

HMY



9.0 Design Report

Cornfield School,
Littlehampton

West Sussex County
Council

14 April 2014

Job No 1688

www.hmy.uk.com

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9.1 Introduction

- 9.1.1 This planning application is for a two classroom extension and support facilities to Cornfield School, Cornfield Close, Littlehampton West, Sussex BN17 6HY.
- 9.1.2 Cornfield School is a special school in Littlehampton which currently caters for secondary aged children. However, from Easter 2014, the school will also accommodate KS2 pupils. The school caters for children with social, emotional and/or behavioural difficulties.
- 9.1.3 Nationally and locally pupil numbers are rising and there is an increased demand for places for children with more complex needs. Grant funding has been secured to provide additional places at seven special schools throughout West Sussex. Cornfield School requires an additional 24 places for September 2016. The school will remain operational throughout the duration of the project. The new building will meet the recognised standards as set out in the DfE Building Bulletins.
- 9.1.4 The school was constructed in the early 1990s and has never been extended. A feasibility study was undertaken to consider the best way to extend each school within the programme.
- 9.1.5 A number of changes are required to Cornfield School to cater for the increase in pupil numbers and also the addition of KS2 children. The school is undertaking a remodelling project to create teaching space for the KS2 children and this will be completed in readiness for Summer Term 2014.
- 9.1.6 The main capital project will provide an ASD (Autistic Spectrum Disorder) wing with two classrooms, withdrawal and group rooms, office and ancillary accommodation. The new facility will provide purpose-built accommodation in a safe and secure environment for the children with autism. The total gross internal area of the building is 226m².



Site location

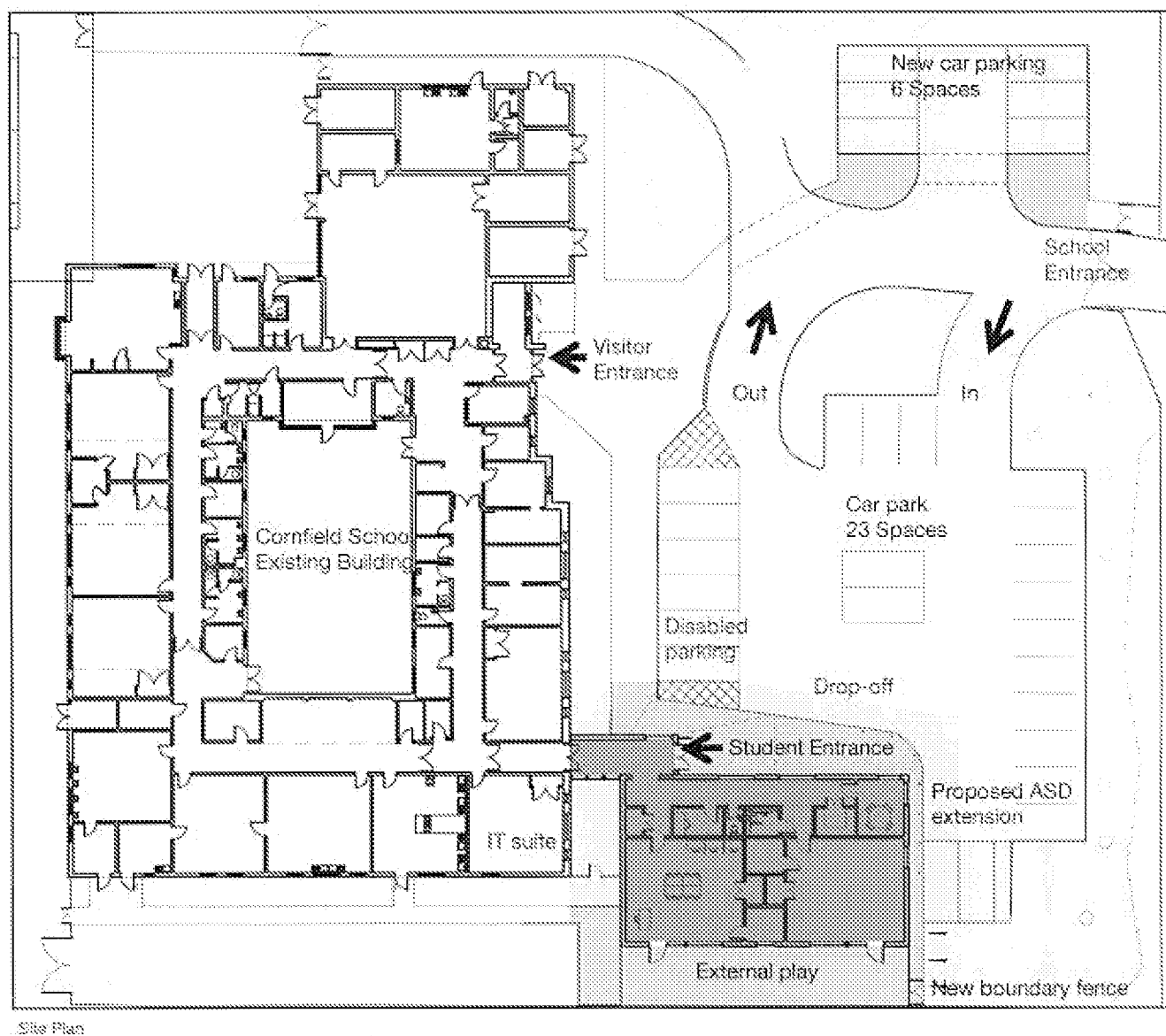
9.1 Introduction/cont.

9.1.7 In addition, adaptations are required to the car park area to create a dedicated in/out arrangement, which will assist with the turning circle for minibuses and taxis, and additional parking spaces due to the increase in staff numbers.

9.1.8 Access to undertake the construction works will be via the school main entrance off of Cornfield Close. The contractor's compound will be partially located on WSCC land adjacent to the school. This will ensure that the contractor's compound will accommodate less of the school car parking area and reduce the impact on drop off and pick up times.

9.1.9 The accommodation to be provided and the proposed layouts have been agreed with the Headteacher and Governing Body.

9.1.10 The Children's Start of Life Capital Programme 2014/15 includes the secured Targeted Basic Need Programme grant for the schools. Because the funding has to be expended by spring 2015 the following programme is required:
Planning application: April 2014
Start on site: July 2014
Completion: February 2015
Occupation: March 2015



9.2 Site Photographs



Existing school building



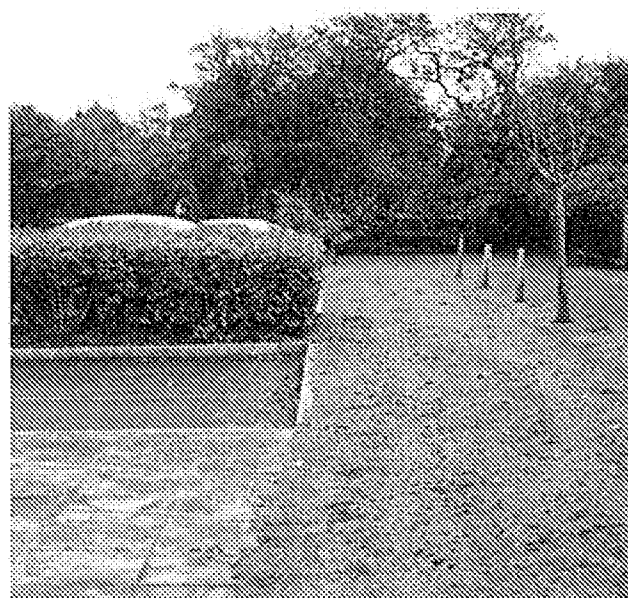
Existing student entrance



View of car park towards site entrance



Site of extension looking west



Site of extension looking east

9.3 Design Proposals

9.3.1 HMY have been appointed by Kier Construction under the SCAPE Framework to develop the previous feasibility study and budget provided from WSCC. We reviewed potential alternative locations for the new accommodation taking into consideration adjacencies with existing facilities, security and safety and construction access and discussed the options with WSCC and the schools. From these meetings agreement was reached to a preferred location for the new accommodation.

9.3.2 Siting

The extension is located to the front of the school over part of the existing car park. This avoids loss of playing field or hard surfaced play areas. The school also wanted the unit to be set apart from the main building to provide a reassuring and calm environment for the ASD pupils.

9.3.3 Access

The extension utilises the existing pupil entrance to connect to the main building. It can be accessed directly from the car park/drop-off area and from the main building with its own controllable entrance. It can also be used independently of the main building.

9.3.4 The building plan

The extension provides two classrooms of 56m² each with their own breakout space and store. They are supported with a small group room, staff office and toilet facilities. The total gross internal area of the building is 226m².

9.3.5 Environmental Design

The building will be naturally ventilated and daylight with a combination windows with high level vents and opening rooflights linked to CO2 monitors. Underfloor heating will be supplied by an independent gas fired boiler and water heating with instantaneous electric water heaters.

9.3.6 External Works

The building footprint will take 248m² of the existing car park and grassed verge and 80m² for hard surfaced social space, accessed directly from the south facing classrooms. The existing boundary fence provides no security to the side of the site so this is being replaced with a galvanised steel mesh fence approximately 3m high to match existing fencing around the playing field. The external play area to the new extension will also be fenced from the rest of the school and provided with gates for emergency and maintenance access.

9.3.7 Parking

Reconfiguration of the existing car park will provide 23 car spaces (currently 21 parking bays provided) by creating a new circulation route into the car park. This will eliminate the bottleneck at the school entrance for vehicles queuing into the school. A new parking area with 6 additional car spaces will be constructed to the right of the main entrance. This will provide a total of 29 spaces on site will be provided to meet with the increased numbers and to accommodate visiting professionals to the school.

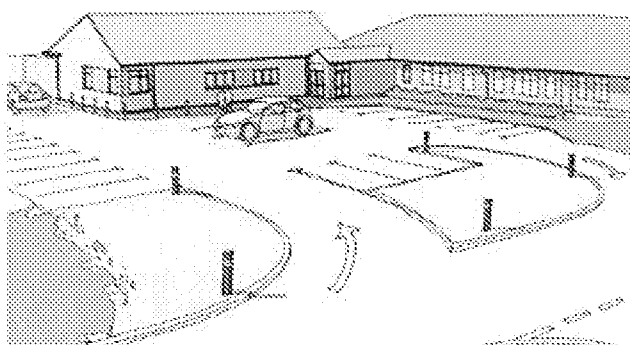
9.3.8

The extension will have a new foul drainage connection made to an existing sewer in Cornfield Close. The surface water drainage will be disposed of in a similar manner as the existing building via a new soakaway/attenuator - refer to Structural Engineers drawing.

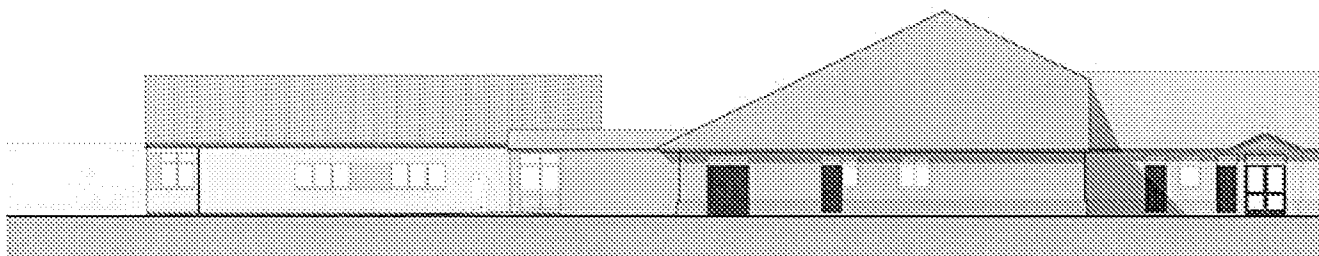
9.4 Materials & Sustainability

- 9.4.1 The new extension is single storey with a concrete tiled pitched roof similar to the existing building. The plan has been developed with the School and the building form and siting has been influenced by the existing building doorway and its roof where the extension links to the existing building.
- 9.4.2 The buildings will be finished externally in a through-coloured render on a render backing board upon a blockwork plinth below dpc level. The elevations have been articulated by grouping powder coated aluminium windows and doors with coloured render panels. The main render colour will respond tonally to the existing brickwork walls to the main building.
- 9.4.3 The structure for each building will be an insulated timber frame with an OSB board sheathing and roof deck. The pitched roof will be a warm roof insulated to current standards and clad with concrete tiles. The floor will be a raft construction with insulated floating screed for the underfloor heating.
- 9.4.4 Internally the timber frame external walls and partitions will be lined with robust grade plasterboard and plywood to meet with the demands of an SEN school. It is a proven design to ensure robustness and provide good fixing for the various pieces of equipment. The partitions will be constructed to meet with acoustic requirements of B893. Ceilings will meet with the requirements to reduce reverberation times within each space as set out in B893. The pitched roof provides an opportunity to create light and airy classrooms and avoids low suspended ceiling which could be damaged.

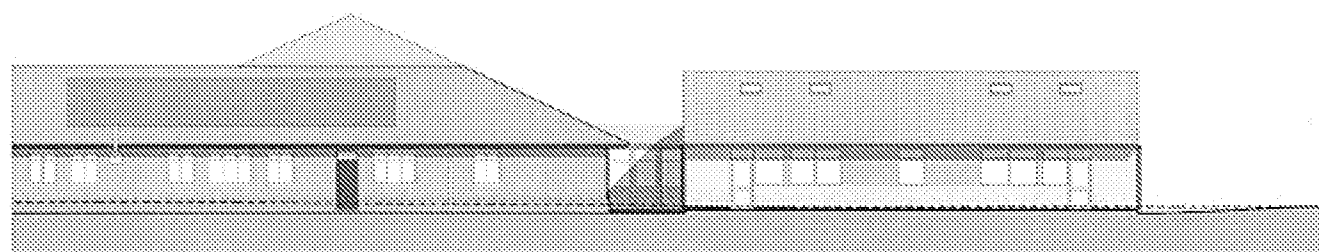
- 9.4.5 The plasterboard walls will be painted eggshell finish and the floors generally finished with vinyl flooring with coved skirtings. Wet areas will have non-slip vinyl flooring and offices carpeted. Painted doors and frames will have large kickplates in vulnerable areas to protect from damage. Colours and finishes will be developed in consultation with the schools during the next stages of design.



Massing study new extension



North elevation



South elevation