

PRIMARY SCHOOL SITE AND DESIGN PRINCIPLES

To: **Cabinet**

Date: **7th July 2009**

From: **Service Director: Strategy and Commissioning Children and Young People's Services (CYPS)**

Electoral division(s): **All**

Forward Plan ref: **Not applicable** *Key decision:* **No**

Purpose: **To:**

- (i) Advise Cabinet of further consideration of the site and design principles currently being used by the Authority as the basis for negotiations with housing developers and the City and District Councils for the provision of new primary schools to serve growth areas.**
- (ii) Seek Cabinet's approval that the Council should seek to secure provision of single storey primary schools.**

Recommendation: **Cabinet is asked to approve the proposal that the Council should seek to secure provision of single storey primary schools.**

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1.0 Background

- 1.1 Cambridgeshire County Council, as the local Children's Services Authority, is responsible for educational provision in the County, which includes legal duties to keep the number of school places under review and ensure that there are sufficient school places to meet demand.
- 1.2 In recent years, the Authority has established a number of new primary schools in response to housing growth in Ely, St Neots and Cambourne.
- 1.3 Planned housing development close to and adjoining the City, as well as in other areas of the County, will require the establishment of further new primary schools. In addition, new primary schools may also be required in response to rising birth rates.
- 1.4 Custom and practice has been to enter into Section 106 negotiations with housing developers on the basis that this would secure capital funding to meet construction and equipment costs, and provide a site of sufficient size for each new school identified as being required. For primary schools, the costs and site area have been for a predominantly single storey building.
- 1.5 In September 2007, Cabinet approved the adoption of a policy framework to inform decisions in respect of the establishment of new schools. This included a re-affirmation of the commitment to the inclusion of children and young people with special educational needs (SEN) in mainstream schools, wherever possible. One area not covered by that policy framework was storey height.
- 1.6 On 5 March 2009, the Joint Strategic Growth Implementation Committee (JSGIC) requested re-consideration of the Council's preference for single storey primary schools to determine whether the adoption of multi-storey design solutions would reduce construction costs, the site area required and, in consequence, improve the overall affordability of housing development sites.

2.0 Primary School Design

- 2.1 The Department for Children, Schools and Families' (DCSF) Building Bulletin 99 (BB99) 'Briefing Framework for Primary School Projects' provides local authorities with guidelines which inform primary school design.
- 2.2 Cambridgeshire's approach to school design relies heavily on input from specialist advisers, feedback from schools involved in recent building projects and its commitment to inclusion, community use and extended services.
- 2.3 In April 2007 the Council adopted "Cambridgeshire's Vision for Education - Schools for the Future". The Vision emphasises the role of the school as a community resource but also that learning, in its wider sense, encompasses a child's aspirations, physical and emotional well being and their personal and social development. Translated into the design briefing for new schools it has not only placed an emphasis on inspirational school buildings but also raised the importance of the quality and range of spaces to be provided in the external

environment.

- 2.4 Technical assessments and feasibility work undertaken by the Council's design partner, Mouchel, on indicative layouts for single storey primary schools demonstrate a requirement for a site area of 2.3 hectares (ha) to provide a 420 place (two form entry (FE) extended services primary school. The site area is made up of the following elements:
- Sports Pitches
 - Games Court (hard surfaced)
 - Soft Informal and Social Area
 - Habitat Areas
 - Footprint of Buildings
 - Refuse, Deliveries and Access
 - Entrance Paths and Roads
 - Car Parking and Drop-Off
 - Bicycle Storage
- 2.5 Certain large volume spaces such as the hall, activity space and kitchen (ventilation requirements) are not suited to housing accommodation above them. Taking this into account, the maximum land saving which would be achieved by building two storey rather than single storey primary schools would be around 1200sqm or 0.12ha.
- 2.6 Learning and School Organisation
- Providing direct access from the classroom to outside environments is a means of enhancing the curriculum, especially when it can become part of classroom practice without having to take all pupils outside or allowing them to do so unless accompanied by an adult. This serves to promote the inclusion of children with SEN.
- Single storey primary schools also make arrangements for pupil collection and drop off easier because of the direct access to classrooms from the playground that is provided. In two storey or multi storey buildings, with classrooms on the upper floors, this is more difficult to arrange.
- Schools also have to confront the issue of congestion, particularly at those times when the whole school moves at once such as assembly, morning and afternoon break and lunch. The single storey arrangement aids the flow and distribution of pupils into and out of the schools at the key times at the start and end of the school day. Classrooms above ground floor level would have to be accessed by pupils and staff via common staircases. There are issues over how to evacuate the school with increased congestion on staircases and increased issues for evacuating children with mobility problems.
- Single storey primary schools can also offer children the opportunity to independently access resources within the school.
- 2.7 The proposal of multi storey design solutions often originates from the observation of primary school buildings in urban developments on mainland Europe, particularly Freiberg in Germany, which has been studied for the application of lessons to developments in the Cambridge sub region. The housing densities achieved in these developments (40 – 50 dwellings per

hectare) and the urban design form are more in keeping with the style of the proposed major development areas in the Cambridge Sub-Region. However, the educational context that drives the design of the schools in these developments can be very different, for example when considering the application of solutions adopted in Freiberg, it should be noted that:

- in Germany, primary age children begin school at age 6, prior to this they are in kindergartens, which are predominantly single storey with an emphasis on outdoor play. In Cambridgeshire, children start school in the September following their fourth birthday.
- schools in Germany focus more narrowly on formal education rather than the whole child approach required by Every Child Matters and the extended services that support it. The school day in Germany finishes at lunchtime. Other child centred activities take place away from school. In Cambridgeshire, children could be on the site from 8.00 am in the morning until 5.30 – 6 pm in the evening.
- there is a lesser requirement for the whole school movement of pupils as school finishes at lunchtime and there is no requirement for a daily collective act of worship. These are the movements in our primary schools that would be most difficult to manage.
- Primary schools in the German model do not provide for the same level of inclusiveness for children with SEN.

2.8 There are examples of new multi-storey primary schools on restricted urban sites in England. The Department for Children, Schools and Families (DCSF) Building Bulletin 99 advises that in these circumstances, thought will need to be given to how the requirements for external areas will be met when faced with these restrictions. It suggests the use of roof space and play decks as a solution. It does not advocate providing below DCSF minimum areas but BB99 is a practical response to the reality that many older school sites in urban areas do not meet minimum requirements. Care needs to be taken in adopting solutions that have been developed elsewhere out of necessity as a justification for planning new schools in new communities.

3.0 SIGNIFICANT IMPLICATIONS

3.1 Resources and Performance

The Council has planned on the basis that new schools in new communities will be wholly funded from section 106 contributions. Each new 420 place primary school requires the developer to make a capital contribution in the region of £7m for the costs of construction. The changed economic circumstances do need to be recognised and it is entirely appropriate for the Council, along with all partners, to reconsider plans for the new developments with a view to exploring how the cost of public services in terms of both land take and construction can be reduced. Equally, the Council cannot deliver savings that are attributed to design solutions where they do not exist.

The scale of the economic downturn may require a more fundamental review of

how public infrastructure in new developments is provided and funded. Savings may be more deliverable through returning to first principles and looking at the whole public realm for further opportunities for sharing of facilities and co-location to secure maximum value from the capital investment. In these circumstances it would be necessary to look afresh at what the schools and their sites are expected to deliver and it should be these requirements that determine the design brief and the site area necessary.

In terms of construction costs, the addition of storeys contributes few savings. In a two storey construction, savings could be made on roof and substructure areas but this is offset by the need to strengthen the substructure and allow for additional supporting structures, the vertical transportation of services, fire protection, staircases and lifts. Labour time is also increased working over a building on a number of levels.

As the number of storeys increase, greater floor area is also required. Structural components and circulation areas such as stairs, stairwells and lobby/platform areas occupy more space. In addition a lift will be required and possibly an evacuation lift which add to cost. The County Council research undertaken on this issue concluded that single storey or multi storey builds were broadly equivalent in their construction cost.

3.2 Statutory Requirements and Partnership Working

The Council has a statutory duty to provide school places to those children and young people living in its area. It has well-established processes in place for producing and revising demographic forecasts in order to determine its requirements.

The Education Act 2005 placed a requirement on local authorities to invite other potential promoters to enter into a competition to provide any new secondary schools they planned to establish, or where they planned to provide replacements for existing secondary schools.

The Education and Inspections Act 2006 extends the competition requirement to primary and special schools. This requirement also applies to new primary schools to be established as a result of reorganisations such as infant and junior school amalgamations.

In the continued development of the proposals for our new schools the County Council will work within the multi agency, inclusive project management arrangements put in place by Cambridgeshire Horizons. These include all public service providers and representatives of the major private sector developers.

3.3 Climate Change

The Authority is committed to providing schools as central as possible to their communities on sites which are well served by foot and cycle paths in order to minimise the number of children who are transported to school on a daily basis.

On 4 November 2008, Cabinet endorsed recommendations for the development of a policy framework and associated performance indicators in response to the

Government's target for all new schools to be zero carbon by 2016. The design for all new schools will need to achieve a Building Research Establishment Environmental Assessment Method (BREEAM) 'Very Good' rating as a minimum.

During Summer months, heat in upstairs classrooms is a more difficult issue for design teams to address using natural ventilation and air flows as, for Health and Safety reasons, windows on 1st floor and above cannot be opened more than 10 cm. Uncomfortable conditions for both pupils and staff can adversely affect learning. There are approaches to mitigating these conditions but mechanical cooling is more likely to be required.

3.4 Access and Inclusion

At its meeting on 11 September 2007, Cabinet reaffirmed the Council's policy of inclusion of children and young people with special educational needs (SEN) in their local mainstream school where appropriate, and of a maximum journey time of 45 minutes each way for children and young people with SEN.

3.5 Consultation and Engagement

Proposals for schools in new developments will be subject to the statutory consultation requirements of the planning process.

In May 2009, the Children and Young People's Policy Development Group (PDG) considered a report on this issue, and the consensus view was that the Council should continue its approach of providing single storey primary schools.

Source Documents	Location
BB99 – Framework for Primary School Design Cambridgeshire's Vision for Education: Schools for the Future Cambridgeshire County Council Guide to the Location and Specification of New Build Nurseries and Pre-Schools	B202 Castle Court Cambridge CB3 0AP