Overhead Cable Markers

Following an incident where an overhead cable was struck in the middle of the night, it was recognised that these are notoriously difficult to locate at night. A decision was taken that all overhead cables on the Area 1 Network would be permanently marked on the verges of the A38 & A30 in Devon & Cornwall. The existing ways of marking these with products on the market was looked at and it was decided that there was not 1 system that allowed for the marking and the placement of the goal posts on site.

At that time posts where available for digging into the ground to mark the cables and then when the cable needed to be marked by goal posts a metal base weighing 25kg had to be taken out to site and then placed with the goal post in it.

It was decided to approach a manufacturer and look at making an all in one system, a supply chain partner of ours who we had worked with in the past was approached (Jacs UK), meetings were held in one of our depots in Cornwall and different ideas where banded about.

Key points

Conspicuous
Durability
Environmentally friendly
Easy to use
Compliance with HSE G06??

It was decided to use a post made out of recycled plastic, this was would be made up of 3 layers, a black middle layer sandwiched between 2 yellow layers, this would allow for the details to be laser engraved, rather than using stick on letters which can fade or fall off. The blade was then designed so that the base would fit into an existing wedge shape plastic socket that was already in use in Area 1 and readily available on the market thus reducing the cost. An aluminium socket was designed for the goal post to be set in the same excavation.

Attention was then turned to the way it would work by a VRS fence (Vehicle Restraint System) and it was decided to mount the blade to the post of the safety fence similar to the marker posts already in use on the Trunk Road network.

A new bracket was designed that would fit on all the current VRS systems and that it would include hoops that would facilitate the goal post


Existing bases for Goal posts weigh 25kg:


Just a quick note regarding our works at Liskeard:

Having just completed the ASF resurfacing works to the A38 Liskeard I wanted to pass on my site teams comments regarding overhead cable protection. Throughout the works location there were a number of overhead services. Obviously these all needed to have goalposts erected prior to working underneath. On this scheme we were able to utilise the permanent 'bases' that you have had placed in the adjacent verges and central reserve rather than using our normal metal 'feet'.

This has had a number of advantages over the conventional method of erection in that:

1. The goalpost bases are in a fixed position and therefore the uprights are always in the correct location.

2. The bases are easily visible and there is no room for error, it can be very difficult to find overhead cables at night even if you already have MP or relevant chainage.

3. Permanent bases remove the need to manually handle heavy temporary bases on a nightly basis.

In summary the permanent fixtures made our works quicker, more efficient and, most importantly, safer. It would be a very good idea to roll out this system across all of the HE network if possible. Whilst there would be costs involved the safety improvements would surely outweigh these costs and I would guess that maintenance costs would be relatively low after the initial installation.