

Key Design Criteria for Primary School Sites

There are a number of factors that dictate the location, orientation, proportions and layout of a new 2FE or 3FE primary school site within a housing development. The following will help inform the design of the housing development to ensure the school is in an appropriate setting to deliver a sustainable educational establishment for the development, and to avoid additional costs known as abnormal costs.

The County Council cannot accept a proposal which offers a school site that has the lowest residential potential or value, as the school site needs to be positioned to fulfil certain central government and County Council guidance, and should be an integral part of the development. Once the preliminary location of the school is defined, based on early dialogue and the requirements set out below, OCC will review its suitability. This can be quickly established by overlaying a 'proving' layout once appropriate information has been provided by the developer.

Please refer to the County Council requirements prior to finalising master plan (document 20).

Location of the school – assessment of constraints

- No part of a school site shall be located on:
 - Contaminated areas
 - Flood zones 2 or 3
 - Sloping ground
 - Existing service runs or new service runs
- No school site shall be located next to a Sewage Treatment Work or within the existing odour contours of that facility.
- No run off of surface water from adjoining land will be accepted.
- To avoid unnecessary unforeseen costs known as abnormal costs and to achieve appropriate circulation, the main area of the site should be level and playing fields should have a gradient no greater than 1:100 along the line of play and 1:50 across the line of play.
- To avoid additional site area the main area of the site should be level and playing fields should have a gradient no greater than 1:100 along the line of play and 1:50 across the line of play

For health and safeguarding reasons to the children

- No high voltage overhead cables shall be located within 200m of any school site. This should be considered the distance standard for High Voltage Overhead Transmission Lines (HVOTL) of 132 kV, 275 kV and 400kV. For 66kV and 110

kV lines the distance could be reduced to 100m. No services other than those directly related to the school site are to be positioned on the school site.

- No underground cables shall be located within 5m of the boundary of the site.
- No 'final distribution' substation shall be located within 10m of any school site.
- No other substations shall be located closer than 200m to any school site.
- Hedgerows/ditches across sites shall be avoided as they have the potential to compromise the economical layout of the school site, restrict supervision, restrict long term site flexibility etc. The site area may need to be increased to take account of restrictions and any ditches shall be infilled prior to site transfer.
- Where hedgerows are present, on boundaries, the boundary shall be located on the inside of that hedge to ensure a secure periphery to the site can be achieved.
- Groups of trees should be avoided where they will present an issue for staff supervision of pupils using the external play areas.

For management of an education facility

- The school should be located on a quiet road at the centre of the housing development.
- If there is more than one primary school then they should be situated apart to ensure that each school sits within a clear catchment area. A special school could be situated abutting the primary school.
- Where the site boundary runs parallel to a hedge the developer will install the fence, on the inside of the hedge, ensuring that there is no potential for scaling the fence from adjacent trees etc
- Acoustics – the school and playing fields need to be situated in a quiet part of the development. The noise levels on unoccupied playing fields used for teaching sport should not exceed 50dB LAeq,30min, therefore this level is required at the boundary of the school site.
- School sites shall not be located such that the urban design concept suggests that the school building be located in the corner of a school site, close to the boundary as this would not be conducive to an economical layout or be able to be designed to meet access, educational, safeguarding and management requirements. See Site Layout section below.
- The positioning of 2 storey housing (not flats) on two/three sides of the school is accepted but may require vehicular access between the houses to the school site.

Road Layout/School Access Points

- A coach drop-off/pick-up layby (for one coach minimum of 18m straight length plus approved entry and exit arrangements such as tapers) will be required on the highway adjacent to the main entrance to the school.
- Roads should be designed to enable coaches to visit the school site and park in the layby, with a continuous circular route out of the development.
- The roads around schools should be designed to ensure that there are no dead ends and the road layout should allow for circular routes. This is to avoid vehicles reversing in close proximity to children.
- The developer will be required to produce a travel plan framework which will include the provision of pupil drop-off parking spaces for parents. The number required will need to be agreed with Highways, based on the developers' evidence based assessment of the school's requirements. Where a site is provided for say a 2FE school but initially only a 1FE school is to be built, the pupil drop requirements will be for the maximum potential size of the site i.e. 2FE or 3FE. NB parent drop-off will not be permissible on a primary school site.
- A 2FE school site should have three (four for 3FE) vehicular/pedestrian entrances into the site. These are to have appropriate site lines/radii and to be a total of 10m wide (6m wide vehicular access with 2m wide footpaths on both sides). The access points are to be situated at either end of the school frontage (dependent on the proving layout) with the further accesses strategically positioned to marry in with OCC's anticipated school layout. This is to maximise routes into the school from the surrounding road network for pupils arriving at the school; for emergency access; staff parking; service areas; future maintenance; extension work; long-term flexibility; development changes, over time, to the site and to ensure the operation of the school is not compromised during any works to the site.

Site Proportions/Layout for Primary Schools, on a Level Site.

The design of the school needs to meet the Education, Skills and Funding Agency guidance on school design. The following guidance regarding the appropriate school site location enables the school site to comply with the design guidance and have an optimum functioning school. If a school site does not comply with this guidance it would lead to a substandard school provision which will not be agreed by the Education Authority.

- In order to create a sustainable building and to control the environmental aspects of classrooms (lighting, heating etc), the classrooms need to be orientated to face either north or south. Along with other requirements this has a direct impact on the proportions and layout of the school site.
- For a 2FE school the site is to be rectangular with its width being no less than 100m; however, where the road frontage is to the north or south the width of the site shall be no less than 130m to ensure appropriate space for access points

and circulation of vehicles on site. Much is dependent on orientation and the road frontage location. The exact parameters of the school site will be dictated by a proving layout but examples of various permutations are shown in Figures 1, 2, 3 & 4 below.

- If the 2FE site is orientated west/east the length of the school road frontage (along one straight side of the site) shall be no less than 100m long facing west or east or 130m long facing north or south. See figures 1,2 & 3.
- If the 2FE site is orientated north/south, the school road frontage (along one straight side of the site) shall be no less than 130m long facing north/south or 100m long facing west/east.
- When the 2FE site isn't orientated along a north/south or west/east axis, more careful consideration of the site dimensions will be required. See Figure 4.

Designing schools to meet Safeguarding requirements

Safeguarding is particularly important in a school setting and there is government guidance which sets out the school's responsibilities. The school needs to be designed to facilitate safeguarding issues, especially with the layout of the school frontage to facilitate the school's ability to manage this issue for the lifetime of the school. To facilitate safeguarding, the site layout will need to support an open aspect to all external areas ensuring no corners or obstructions where pupils can be hidden from view. Below are the specific requirements for a site layout to fulfil the safeguarding issues:

- The main entrance should be close to disabled, visitor and staff parking. However the parking should not be positioned directly in front of the school building to avoid pedestrian vehicular conflict.
- Vehicular access routes into the site must be positioned either side of the main school frontage to facilitate access to the building for maintenance and building works, so to minimise disruption to the school and ensuring there are no safeguarding/management issues.
- Location of school keep clears zigzag road markings on the highway frontage shall be demonstrated. See Doc 1 Appendix A
- An off-site layby for coach drop-off and pick-up will be required adjacent to an entrance to the school, on the highway.
- The hall and kitchen accommodation should be adjacent to the main entrance for out-of-hours use and for the occasional daytime community use.

- The staff parking and service area should be towards the front of the site, but to the side of the school building. The service and delivery route should be adjacent to the kitchen to ensure safe and secure access out-of-hours.
- The nursery will be at the front of the school site. This is to ensure that safeguarding is maintained during drop-off and pick-up during school hours.
- The site configuration needs to allow for future demographic bulges and should allow for additional temporary classroom accommodation.
- The SEN Specially Resourced Provision (SRP) will require access to a secure external space.
- All of the playing field along with all external areas shall be visible from the building with no hidden areas.
- All adjustment to levels have to take place off site to avoid any invisible areas on the side of the site or unusable areas of the site

An 8400m² playing field will be required for a 2FE site with the approximate dimensions of 110.5m by 76m

See figures 1 ,2 , 3 and 4 below for a 2FE school

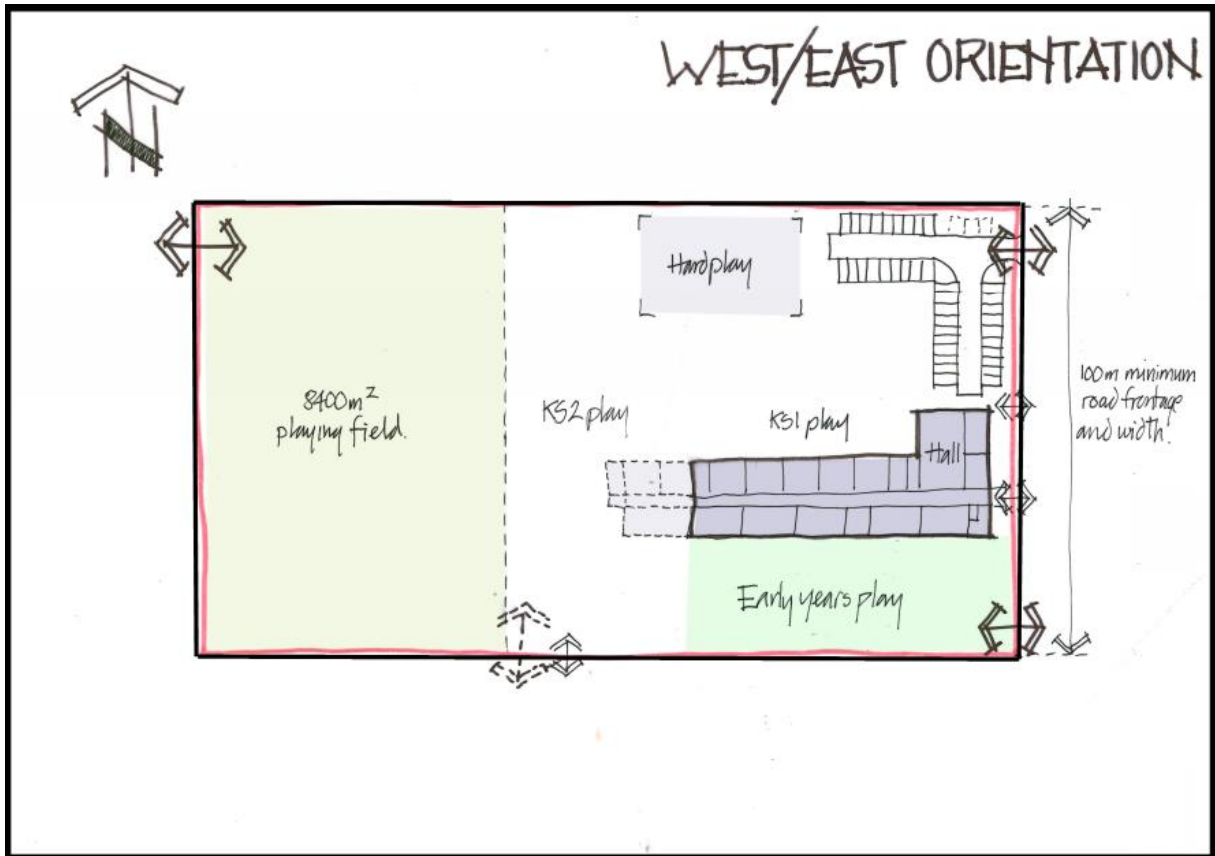


FIGURE 1

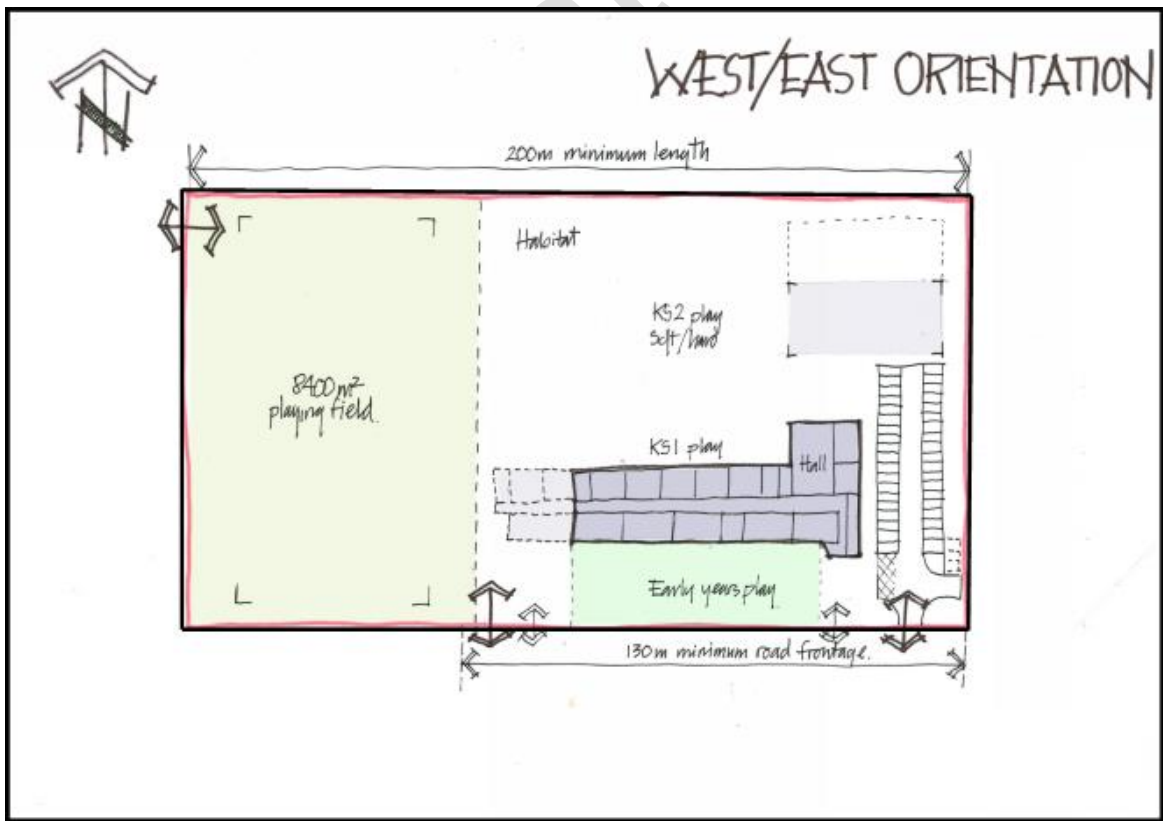


FIGURE 2

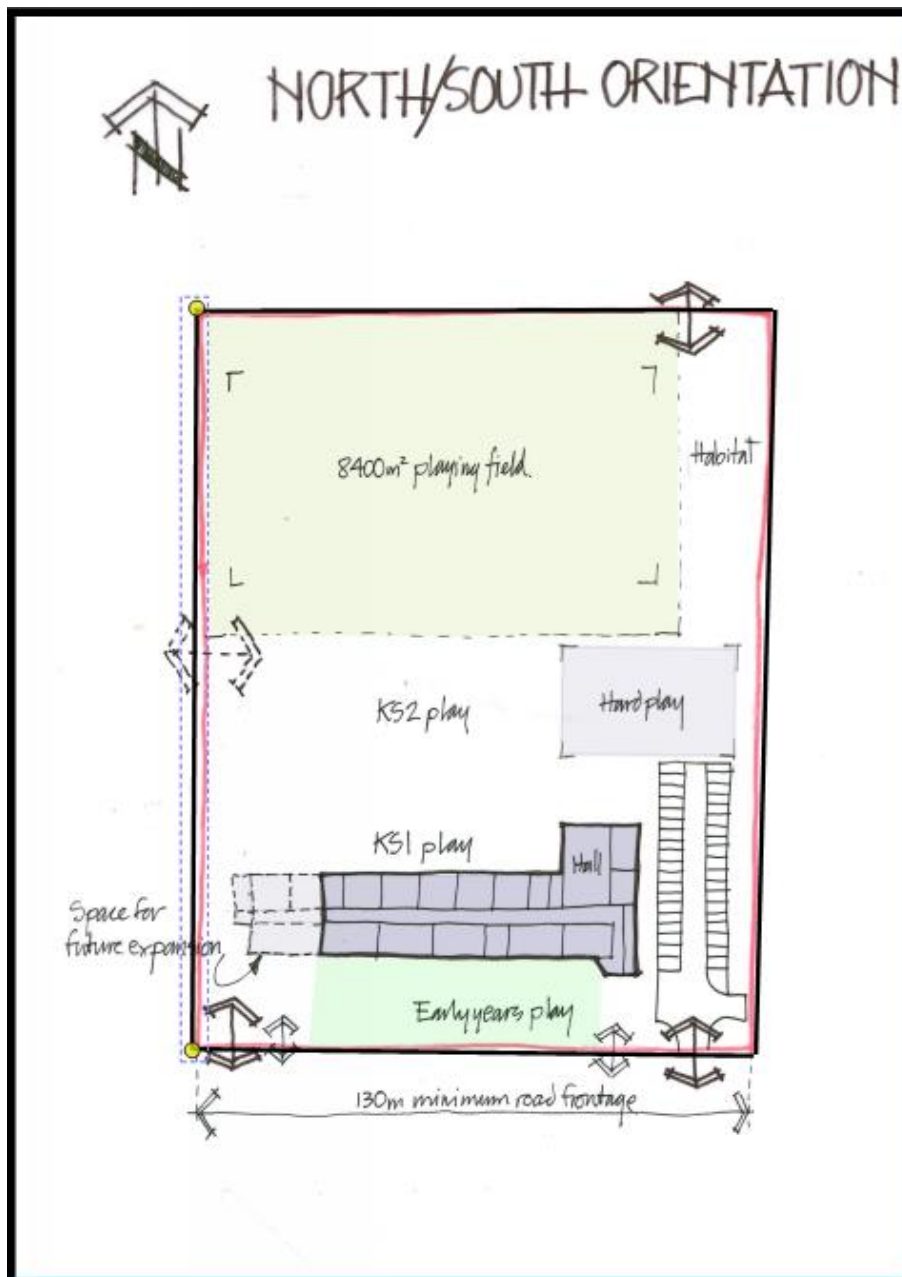


FIGURE 3

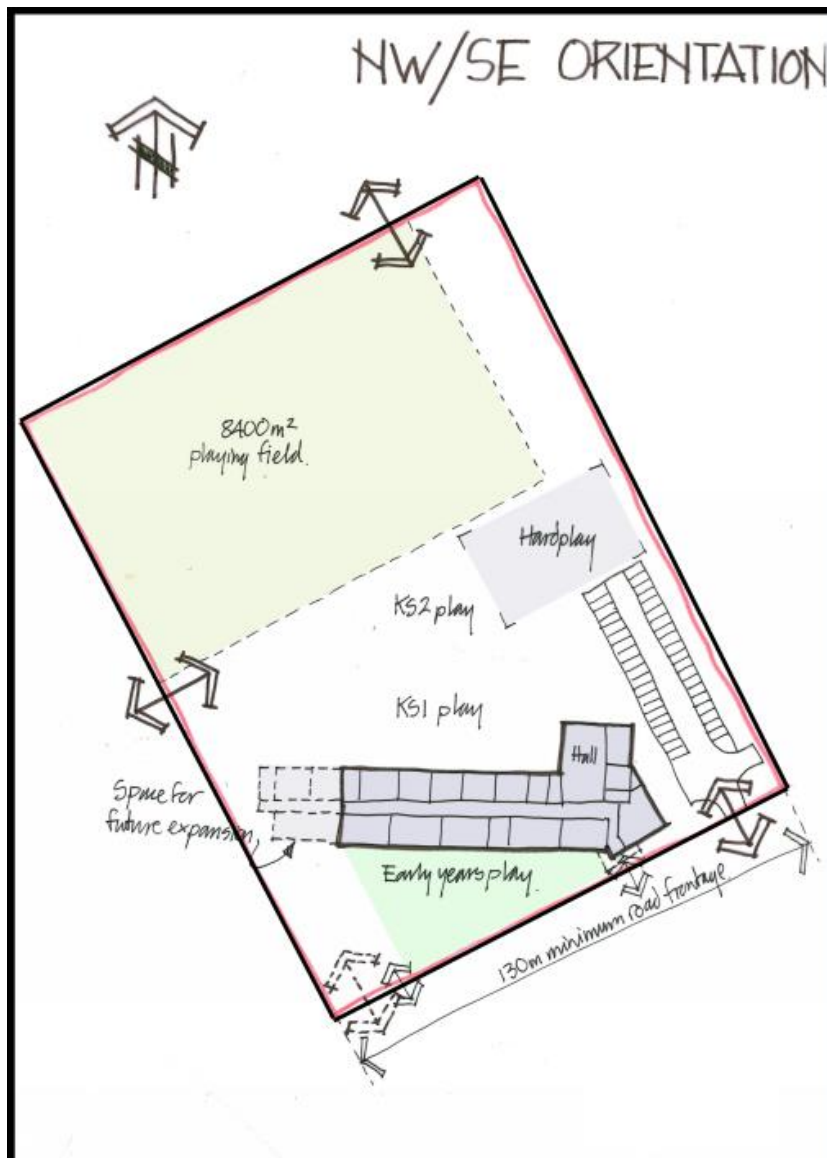


FIGURE 4