

# Best Practice Document



## TRAFFIC DETECTOR LOOPS

The attached best practice was agreed by SEHAUC.

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### Cross Reference Information:

NRSWA 1991	:	
Code of Practice	:	
Regulations	:	
SEHAUC Meeting	:	15th September 2007

Signed: Joint Chairs      *Signed copy held in Master file*

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Traffic Detector Loops are placed in the upper layers of the road surface and are essential for the efficient operation of signalised junctions and bus lanes, enabling prioritisation of demand for busy urban routes. They are also installed at various locations for monitoring traffic flows, usually primary network roads, and for other sites for collecting vital data for traffic management schemes.

Whilst the number of loops on the network is relatively small, their numbers are increasing especially as highway authorities will be required under the Traffic Management Act to provide annual statistics on traffic volumes on their strategic networks identifying congestion and other journey time data.

Any damage to this sensitive equipment will need to be remedied quickly and the high costs are of particular concern to statutory undertakers, whilst the loss of data and disruption to traffic systems is a frustration to highway authorities.

This Good Practice Guide seeks to assist those who will encounter such equipment and direct them in minimising the damage caused to traffic detector loops in the following ways:-

1. Plan of sites with detector loops
  - a. All highway authorities will make available for inspection a plan showing the location of all known remote traffic sensor monitoring sites.
  - b. All highway authorities will provide on request a plan showing the location of all known traffic detector loops at discrete locations when identified by a works promoter.
2. Signalised Junctions and Pedestrian Crossings
  - a. All signalised junctions and pedestrian crossings use traffic detector loops which are placed in the running lane approaches to the signals. It should be noted that these may be spaced at considerable distance (up to 200 metres for SCOOT and Bus Detectors) from the signal heads monitoring the queue of traffic.
  - b. The safety at Street Works and Road Works, a Code of Practice, (page 47) gives guidance on when working in the vicinity of permanent traffic signals and this advice should be followed. Should signals require being turned off special measurers will be directed by the highway authority.
  - c. Where possible new apparatus should be sited to avoid existing traffic detector loops.
3. Traffic Monitoring and Remote Data Collection Sites
  - a. Traffic Monitoring detector loops may be encountered anywhere on the primary network roads and also up to 200 metres from signal controlled junctions.
  - b. Remote Data Collection Sites are never obvious to the untrained eye and will not usually be associated with signal control junctions. It is advisable to pre-inspect sites to look for feeder pillars at the edge of the verges or back of footways.

4. Damage to Detector Loops
  - a. Damage to loops may be unavoidable where there is a need to access plant situated underneath them. However, damage may be prevented by pre-surveying the site, highlighting the loop and careful working in the vicinity, for example by saw cutting the surface layers. However inadequate compaction near the loops may undermine the surfacing to the extent that subsequent settlement causes the cable to fracture.
  - b. Should it be known that a loop will be cut as a result of any works then early contact in advance of the work should be made with the highway authority to ensure replacement loops are organised and the appropriate traffic management arrangements are planned and put in place whilst the works are in progress.
  - c. It is recommended that contact is made with the relevant highway authority in advance of work planning where traffic detector loops are likely to be encountered.
  - d. Highway authorities shall provide a contact number to statutory undertakers so that advice may be given for working in the vicinity of traffic detector loops in the unfortunate event of damage to this apparatus.
  
5. New Installations
  - a. When it is proposed to install new traffic sensor loops, either as part of a traffic management scheme or independently, this proposition is to be submitted by notification to the statutory undertakers.