

Key Design Criteria for Secondary School Sites

There are a number of factors that dictate the location, orientation, proportions and layout of a new Secondary 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.

[Link to Document 20 – information required prior to finalising the masterplan](#)

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.
- Level sites
 - 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
 - Athletic tracks require a gradient of 1:1000
 - All regrading of school sites shall take place outside of the school boundary to avoid the need to increase the area of the school site.

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.
- 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.
- 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

- Four coach drop-off/pick-up laybys (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 to enable pupils to be picked

up during the school day. NB This is in addition to any on-site coach drop of facilities that will be required.

- Roads shall 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 1200 place school but initially only a 600 school is to be built, the pupil drop-off and highway parking requirements will be for the maximum potential size of the site.

NB No parent drop-off or student parking will be permissible on a secondary school site.

- The secondary school site shall have six 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 with a further access within 60m of one of the entrances (dependent on the proving layout) to allow coaches to enter, drop-off and exit. Other accesses are to be 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 coach drop off; emergency access; staff parking; service areas; future maintenance; extension work; long-term flexibility; development changes, overtime, to the site and to ensure the operation of the school is not compromised during any works to the site.

Site Proportions/Layout for Secondary 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 could 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 secondary school the site is to be rectangular with its proportion being 1:2. The minimum road frontage shall be no less than the width of the site based on the 1:2 proportions.
- Much is dependent on orientation; the road frontage location; the size of the school and whether there is 'option' land associated with it resulting in the potential for the future expansion of the school. The exact parameters of the school site will be dictated by a proving layout carried out by the County Council. As an example, for a 1200 place secondary it is envisaged that there would be a road frontage of approximately 210m with a further accessible road frontage along the adjacent side of 180m to allow for the safe and minimal movement of vehicles onsite.

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.
- An onsite coach drop of facility will be located adjacent to the sports hall utilising two of the vehicular entrances on the main frontage. This will need to be strategically situated to enable the area to double up for other functions once the school day commences and adjacent to the sports hall/ playing field for weekend events. It shall not be situated in front of the school building. NB This facility will not be used for parent drop off.
- The sports hall, hall, dining 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 at the front and to the side of the main school building. The service and delivery route should be adjacent to the kitchen to ensure safe and secure access out-of-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.
- Playing fields will be the appropriate dimensions to maximise the number of pitches and types of sport.
- All 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

Consultation Draft