

SGA10: South of Little Eaton

SUMMARY TABLE:

Key Fact	Description
Site size (Ha)	11.5 Ha
Proposed number of dwellings	200 homes (at 17 dwellings per hectare)
Main land-uses	Former landfill site
Landscape Character Area	Area - South Yorkshire, Nottinghamshire & Derbyshire Coalfield Type – Coalfield Village Farmlands Key characteristics: <ul style="list-style-type: none">• Gently undulating landform• Dairy farming with pasture and localised arable cropping• Relict ancient semi-natural woodland, copses and linear tree-belts• Dense watercourse trees and scattered hedgerow trees• Towns and villages on ridge lines surrounded by remnant medieval strip fields• Network of small irregular lanes between larger urban roads• Small villages with sandstone buildings expanded by red brick terrace housing and ribbon development
Flood Zones & Watercourses	Flood Zone 1 – 1.9ha (16.5%) Flood Zone 2 – 5.3ha (46.1%) Flood Zone 3 – 4.3ha (37.4%) Notable watercourses – Bottle Brook and the River Derwent border the site. Whilst not a watercourse, the site adjoins a water treatment facility directly to the north.

DEFENSIBLE SITE BOUNDARIES:

Defensible boundaries are shown on Map 1. Details of individual sections of boundary are as follows:

A – The B6179 Alfreton Road defines the eastern-most extent of the site with a strong line of mature trees running parallel to the highway.

B – Similarly to **A**, this short section of site boundary follows the A38 around to the west with the highway defining the outer-most extent of the site.

C – This section of boundary is defined by the operational railway line which runs north-south along the entirety of the western extent of SGA10.

D – Mostly a current identifiable boundary which distinguishes between Outram's Wharf Industrial Estate and land within SGA10. Section largely consists of a line of mature trees.

E – Another section, similarly to **D**, which sees an established treeline and hedgerow run along the southern side of Outram's Wharf.

A site boundary is indicated in **Map 1**. Boundaries **A**, **B** and **C** represent new defensible Green Belt boundaries should SGA10 be taken forward.

VEHICULAR ACCESS ARRANGEMENTS:

Map 1 clearly shows SGA10 bordered by two main public highways, the A38 and B6179, which strongly define the site's southern and eastern boundaries respectively. However, with the adjacent section of A38 dual carriageway, vehicular access into the site directly from the A38 is considered unrealistic. Alternative arrangements to form access are instead more suited to the B6179 Alfreton Road which connects the A38 to the centre of Little Eaton. Towards the northern end of SGA10, the B6179 is largely straight in its profile allowing a joining side junction to comfortably meet requirements for splay visibility. Any junction would need to span a disused stretch of canal which now functions as a drainage channel. It is believed that land alongside the B6179 is in the ownership of Highways England, therefore making it unlikely that complex ownership constraints will emerge with regards to securing access between the site and Alfreton Road at the location of AP1.

All proposed site access points (AP's) are presented on Map 1.

AP1: New junction between Alfreton Road (B6179) & SGA10

This would take the form of a T-junction arrangement which could involve signalisation to offer opportunities for traffic to exit SGA10 and join the local road network without encountering undue delays departing the site.

Depending on land ownership immediately west of Alfreton Road, there could also be an opportunity to provide an off-set mini-roundabout with joining arm off into SGA10. The siting of AP1 is based on a historic access point, evidenced from aerial photography.



JUNCTION CAPACITY ANALYSIS:

The site has a proposed capacity of **200 homes**. The Council use a 1:1 vehicle to house ratio to generate a figure of **200** vehicles which are all assumed to leave the site at peak AM time (between 8:00am to 9:00am). This ratio **does not** assume each home has only a single vehicle within its ownership. Instead, it assumes only one vehicle per household will depart **SGA10** during the peak AM due to the staggered time those from the same household generally, but not exclusively, leave their homes.

Map 1 shows the projected vehicular flows through identified junctions on the local road network. The graphic below summarises the scale of additional journeys expected to pass through identified junctions in the vicinity of **SGA10**. Due to the number of likely additional journeys, the movements of vehicles passing through

only the first two junctions reached off-site are shown below. However, the anticipated increase in trips is lower than the 120 additional trips passing through a junction per hour that is required to warrant detailed focus within an assessment. Despite this, it is still considered worthwhile to assess the two junctions expected to see the largest number of vehicle movements through them.

It is important to recognise that commentary about individual junctions is based on the views of Planning Officers. It is the responsibility of the Highway Authority (Derbyshire County Council) to plan for how highways and junctions can accommodate additional traffic. Additionally, site promoters will be expected to demonstrate how any additional traffic will be safely accommodated by the existing road and junction network, and set out plans for all necessary highway mitigation.

Junction	Number of Vehicles
J1	 (100 vehicles)
J2	 (100 vehicles)

J1: Roundabout of Alfreton Road (B6179), A38 & A61

This is a multi-arm roundabout south of SGA10. On the B6179's approach to the roundabout, the highway accommodates dual-lanes to accommodate different vehicular movements. Part of the Strategic Road Network (SRN), the roundabout is often busy. Recent remodelling works have helped improve the flow of traffic, although the island has recently been the subject of a National Infrastructure Planning enquiry into the construction of a grade separated flyover at the location which was given consent in January 2021 with Highways England expected to commence works later in 2021. Joining arrangements to the remodelled junction from the Little Eaton direction will continue to access a roundabout at ground level, and access to all exits will remain and there may be scope for any additional traffic flow generated by any future development to be absorbed by the new-style grade separated junction.

J2: Junction of Alfreton Road (B6179) & Duffield Road

This is an off-set T-junction with priorities for traffic flowing along Alfreton Road. Cars approaching the junction along Duffield Road must give-way. As the junction is not set-out as a right angle, cars travelling north along Alfreton Road can exit onto Duffield Road at relatively high speed. There is scope due to space immediately south of Duffield Road to consider the installation of a mini-roundabout and cope with additional vehicular movements, although this could accentuate the degree of angle Duffield Road

diverges away from Alfreton Road at. There are also private driveways over the wide grass verges that may be affected should such works be pursued.

ECOLOGICAL CONDITIONS & BIODIVERSITY OFFSETTING:

Statutory environmental designations present or adjoining/nearby to the site:

- **None**

Non-statutory environmental designations present or adjoining/nearby to the site:

None inside the site boundaries, but the following Local Wildlife Sites are located nearby to SGA10:

- **ER002 Alfreton Road Rough Grassland**
- **ER005 Breadsall Disused Railway**
- **DE007 River Derwent (in the Derby City area)**

No Tree Preservation Orders (TPOs) or Group Tree Preservation Orders are located within the proposed boundaries of **SGA10**.

The route of a disused Canal passes along the eastern boundary of the site, an area with potential significant biodiversity and ecological merit, and therefore potential future value as part of any redevelopment of the site.

Much of the site was used as landfill until the early-1990s but since this time has been left relatively unmanaged. Self-seeding trees have reclaimed much of the land and lower-level vegetation is also abundant. The lack of drainage as a result of the material under the top-layer of soil in some areas has also meant that significant growth of moss-style vegetation has occurred.

The above indicates that the site in its current condition displays notable biodiversity and ecological merit and as such any redevelopment of the site could lead to significant environmental detriment if appropriate offsetting measures were not adequately made provision for. Notwithstanding this, no statutory ecological designations currently exist across the site.

There are opportunities for on-site offsetting including in the wide channel of land between the former Canal and Severn Trent (ST) water treatment facility as this is inappropriate for housing development as a result of ST infrastructure. In addition, there is opportunity to develop a green corridor along the length of the former Canal and there are known local efforts to re-instate some use for the dis-used asset. Whether or not all required offsetting could be accommodated on-site will need to be the subject of further analysis in the event of development, but it should be a priority.

Priority habitat inventory – deciduous woodland identified on the south-eastern portion of the site. The same is identified along the proposed northern boundary of the site (around the south of the Severn Trent asset in the north). Lapwing priority species identified on site.

Any future development should make adequate provision for positive ecological measures in order to secure biodiversity gain. The Wildlife Trust have produced a publication entitled 'Homes for People and Wildlife – How to Build Housing in a Nature-friendly Way' which offers guidance on how opportunities to introduce biodiversity can be achieved.

INFRASTRUCTURE REQUIREMENTS:

ROADS:

There is the potential for site access to be gained directly from the B-classified Alfreton Road (B6179). Junction capacity analysis indicates that no junctions would require intervention as a result of the anticipated traffic levels resulting from the development. Responsibility rests with the site promoter to identify the scale of impact and any required highway/junction mitigation deemed necessary to ensure the continuation of safe highway conditions across the network. Particular challenges relating to potential impact from development on the adjacent strategic road network to which the B6179 connects, particularly in light of the A38 flyover works and therefore Highways England would need to be engaged in any nearby major residential developments.

PUBLIC TRANSPORT:

The Trent Barton-run Amberline and Sevens 7.1 stop adjacent to the site on Alfreton Road approximately 160m from the centre of SGA10. Amberline services between Hucknall and Derby via Eastwood and Heanor provide an hourly service, as does the Sevens 7.1 which serve Belper and Derby.

SCHOOL PROVISION:

The figures below for Little Eaton Primary School were calculated using Derbyshire County Council's Education Provision figures within the Developer Contributions Supplementary Planning Document (SPD). The figures for Saint Benedict Catholic Voluntary Academy (CVA) were calculated using the equivalent SPD document produced by Derby City Council which includes figures relating to school place provision.

Primary School(s)

Schools	Capacity	Currently Enrolled	Development of SGA10 requires	Updated Capacity with Development	SGA10 impact on school
Little Eaton Primary School	210	212	48	260	24% over capacity

Secondary School(s)

Schools	Capacity	Currently Enrolled	Development of SGA10 requires	Updated Capacity with Development	SGA10 impact on school
Saint Benedict CVA (Derby City)	1,215	1,329	40	1,369	13% over capacity

GREEN & BLUE INFRASTRUCTURE:

A Public Right of Way (PRoW) passes through SGA10 from its north-eastern corner to its south-western point. Its onward accessibility value is limited as it encounters the A38 to the south which presents an imposing physical barrier. Similarly to the north, the route halts opposite a factory building situated off Duffield Road. As a result, the value of the PRoW is fairly limited in that it doesn't provide direct access radiating out into the surrounding countryside.

Notwithstanding, it is still of importance and would need to be accommodated and defined appropriately in any redevelopment of the site. More generally, there is the opportunity to re-use the disused canal which flanks the eastern boundary of the site, potentially to accommodate a re-routed PRoW and to accommodate a green corridor in-line with any required biodiversity offsetting measures identified in the masterplanning of the site. The River Derwent also runs nearby the site so forging links to this blue infrastructure asset is worthy of further review.

UTILITIES:

Power

The following information was provided by Western Power.

Primary Point of Connection: **Darley Abbey**

HV Point of Connection: **Derby 06 Centurian Way**

Diversion Required? **No**

Likely works to provide
Nominal supply capacity to site: **Possible need to establish connection to Darley Abbey Primary – but would need to negotiate rail track and A38 highways infrastructure.**

Water

The following information was provided by Severn Trent. Foul water connection and surface water connection are rated either low, medium or high indicating the perceived risk and likelihood that accommodating infrastructure works may be required in order to bring the site forward. The rating itself does not indicate whether a site is developable or not.








Foul Drainage


Description	Risk Rating
Development may impact pump operations and local overflow performance, some of which are associated with historical pollution incidents on the watercourse. External flooding incident reported downstream.	Medium

Surface Water

Description	Risk Rating
Greenfield site. Assumed that the development will discharge to the watercourse adjacent to the site boundary.	Low

NEAREST COMMUNITY FACILITIES:

Facility	Location	Distance from site
School – Primary	Little Eaton Primary School, Alfreton Road	1.1km
School – Secondary 	Saint Benedict, Catholic Voluntary Academy, Duffield Road, Derby	3.7km
Bus stop 	Alfreton Road	0.3km
Public House 	The New Inn, New Inn Lane	0.6km
Health Facility 	Appletree Medical Practice, The Town	1.1km
Leisure Centre 	Springwood Leisure Centre, Springwood Drive, Derby	6.5km
 Employment Site	ELS 005, Alfreton Road, Little Eaton	0.1km
Superstore or Town/Local Centre 	The Town, Little Eaton - this is not a centre recognised within the hierarchy, nor does it contain a superstore. However The Town has a healthy provision of retail and services and	1.5km

Facility	Location	Distance from site
	SGA10 is considered to be on a scale that would complement this facility. It is considered that it would be unreasonably detrimental to the potential site if the presence of such a facility were ignored in favour of locating the nearest superstore and/or hierarchy centre.	
Community Hall 	Little Eaton Village Hall, Church Lane	1.8km

GREEN BELT:

To check the unrestricted sprawl of large, built up areas:

The development of SGA10 would lead to the growth of a village (Little Eaton).

To prevent neighbouring towns merging into one another:

The Green Belt map shows the distance between the current extent of Green Belt designation in Little Eaton and the nearest inset area(s) of Green Belt at 73 Ford Lane, Allestree located within the adjacent administrative Derby City area.

Distance 1: Little Eaton to Ford Lane, Allestree. The current gap before potential development of SGA10/deallocation of Green Belt is **0.55km**. The amended gap (A – SGA10 to Ford Lane, Allestree) in the event of SGA10 being developed is **0.23km**. This is a significant reduction of **58.2%** in the current distance between inset settlements.

To assist in safeguarding the countryside from encroachment:

To demonstrate the scale of encroachment SGA10's development may make, a measurement between the centre point of Little Eaton (4 Barley Close) and the nearest point of SGA10 is made. This distance is **0.68km**. The distance from the centre point to the furthest extent of SGA10's developable area is **1.49km**. This distance shows the site would contribute to an enlargement of **119.1%** of the current distance between the centre of Little Eaton and the outermost extent of SGA10 which represents a substantial increase in the size of the settlement southwards.

To preserve the setting and special character of historic towns:

The nearest parts of Breadsall and Little Eaton Conservation Areas (CA) are both approx. 0.75km away from SGA10, sufficiently distant to not harm their respective settings.

To assist in urban regeneration, by encouraging the recycling of derelict and other urban land:

Approximately 50% or more of the site is considered to be brownfield land. This is made up of the area known to have been a waste disposal site.

CONTAMINATION AND GROUND STABILITY:

Much of the southern portion of the site has previously been used as landfill. The exact extent of this is not known, nor the type of fill that has been introduced into the ground. However, the topography of the site has altered dramatically as a result of its past role and subsequent capping. Due to the uncertainties outlined above, the developable area outlined by Map 1 is based on flood risk outlines and these display a very strong dividing line between the various flood risk zones. This correlates with the change in topography associated with the historic landfill operation which sees a notable area of 'made' land within SGA10.

Another unknown concerns whether the site was commercially used landfill. Unfortunately no mapping evidence is available at this stage, suggesting the landfilling operation may have been a private endeavour. Some evidence has been identified via a survey carried out in support of a planning application in neighbouring Derby City which documents a waste licence for Ford Lane, Little Eaton being granted in 1977 but which has since been revoked. The survey notes that the annual tonnage expected was 4,999 and total tonnage <25,000 tonnes. This may be referring to the historic landfill which has had such notable influence on this site, or instead may be related to separate commercial use on the site associated with the adjacent skip company. It is not known whether the content of skips saw materials enter the ground.

In any case and in view of the discussion above, it is highly likely that the site has the potential to be impacted by significant levels of ground contamination. However, no part of the site falls within any Coal Authority risk zone and therefore ground instability relating specifically to historic mining activity is unlikely to present an issue.