houses a school built around the inner function. Balancing the security required whilst creating an inviting, calming and inspiring place to come and learn was the topmost priority. The school has an excellent reputation, and the new building will reinforce the fact that Springwell is one of the leading BESD Special Need Schools in the region. The new building will be the face of the school and show the schools desire to creatively respond to the specific needs of BESD pupils.

The proposal aims to maximise the site's opportunities by responding to the views and orientation whilst minimising disruption to the existing school during the construction phase.

2.4 Design Evolution

The design has evolved through constant dialogue with the school in the form of engagement meetings, workshops and presentation days. These meetings were attended by governors, teachers, pupils and council representatives.

In response to the school's vision and the constraints of the site three possible strategies for the form and placement of the new building were developed. Each of these took a different approach to the site and the way in which internal spaces were arranged and managed.

Fig. 8 Site/Design development

Due to the tight site constraints and requirement to maintain the existing building rather than undergo full decant, the location of the building on the site was limited. The location of the building exploits the features of the site, with views over the valley to the East, a community presence via visual link to Carlton Road and split playing field/hard play areas. The form and orientation of the building was then developed further forming three principle concepts; wings, fingers and courtyards.

Wings
The new building has a spine of central facilities with protruding wings forming the Key Stage areas. This form creates maximum external wall area for classrooms and forms large outdoor spaces.

Fingers
A central spine containing the central facilities provides a buffer from Carlton rd, with three fingers protruding toward the East. This allows equal views and protection for each Key Stage finger, and forms intimate semi-enclosed courtyards.

Courtyards
A compact and simple design centred on a social/communal 'heart' space. The building is composed of four defined quadrants wrapped around this central space each with an enclosed and secure courtyard garden. The classrooms open out onto individual Key Stage gardens.

As the design developed the 'courtyard' scheme fitted with the aspirations of the school and their desire to create a secure and welcoming school specific to the needs of BESD pupils. The school curriculum is focussed on kinesthetic learning with social inclusion and communication seen as key principles to learning. The new school had to create a safe, calm and welcoming environment where 'family' and 'nurture' form the back bone of a child's education.

The rectangular form can be broken down into four quadrants centred around communal facilities and social space. Each Key Stage quadrant has its own identity, social space, enclosed courtyard, and opens onto a defined garden area. The Key Stage groups are separated from one another into individual quadrants. This separation prevents disruptions caused by students from migrating through the school from Key Stage to Key Stage in a domino affect and allowing the rest of the school to operate as normal.

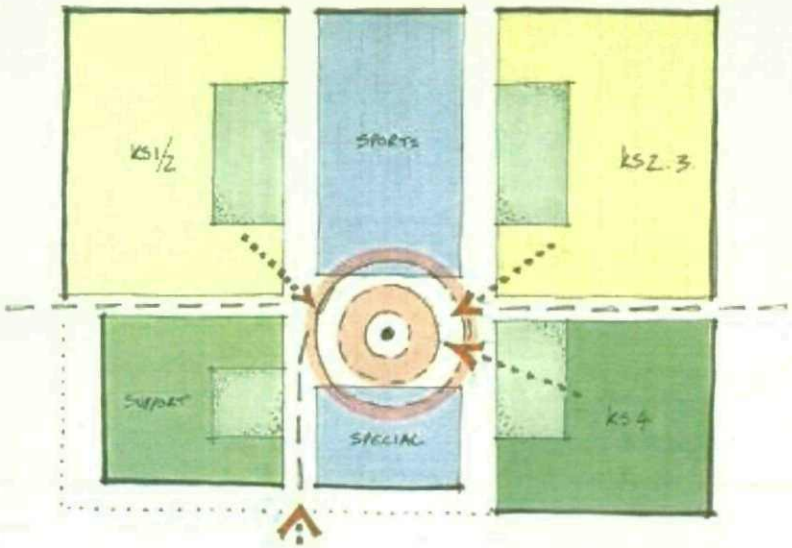

Fig. 9 Quadrant Courtyard Concept

Provision has been made for a grass pitch to the South of the new building and a MUGA (Multi Use Games Area) and Astroturf pitch to the West. There is also a sensory garden, wildlife area, and poly tunnel/cultivation area in the proposals for the specific educational needs of the school and skill based curriculum.

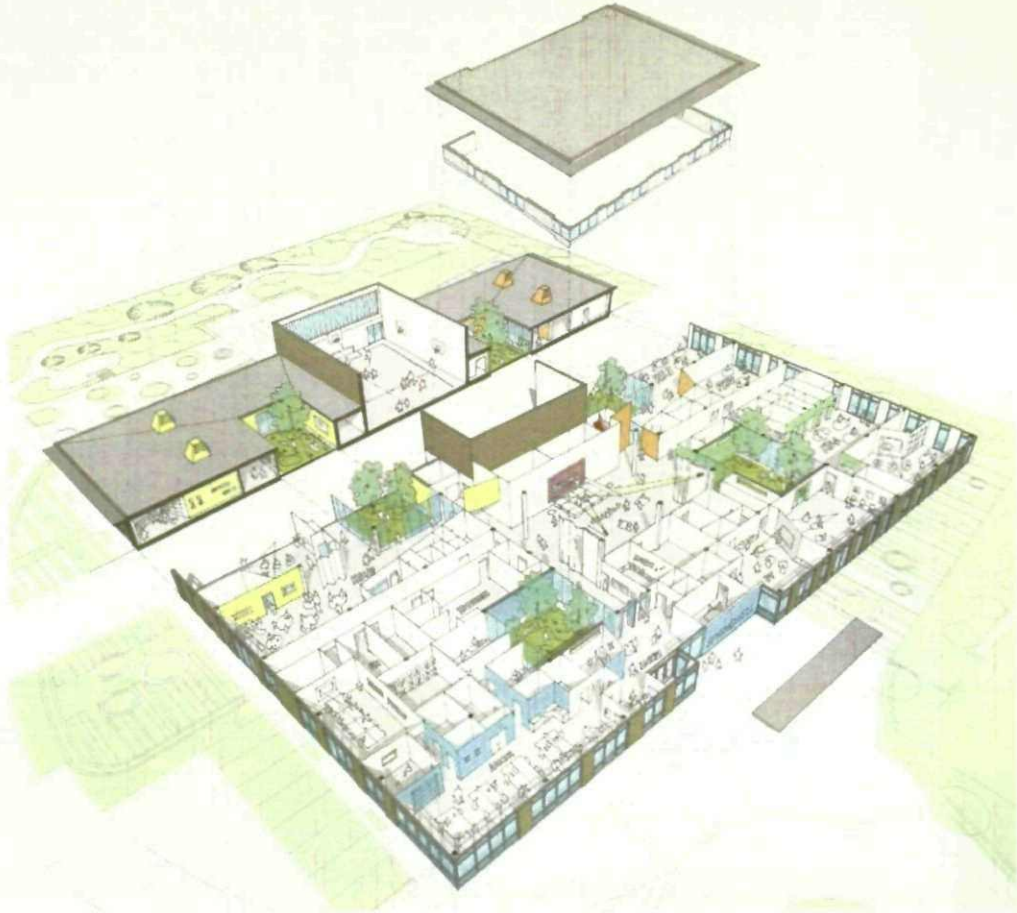

Fig. 9 Cut away aerial view of the proposed scheme

3.0 Design Resolution

3.1 Use

The scheme will provide the school with a much improved learning environment both internally an externally. This improved environment will provide the school with every opportunity to realise its ambitions for innovative, inclusive and holistic education.

Fig. 10 Proposed site master plan

3.2 Amount

The proposed scheme will dramatically improve the facilities in which the school operates. This will be achieved by increasing the amount of new building on site to 3530m^2.The intention is to use the whole site as an educational resource. In order for this to be achieved a balance has been struck between hard and soft areas, whilst maintaining a philosophy of inclusivity for all school users of varying disabilities.

The following table sets out the provision of external areas on the site.

Area	BB98 / BB102 Minimum area recommendations	Proposed Provision
Area for Sport (Playing Fields and Ball Courts)	5,000 sqm.	6,940 sqm. (allows for doubling ball courts)
Soft Informal and Social	992 sqm.	1,800 sqm.
Hard Informal and Social (Includes Key Stage Gardens and Performance Area)	515 sqm.	630 sqm.
Habitat	277 sqm.	425 sqm.
Access & Buildings (approx)	-	c.8,800 sqm.
Float	-	7,135 sqm.
Total Site Area	**17,660 to 20,068sqm.**	**24,750 sqm.**

Fig. 11 External site areas

3.3 Layout

The main approach to the Springwell School is from the South off St Helens Boulevard. This is the only vehicular and pedestrian access to the site once the building works are complete (temporary construction access from Carlton Road). There is a separate in and out route for the easy drop-off of pupils. Due to the large number of pupils being dropped off by taxi provision has been made for taxi drop off zones within the curtilage of the site to prevent congestion of the nearby road network.

The proposal provides for 41 car parking spaces in addition to 2 DDA compliant car parking spaces and 17 taxi drop off spaces on the site.

The entrance route has been designed as a tree lined boulevard clearly leading to the main school entrance. The playing field has also been brought to the front of the site to give a panoramic vista and 'green' approach to the building. The landscaping and approach create a welcoming and inspirational entrance to the school.

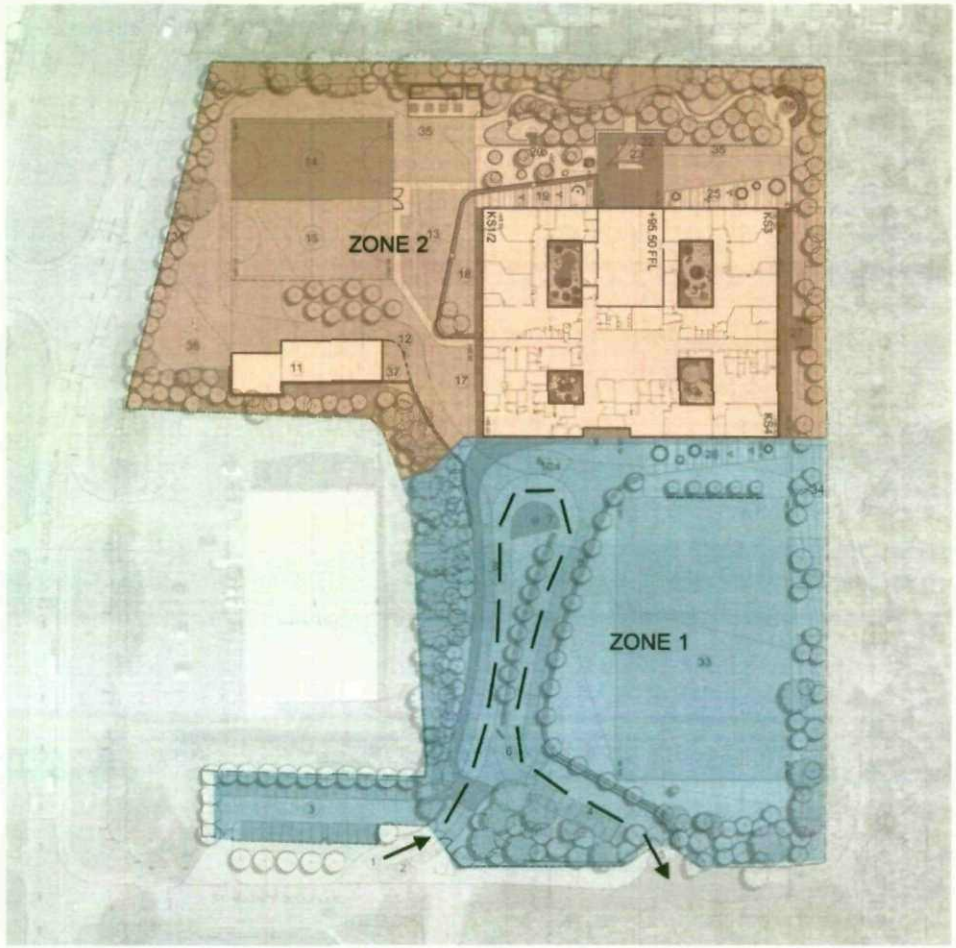

Fig. 12 Access routes and security zones

The site is split into two distinct zones;

- Zone 1 - a private/public zone controlled by the main gates toward the south of the site, which houses the parking drop off areas, grass sports pitch and KS4 garden. And;
- Zone 2 - a private zone accessed through the school for the earlier years and communal external facilities.

This zoning allows for passive security, therefore reducing the requirement for intrusive security measures.

3.4 Scale

The new building has been designed sit comfortably in relationship to the topography of the site. It is largely single storey and sits like a pavilion in the landscape. The new school is set back from the site entrance and Carlton road to allow a buffer between the school and residential areas and road noise. This separation also provides a better environment adjacent to the building and classrooms.

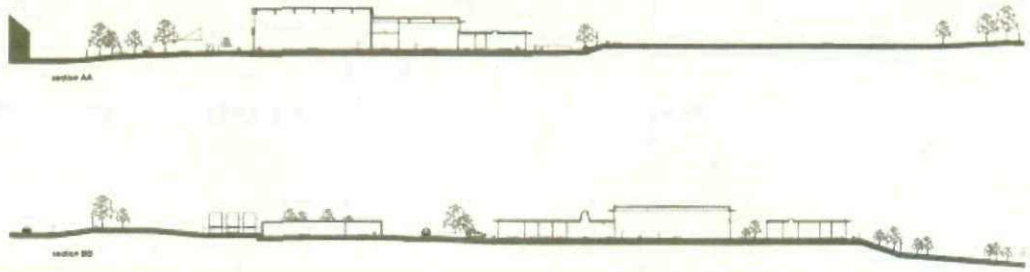

Fig. 13 Site Section

Section AA highlights the natural buffer between the neighbouring residential dwellings to the North, and Section BB above shows the set back from Carlton road to the West of the site.

3.5 Landscape Design

A key priority of the design of the external spaces is to extend the teaching spaces out into the landscape. The proposed landscaping provides a variety of hard and soft landscaped areas for both learning and play; the areas of each comply with the relevant requirements set out in BB102 and BB85.

The proposed layout of the new school building acts to create an enclosed courtyard space for each Key Stage and also a defined external garden/play space. The courtyard is seen as an external classroom for teaching, with the external garden for teaching and informal play. The landscaping provides a number of destination spaces, for educational opportunities and play.

Wherever possible the links between the new building and external spaces are designed to be as direct as possible.
An area to the North of the new building has been set aside as a horticulture area. Here, natural processes can be explored through the cultivation of plants and organic food crops. To the North East of this area is woodland walkway and nature area

which will include an informal meandering path leading to an external teaching/performance space. There is also a sensory garden and open grass areas for relaxation and play.

The main parking area is located to the South and South West of the new site, with a degree of separation between vehicular and pedestrian access and movements for safety.

The provision of sports and recreation facilitates the opportunity for students and community users to participate in both formal and informal play and sports activities. The incorporation of both hard and soft surfaces enhances the variety of sports that can be played and the provision of a MUGA allows for sport to take place throughout the year.

3.6 Appearance

We have looked at the visual impact the new school building will have on the landscape. Following discussions with the local Planning Authority our approach has been to position the building to the North East of the site allowing a buffer between Carlton Road and the Residential area to the North. The simple rectilinear plan minimises the size and expanse of the building, thereby reducing its visual impact on the landscape. The existing trees and planting surrounding the perimeter and within the curtilage of the site provides a level of screening of the school and will only be reinforced by the planned development.

Fig. 14 View toward the proposed main entrance from the entrance boulevard

Fig. 15 Proposed view from the grass pitch

The double height element of the scheme which houses the sports hall and drama space sits toward the North of the site. This element acts as a floating box contrasting against the horizontal element of ground floor accommodation. The light/vent chimneys also break this horizontal plane and through colour offer an identity to the four quadrants of the school.

Fig. 16 Proposed view from the North West

The new building will use a simple palette of materials. The ground floor façade has a rhythm of glazed and timber vertical panels which acts to break the mass of the building, inspired by the random nature of trees in a wood. The sport hall element is designed as a pure white rendered box, as a distinct element and contrast to the timber below. A simple metal overhang expresses the horizontal plane and also provides solar shading for the classrooms within.

3.7 Sustainability

The design team is committed to designing schools based on sustainable environmental principles from the basic concept through to detail design. The form of the building is designed to passively manage; day lighting and direct sunlight, solar gains and climatic control, ventilation, water management, acoustics and energy use. The design will also utilise green materials from sustainable local sources where ever possible, and will be built from precast concrete and prefabricated elements for reduced embodied energy.

Biomass will be used to generate heat and power throughout the life cycle of the building. Our initial BREEAM assessment shows that it is likely that we will achieve a "Very Good" rating as a minimum.

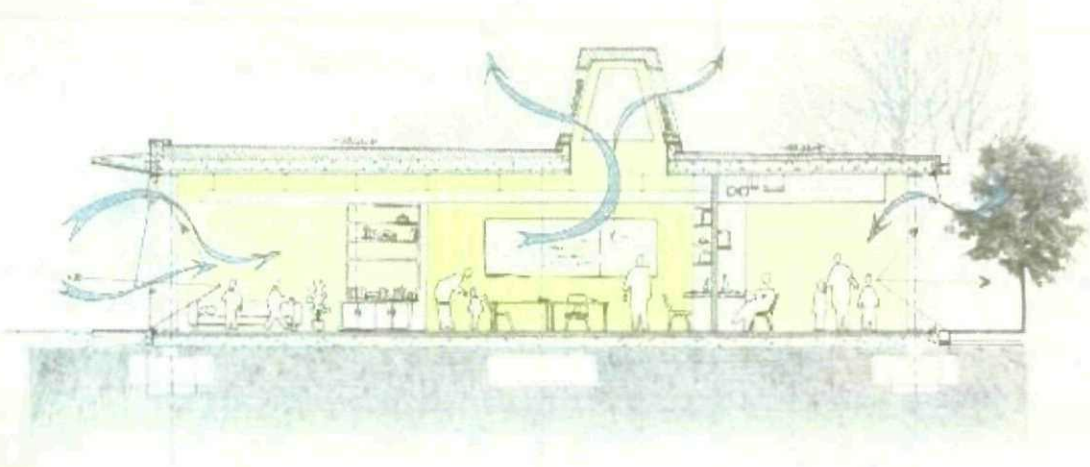

Fig. 17 Typical classroom section

The rooms are designed to be naturally ventilated wherever possible, the classrooms having light and ventilation chimneys to provide natural ventilation and diffuse north light.

4.0 Accessibility

The main point of access to the site is from St Helens Boulevard to the South. The new building presents its main entrance in this direction. Access to the site and buildings is designed to be inclusive and convenient for all.

Provision has been allocated for 41 car parking spaces, in addition to 2 disabled bays and17 taxi drop off spaces. Space for motorcycles and a storage area for 20 bicycles for the use of staff and visitors will also be provided. These areas are easily accessible and designed on the principles of secure by design.
All parking spaces will be marked in accordance with BS8300 Fig.3.
Disabled car parking spaces are designed to be easily identifiable from the initial point of access to the site and close to the main entrance. Dropped kerbs and tactile blister paving will be provided where access routes meet other zones i.e. vehicle routes.

In line with good practice both in terms of DDA compliance and Health and Safety the initial access to the site is designed so that vehicular and foot traffic are physically separated in order to afford a safe transfer from vehicles to the main school entrance.

Most pupils arrive on site by taxi. Large taxi drop off points have therefore been provided on the main approach to the school entrance. The pupils are dropped off and are personally greeted by a member of staff at the entrance and escorted into the building.

Users of the school can make use of public transport. There is a bus shelter situated on Carlton Road which runs adjacent to the school. The service runs to Barnsley town centre and the central bus and rail interchange. Barnsley Railway station is 3 miles away by road from Springwell with links to London, York and Lincoln. Northern Rail manages the station and the following routes operate through it:

- Huddersfield – Lincoln
- Leeds – Sheffield
- London – York

The new building will be constructed in compliance with Building Regulations Approved Document M and BS8300 so that the school complies with the requirements of DDA95+2000 and SENDA 2001.

The main entrance to the school building is clearly identifiable on entering the site. The entrance is emphasised by a defined entrance canopy and boulevard approach. The use of clear signage and clearly demarked external paving features will provide further emphasis to the location of the entrance.

Due to the nature of the school, it is proposed that the new building will provide level access throughout.

5.0 Implementation

Subject to the discharge of relevant conditions that are attached to the Outline Planning Permission the development will be phased so that the school do not need to decant into temporary accommodation through the construction period. For this to happen the existing buildings need to be kept fully operational until the new building has been completed. Once complete the school will decant into the new building allowing the former Rockley Mount building to be demolished prior to the completion of the landscape proposals.
The following diagrams set out the phasing that will take place on site:

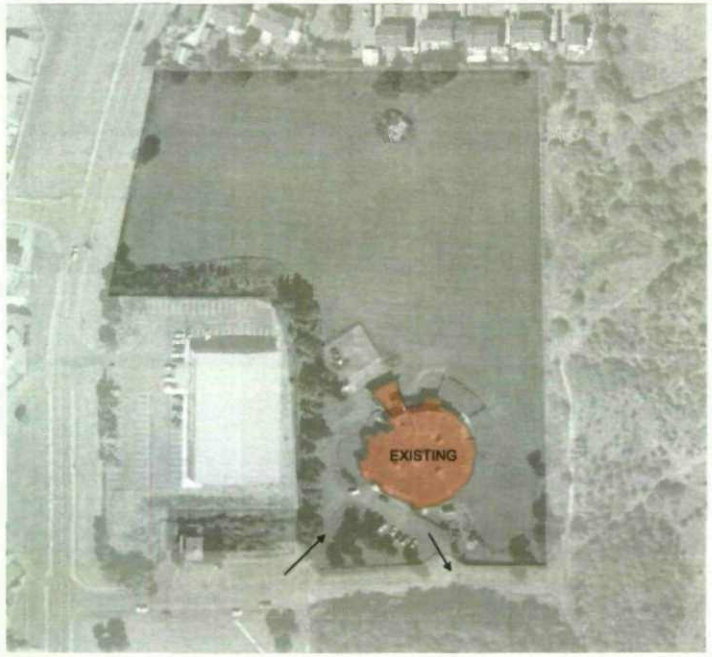

Fig. 18 Site as existing

Fig. 19 Construction of New Build School and North external works (weeks 1-56)

Fig.20 Demolition and South external works (week 59-77)

Fig. 21 Completion (week 78)