

# highway infrastructure design

The design of highway infrastructure to serve a new development, in particular the access arrangements, are an integral part of the information required for most planning applications. Whilst it is still possible to make access a reserved matter, the principle of achieving an appropriate and sustainable access needs to be demonstrated.

The design of highway infrastructure includes site access arrangements, access roads, junctions, footways/cycleways, and may include parking areas and public transport facilities. The design of these is usually undertaken in the following stages; preliminary, outlined and detailed.

At the feasibility stage of development, such as a land appraisal, a preliminary design is often required to identify potential access options, and the number that maybe required can be used to determine the preferred location and form of an access junction. This 'level' of design may also include the form of the main site access road, such as a link-road, loop-road or cul-de-sac, whilst also determining any requirements for emergency links providing connections back to the existing public highway.

## The design process may include many of the following stages:

- Traffic flow and speed surveys
- Analysis of highway safety records
- Reference to Department for Transport or County Council design standards
- Junction visibility measurements
- Traffic capacity assessments
- Safety audit of proposal

## The highway infrastructure for a development may include some of the following elements:

- Priority junctions
- Roundabout junctions
- Signalised junctions
- Grade separated junctions
- Footway/cycleway routes
- Pedestrian crossings
- Traffic calming features
- Public transport facilities
- On-site residential or commercial access road layouts

Most forms of planning approval will have conditions attached which required the detailed design of the highway infrastructure to be submitted to, and approved by, the Council. This is particularly the case for improvements to the existing highway, or new roads that are to be adopted by the Highways Authorities and the Highways Agency (Highways Act 1980).

DLP Transportation Ltd has the necessary expertise and the appropriate analysis/design software to undertake all stages of Highway Infrastructure design. We are experienced in providing appropriate and cost effective solutions to clients whilst meeting the demands of both the county council highways authorities and the Highways Agency.

