Appendix C: SA scoring assumptions for Secondary School sites

Contents

Sustainability Objective: Natural Environment

Scoring Assumptions:

It is assumed that wildlife corridors will be included on all sites, if required by HRA, and no development will be permitted on nationally or internationally designated wildlife sites. However, development sites that are within close proximity of an international, national or local designated conservation site still have the potential to affect the biodiversity or geodiversity of those sites/features, e.g. through off-site habitat damage/loss, fragmentation, disturbance to species, air pollution, increased recreation pressure etc. Conversely, there may be opportunities to promote habitat connectivity if new developments include green infrastructure. Therefore, while proximity to designated sites provides an indication of the potential for an adverse effect, uncertainty exists for all effects (shown with '?'), as appropriate mitigation may avoid adverse effects and may even result in beneficial effects. As a starting point for the assessment, distances of 250m and 10km from international wildlife sites which are affected by recreational impact have been used as an indication of proximity. This distance is based on the South and East Devon Mitigation Strategy which identifies a 10km recreational buffer. The level of analysis has not yet been undertaken for recreational impact on the Dartmoor SAC or Dartmoor Woods SAC but there are indications from initial evidence carried out that recreational impact is a potential issue. As such, this SA takes a precautionary approach to the potential for recreational impact on the Dartmoor SACs, although it does not prejudice the Council from amending this level of impact at a later date when further evidence is available. This level of detail is not possible to be determined with certainty as part of a strategic site options assessment.

- Sites that are within 250m of one or more internationally or nationally designated biodiversity or geodiversity sites may have a significant negative (--?) effect.
- Sites that are between 250m and 10km of the Exe Estuary SPA, Dawlish Warren SAC, Dartmoor SAC, or Dartmoor Woods SAC or are within the South Hams Landscape Connectivity Zone, and/or that are within 250m of a locally designated site (e.g. County Wildlife Sites, Local Nature Reserves, Regionally Important Geological Sites) and/or contain UKBAP Priority Habitats or habitats that would support protected species, may have a minor negative (-?) effect.
- Sites that are more than 10km of the Exe Estuary SPA or Dawlish Warren SAC, Dartmoor SAC, or Dartmoor Woods SAC or and that are over 250m from a locally designated site, and that do not contain UKBAP Priority Habitats could have a negligible (0?) effect.

Proximity to an Air Quality Management Area (AQMA) can also influence the effects of new residential development on air quality, as development in or near to those areas could result in an increase in car use and associated emissions. However, the location of town centre sites could close to public transport links, services and facilities could help to reduce car-based travel from these new developments which could therefore have a negligible impact on AQMA conditions.

- Sites that are within, or within 1 km of, an AQMA would have a significant negative (--) effect.
- Sites that are further than 1 km from an AQMA but have been identified to have potential to result in increased traffic within an AQMA would have a minor negative (-) effect.

- Sites that are further than 1 km from an AQMA and have not been identified to have potential to result in increased traffic within an AQMA would have a negligible (0) effect.
- Town centre sites that are within, or within 1 km of, an AQMA would have a negligible (0) effect.

School site options will provide green infrastructure (especially playing pitches), however, larger sites are more likely to be able to provide a range of multi-functional green infrastructure. The degree of public access is currently unknown, but sites may improve local access to public or semi-public sports facilities. In some instances, existing green infrastructure may already be present on site and these assets may be lost if not incorporated into the new development, depending on design. School sites are likely to provide an uncertain minor positive effect (+?).

[National Planning Practice Guidance defines green infrastructure networks as including parks, open spaces, playing fields, woodlands, but also street trees, allotments and private gardens. It can also include streams, canals and other water bodies and features such as green roofs and walls.]

Sources of data:

County Wildlife Sites

County Geological Sites

Local Nature Reserves (LNR)

National Nature Reserves (NNR)

Special Area of Conservation (SAC)

Special Protection Area (SPA)

Ramsar sites

Sites of Special Scientific Interest (SSSI)

Aerial imagery

Sustainability Objective: Landscape

Scoring Assumptions:

Development in sensitive locations could have adverse impacts on the character and quality of the landscape, although effects will be uncertain as they will also depend on factors such as the design and scale of the development. The following base assumptions will be used, with site known site specific details used to adjust the level of potential adverse effect as appropriate:

- School sites which have been identified as having local landscape sensitivities could have a minor negative effect. However, the design and landscaping is unknown so in most cases this is likely to be uncertain (-?).
- Sites that are in a visible/prominent locations within the Undeveloped Coast designation could have a significant negative (--?) effect.
- Sites that are within the Undeveloped Coast designation but are less visible/prominent in the landscape could have a minor negative (-?) effect.
- Sites that are within 250m from the Dartmoor National Park boundary could have a significant negative (--?) effect.
- Sites that are within 1km from the Dartmoor National Park boundary could have a minor negative (-?) effect.
- Sites that are within 250m from the Exeter City boundary could have a significant negative effect
- Sites that are within 1km from the Exeter City boundary could have a minor negative (-?) effect.
- Sites that are within 250m from the historic defined landscapes of Mamhead, Oxton, Powderham and the Haldon Estates could have a significant negative (--?) effect.
- Sites that are within 1km from the historic defined landscapes of Mamhead, Oxton, Powderham and the Haldon Estates could have a minor negative (-?) effect.

Sources of data:

Dartmoor National Park boundary

Exeter City boundary

Undeveloped Coast designation

Mamhead, Oxton, Powderham and the Haldon Estates

Sustainability Objective: Historic and Built Environment

Scoring Assumptions:

The assumed characteristics table notes that no development proposed in the Local Plan will be permitted on nationally or internationally designated heritage sites. Historic England's definition of the setting of a heritage asset is contained in the National Planning Policy Framework Glossary in Annex 2, which states *"The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance, or may be neutral".* Detailed impacts on the setting of individual historic assets are difficult to determine at this early stage of site assessment and are more difficult for strategic/large scale sites. Effects would be more able to be determined once specific proposals are developed for a site and submitted as part of a planning application.

Consequently, in some cases, potential effects are recorded as uncertain (?) given the absence of detailed information. In the absence of detailed assessment work on the historic environment of each of the potential site, the following assumptions have been made as an indication of potential effects on heritage assets:

- A potential significant negative effect (--?) will be identified where a residential development **site contains** a statutory heritage asset (e.g. Listed Buildings (Grades I and II*), Scheduled Monuments, Registered Parks and Gardens, and Conservation Areas).
- A potential minor negative effect (-?) will be identified where a residential development site contains a Grade II Listed Building and/or is **within 3km of** all other statutory heritage assets.

Sources of data:

- *Conservation Areas*
- *Listed Buildings*
- *Registered Parks & Gardens*
- *Scheduled Monuments*

Sustainability Objective: Climate Change Mitigation

Scoring Assumptions:

The proximity of school sites to existing population centres will affect the extent to which people are able to make use of non-car based modes of transport (and to a lesser degree for a school, access services and facilities).

- School sites 2+km away from the edge of a Main Town could have a significant negative (--) effect.
- School sites less than 2km away from the edge of a Main Town could have an uncertain negligible (0?) effect.
- School sites within or adjacent to Exeter or a Main Town could have an uncertain significant positive (++?) effect.

Proximity to sustainable transport links will influence how accessible school sites are for pupils. The objective should be for most pupils living within the town to be able to walk or cycle to school. The proximity of site options to existing off-road cycle and walking routes can be taken as an indicator of how likely pupils are to cycle, for example.

- Sites that are connected to a safe walking / cycle route(s) are likely to have a significant positive effect.
- Sites that are within 500m of a walking and cycle routes are likely to have a minor positive (+) effect.
- Sites that are within either 500m - 1 km of a walking / cycle route are likely to have a minor negative (-) effect.
- Sites that are more than 1 km from a nearby safe walking / cycle route(s) are likely to have a significant negative (--) effect.

The location or scale of residential development will not affect the energy efficiency of the development; this would depend largely on the detailed proposals for sites and their design, which are not known at this stage. Opportunities to connect with district heating or provide on-site energy generation will be considered through the Local Plan policies.

Sources of data:

- *Railway stations*
- *Bus stops*
- *Bus frequency*
- *Local cycle routes*
- *National Cycle Network*

Sustainability Objective: Climate Change Adaptation

Scoring Assumptions:

Development on greenfield land is more likely to increase the area of impermeable surfaces and could therefore increase overall flood risk, although it is recognised that other standards relating to incorporation of Sustainable Drainage Systems (SuDS) will apply. NPPF Paragraph 164 requires that any development in an area at risk of flooding '*incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate*'. The effects of new development on this SA objective are therefore dependent to some extent on its design, for example whether it incorporates SuDS, which is unknown and cannot be assessed at this stage.

Where site options are located in areas of high flood risk, it could increase the risk of flooding in those areas (particularly if the sites are not previously developed) and would increase the number of people and assets at risk from flooding. National Planning Practice Guidance identifies which types of land uses are considered to be appropriate in Flood Zones 2, 3a and 3b. Schools are classed as a 'more vulnerable use', which is suitable in areas of flood zone 1 and 2 but would require an exception test in flood zone 3a, and is unsuitable in flood zone 3b.

A sequential approach should be followed to steer new development to areas with the lowest probability of flooding (i.e. flood zone 1) and local planning authorities will need to undertake a flood risk sequential test when allocating sites. Where there are no reasonably available sites in flood zone 1, local planning authorities in their decision making should take into account the flood risk vulnerability of land uses and consider reasonably available sites in flood zone 2. Only where there are no reasonably available sites in flood zones 1 or 2 should the suitability of sites in flood zone 3 (areas with a high probability of river or sea flooding) be considered, taking into account the flood risk vulnerability of land uses and applying the Exception Test if required (this would be required for residential development). Essentially, the Exception Test requires proposed development to show that it will provide wider sustainability benefits to the community that outweigh flood risk, and that it will be safe for its lifetime, without increasing flood risk elsewhere and where possible reduce flood risk overall.

A Critical Drainage Area (CDA) is an area that has critical drainage problems and which has been notified to the local planning authority as such by the Environment Agency in line with the NPPF. In these locations, there is a need for surface water to be managed to a higher standard than normal to ensure any new development will contribute to a reduction in flooding risks in line with NPPF.

Therefore:

- Sites that are entirely or mainly (i.e. >50%) on greenfield land that is within flood zones 3a or 3b, or sites that contain a Critical Drainage Area, are likely to have an uncertain significant negative (--?) effect, dependent on the SuDS provision made and whether the design of development brought forward could avoid areas of flood risk.
- Sites that are either entirely or mainly on greenfield land outside of flood zones 3a and 3b, or that are entirely or mainly on brownfield land within flood zones 3a or 3b, are likely to have an uncertain minor negative (-?) effect, dependent on the SuDS provision made and whether the design of development brought forward could avoid areas of flood risk.
- Sites that are on brownfield land outside of flood zones 3a and 3b are likely to have a negligible (0) effect.

Sources of data:

- *Flood Zones*
- *Critical Drainage Areas*

Sustainability Objective: Land Resources

Scoring Assumptions:

Development of greenfield land for a school could result in the loss of high quality agricultural land.

Therefore:

- Sites with more than 5 ha of Grade 1, Grade 2 or Grade 3a agricultural land would have a significant negative (--) effect.
- Sites with between 1 ha and 5 ha of Grade 1 or Grade 2 or Grade 3a agricultural land would have a minor negative (-) effect.
- Sites with less than 1 ha of Grade 1 or Grade 2 or Grade 3 agricultural land would have a negligible (0) effect.
- Site with more than 5 ha of Grade 3 agricultural land according to the national GIS dataset could have a significant negative (--?) effect although this is uncertain depending on whether the land is Grade 3a or 3b (which cannot be determined from the national GIS dataset).
- Sites with between 1 ha and 5 ha of Grade 3 agricultural land according to the national GIS dataset could have a minor negative (-?) effect although this is uncertain depending on whether the land is Grade 3a or 3b (which cannot be determined from the national GIS dataset).
- Sites that comprise less than 1ha of Grade 3 agricultural land according to the national GIS dataset or comprise entirely of Grade 4 or lower agricultural quality land would have a negligible (0) effect.

In addition, as part of a mixed effect:

- Sites with up to 5ha of previously developed land would have a minor positive (+) effect
- Sites with more than 5ha of previously developed land would have a significant positive (++) effect

In addition, as part of a mixed effect:

- Sites that are mostly (>50%) within a Minerals Safeguarding Area would have a significant negative (--) effect, as mineral resources could be sterilised. However, this will be uncertain (--?) as there could be the opportunity to extract the mineral resource prior to the development going ahead.
- Sites that are partially (<50%) within a Minerals Safeguarding Area would have a minor negative (-) effect, as mineral resources could be sterilised. However, this will be uncertain (-?) as there could be the opportunity to extract the mineral resource prior to the development going ahead.
- Sites of any size that are within a Minerals Safeguarding Area in which evidence indicates all mineral resource have been extracted will have a negligible (0) effect.

Sources of data:

Agricultural Land Classification

Mineral Safeguarding Areas

Aerial imagery

Sustainability Objective: Water Resources

Scoring Assumptions:

Levels of water consumption within a new school will be determined by its design and onsite practices, rather than the location of the site, therefore effects on water supply cannot be determined. However, the location of residential development could affect water quality in nearby waterbodies during construction. The extent to which water quality is affected would depend on construction techniques and the use of sustainable drainage systems (SuDS) within the design; therefore effects are uncertain at this stage. In addition, the location of sites could affect water quality, depending on whether they are in an area where there is capacity at the local sewage treatment works (STWs) to treat additional wastewater generated by the overall scale of development proposed. However, South West Water has advised that all potential sites for the Local Plan can be connected to existing STW (some of which will require expansion), with no impact on the output water quality at any sites (i.e. all water quality will stay within permitted limits).

- School sites that contain or are immediately adjacent to watercourses that run into the Exe Estuary SPA could result in significant negative (--?) effects on water quality although this is uncertain at this stage of assessment.
- School sites that contain or are immediately adjacent to watercourses that do not run into the Exe Estuary, could result in minor negative (-?) effects on water quality although this is uncertain at this stage of assessment.
- School sites that are not close to any watercourses would have a negligible (0) effect.

Sources of data:

Rivers and Lakes GIS layers

Sustainability Objective: Homes

Scoring Assumptions:

The identification of a school site will have a minor positive effect on housing delivery by enabling new homes in and around that location. Therefore all sites have a minor positive effect. However;

- If the site is already permitted or allocated for residential development it will have an uncertain significant negative effect.
- If the site is suitable for residential development, it will have a negligible effect.

Sources of data:

- *Assumed capacity of each site*

Sustainability Objective: Health

Scoring Assumptions:

Public health will be influenced by the proximity of sites to open spaces, walking and cycle paths, easy access to which can encourage participation in active outdoor recreation and active travel before and after school:

- Sites that are within 400m of an area of major open space and that are within 200m of a walking or cycle path will have a significant positive (++) effect.
- Sites that are within 400 m of an area of major open space or that are within 200m of a walking or cycle path (but not both) will have a minor positive (+) effect.
- Sites that are more than 400 m from an area of major open space and more than 200m from a walking or cycle path will have a minor negative (-) effect.

Sources of data:

Major open space

Public Rights of Way

National Trails

Sustainability Objective: Wellbeing

Scoring Assumptions:

Where a new school is proposed within close proximity (100m) of sensitive receptors (e.g. existing houses, etc.) there may be negative effects on amenity as a result of increased traffic, noise and light pollution, particularly during the construction phase. In addition, a new school within close proximity of major roads/railways/industrial areas (as indicated on the GIS base map) may result in pollution affecting pupils in the longer term. Therefore, mixed effects overall may result:

- School sites that are in close proximity (within 100m) to sensitive receptors may have a minor negative (-) effect during the construction phase, and sites that are directly adjacent to an 'A' road, motorway or railway line, or industrial area would have a minor negative (-) effect in the longer-term.

Proximity to an Air Quality Management Area (AQMA) is addressed in Sustainability Objective A.

Sources of data:

- *Residential allocations*
- *Aerial imagery*
- *A roads*
- *Motorways*
- *Railway lines*
- *AQMAs*

Sustainability Objective: Access to Services

Scoring Assumptions:

Digital connectivity is important and is scored as follows;

- Sites adjacent to areas where there is ultrafast broadband (>300mbps) or superfast broadband (30-300mbps) available would have a minor positive (+) effect.
- Sites in areas where there is standard broadband (10-30mbps) available would have a negligible (0) effect.
- Sites where there is <10mbps internet download speed currently available would have a minor negative (-) effect.

Sources of data:

- *Ofcom Broadband availability checker*

Sustainability Objective: Jobs and Local Economy

Scoring Assumptions:

Schools do create employment for a wide range of staff. However, the location of a school site within a settlement does not have a direct impact on this criteria. Therefore a negligible effect (0) is likely.

Sources of data:

n/a

Sustainability Objective: Town Centres

Scoring Assumptions:

The location of a new school site has the opportunity to support the vitality and viability of existing town centres by increasing the number of day-to-day visitors to the town centres and supporting businesses and services in those locations. Therefore:

- Sites that are located within 3 km of a town centre would have a minor positive (+) effect.
- Sites that are located more than 3 km from a town centre would have a minor negative (-) effect.

Sources of data:

- *Town Centre boundaries*

Sustainability Objective: Connectivity and Transport

Scoring Assumptions:

A key factor in determining the use of the non-car based modes of transport will be the presence of nearby existing sustainable transport links, although the actual use of sustainable transport modes will depend on people's behaviour.

- School sites that are within 1 km of a railway station and 500 m of a bus stop with frequent services (minimum half hourly) (regardless of proximity to cycle routes) are likely to have a significant positive (++) effect due to distance from public transport options.
- School sites that are within either 1 km of a railway station or 500 m of a bus stop with frequent services (minimum half hourly), but not both, (regardless of proximity to cycle routes) are likely to have a minor positive (+) effect due to distance from public transport options.
- School sites that are more than 1 km from a railway station and more than 500 m from a bus stop but that have an existing cycle route within 1 km of the site could have a minor negative (-?) effect due to distance from public transport options, although this is uncertain depending on the quality of cycle route(s).
- School sites that are not within 1 km of a railway station but are within 500 m of a bus stop with infrequent services (more than half hourly), (regardless of proximity to cycle routes) are likely to have a minor negative (-) effect due to distance from public transport options.
- School sites that are more than 1 km from a railway station and 500 m from a bus stop and that do not have an existing cycle route within 1 km are likely to have a significant negative (--) effect due to distance from public transport options.

Access to the local road network and the impact on the strategic road network are not assessed through the SA, as these are not sustainability issues. Instead, the SA focusses on the extent that site options would provide opportunities for sustainable transport use. Note that provision of walking and cycling links within new development is covered under SA objective D above, and access to broadband is covered under SA objective K above.

Sources of data:

- *GIS mapping & aerial for cycle routes,*
- *Railway stations*
- *Bus routes.*