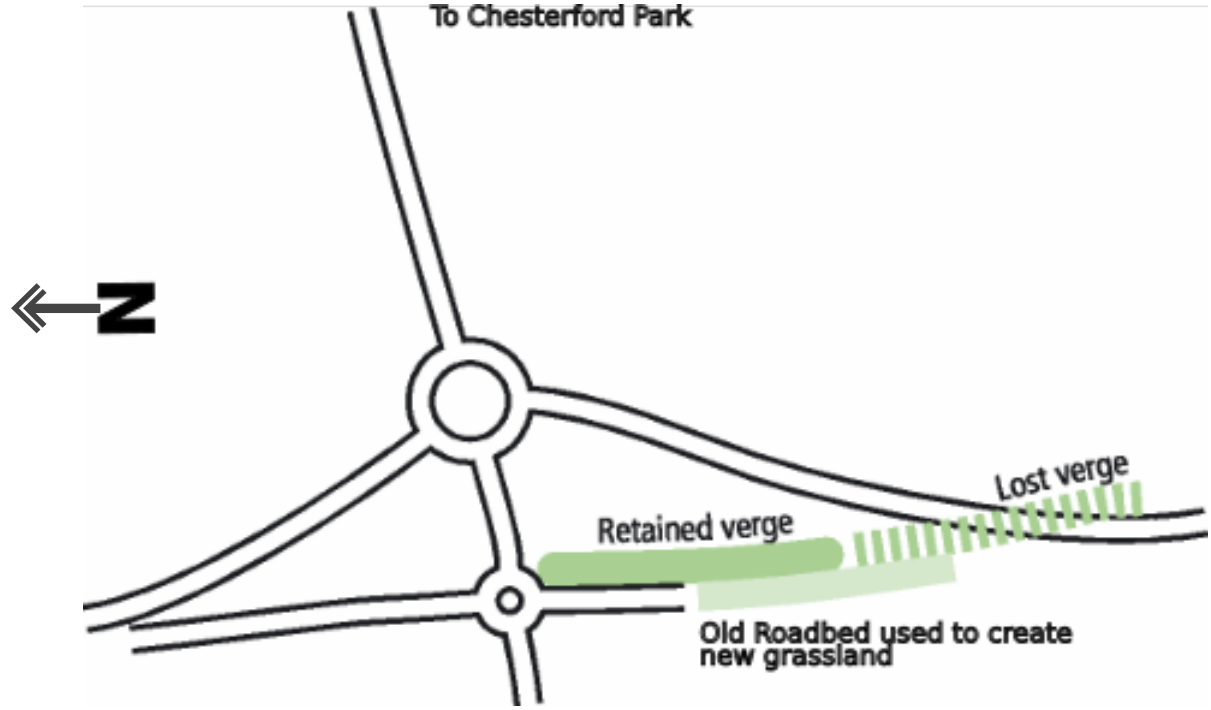
Little Chesterford Roadside Verge
Ordnance Survey Grid Ref TL519418

In the early 2000s a science park on the Essex- Cambridgeshire border was to be expanded. An existing simple crossroad junction was deemed to be unsatisfactory by the Highway Authority as it needed to cater for a greatly increased traffic load to development expansion close by. It was decided that a new roundabout (part of the development proposals) was the most satisfactory option.

The realignment of the road and construction of a new roundabout involved the removal of a significant proportion of Special Roadside Verge (designated as a Wildlife Site), important for its rare chalk flora.



Integrating development and biodiversity

The initial submission included a full ecological survey of the site and suggested mitigation/compensation measures. The application was approved subject to planning conditions, one of which required a landscape and habitat management/maintenance scheme to be submitted and approved. The detailed habitat creation scheme included translocation of plants from the old verge, creation of a new area of chalk grassland on the old roadbed (using chalky topsoil from the old verge) and allowance for natural regeneration from the seedbank in the soil. The works were overseen by an ecological specialist consultant.

Benefits/problems

Although the programme of works was carried out as approved in 2002, it became apparent that the new chalk grassland had initially failed to establish, despite following the detailed specification. The area became dominated by arable ‘weed’ species, such as docks, thistles, coarse grasses and oilseed rape. Reasons for this failure include the likelihood that chalk grassland topsoil became mixed with adjoining arable soils, containing unwanted species. Plants of ancient and species-rich grasslands thrive in low nutrient conditions, so improved/fertilised topsoil should never be introduced. In this case it would have been better to use only the chalk topsoil and chalk subsoil

mixed with fresh cuttings from the existing grassland (known as ‘green hay’). Regular monitoring and maintenance is essential so that the process can be adapted as required.

Despite an apparently well-founded and specified scheme, the outcome was initially very far from the desired state, but by 2006 the desired species were beginning to appear, though the undesirable species were still dominant. Additional management was carried out to remove the docks by hand, but this level of time-consuming management should be allowed for in the aftercare of such schemes.

After a couple of decades the overall result has been the creation of the kind of chalk grassland flora that was envisaged, but it has taken time and continued management to get there. In particular the species Wild Liquorice has responded very well and has spread across the plot. The (re)creation or translocation of established and fragile grassland communities is fraught with difficulties. Grassland creation should only be accepted as a substitute for the in situ conservation of semi- natural grassland as a last resort.