Essex Highways

Local Highway Panels Members' Guide

15 Street Lighting

RINGWAY JACOBS
integrated expertise

Essex County Council

1. Introduction

The LHP do not maintain street lighting and the installation of new lighting is discouraged. However this guide will assist your understanding of street light and LHP involvement.

Essex is the third largest local lighting authority in the country. In Essex, there are around:

• 129,000 street lights

• 12,000 illuminated signs

• 4,200 Illuminated bollards

We use one of the largest central management systems in the world which helps us to control our street lighting more efficiently. Sensors on the top of each column detect faults then send a report to our street lighting team. By knowing exactly where to deploy engineers we can ensure the County's lights are working to their full capacity.

The Essex County Council's Maintenance Strategy states that we should be reducing our own environmental impact, including changing our behaviour to make significant reductions in the carbon emissions from our own operations (street lighting, buildings and transport) by 10% by 2011 and by 60% by 2050.

ECC has a programme of work to replace all owned and maintained street lights with energy-saving LED lanterns across the County. The new LED lanterns are longer lasting, require less maintenance and use less electricity than conventional lamps.

The programme is being carried out in four phases. Street lighting energy savings (from Phase 1 and 2) across 2016/17 and 2017/18 totalled £1.4 million. Under Phase 3 ECC installed a further 23,000 LED streetlights on main road across Essex. Under Phase 4 will replace the remaining 85,000 street lights with new LED lights..

The Local Highway Panel do receive requests for additional street lighting units to be of benefit to the community.

2. Typical Problems

The anti-social behaviour would be solved by more street lighting.

Safety could be improved by more lighting.

The lit bollards keep getting hit can we improve them?

This alleyway is dark and unsafe.

3. Things to consider

Essex County Council (Essex Highways) do not maintain street lighting on private roads. Other lighting authorities like Parish and Town Councils also maintain lighting on an adopted highway.

Ongoing Maintenance Liability

Any new street lighting will add to the maintenance financial liability. Capital and Revenue budgets are limited and it is critical that we plan ahead to maximise the use of our resources. We must protect the existing infrastructure and prioritise those works that deliver the best long term benefits.

The Highways Information Map can help identify if a street light is the responsibility of the highway authority. Many of the street lights in Essex are under the part night lighting scheme. See the website for more information.

A programme of work to replace all ECC owned and maintained street lights with energy-saving LED lamps across the county began in August 2016. The new LED lamps are longer-lasting, require less maintenance and use less electricity than other conventional lamps. More information on the LED programme can be found out here: -https://www.essexhighways.org/roads-and-pavements/street-lighting/replacement-by-leds-programme.aspx

Where residents have concerns about anti-social behaviour it is recommended that Councillors seek support from the Police before considering additional lighting.

Faulty street lights

If you notice a street light is faulty, you can report it online at:

https://www.essexhighways.org/transport-and-roads/tell-us/report-street-lights.aspx

To track the status of your street light problem using your reference number, postcode or street name, go to check a query.

Damaged Lit Furniture

If you witness damage to any highway furniture you can report the information through the normal channels to enable ECC to undertake a Green Claim which helps us to recoup costs from insurance companies- Reports to the Green Claim team can be contacted on green.claims@essex.gov.uk.

4. Typical Measures

Types of 'Lighting' which the LHP could consider funding:

Illuminated signs

The TSRGD states where signs need to be illuminated and where they do not. Some LHP schemes will require illuminated signs.

The LHP could consider to remove lighting of signs where they are no longer needed. This would assist in reducing our carbon emissions.

Solar Illuminations

Where possible, the LHP currently power the VAS/SID technology with solar energy, which is how much of the standard signing is now illuminated. The Panel could choose to illuminate any new signing with solar energy if they chose to do so; however, their continued maintenance may not be seen as a priority. Solar Lighting is also a good alternative on footways and cyclewats. Solar lighting can be set within the footway/cycleway to be over- run.

Illuminated bollards

Illuminated bollards in the County are a maintenance liability. These could be converted to the non-illuminated, self-righting reflective bollards to reduce the power supply costs.

Pedestrian crossing lighting upgrades

Some of the pedestrian crossings in the County are not to the latest standard. The LHP can upgrade these to enable them to be clearer to drivers. This could involve upgrading footways, lighting, carriageway surfacing and lining.

4. Typical Measures Continued

Lighting Columns

Removal of old columns that have been cut down for safety reasons but never fully removed should be reported via the maintenance route.

Consideration can be given to upgrading existing columns to LED ahead of the street lighting programmes.

All schemes need to consider conservation area restrictions.

Footway Lighting

Not all footways need to be lit; however, if the panel believe a particular footway needs lighting this could be investigated.

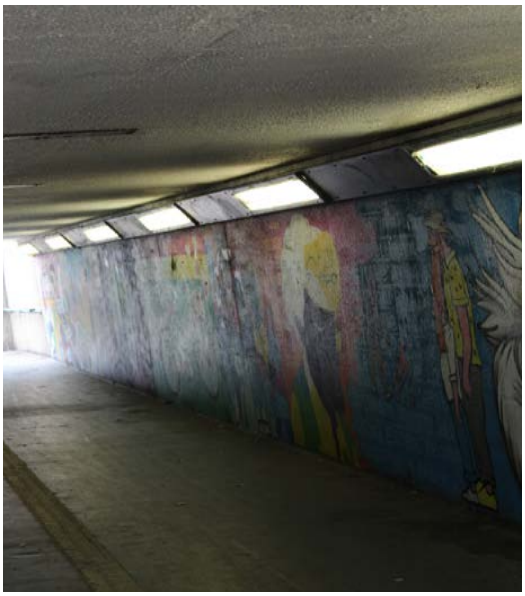
Footpath (PROW) lighting

Some Public Rights of Way are in urban areas and the panel may feel the need to light such routes for perceived safety reasons.

4. Typical Measures Continued

Lighting in subways/underpasses/bridges

Many of these are illuminated but have lower than desired lighting levels. The panel could choose to review the lighting requirements where perceived safety concerns exist.



4. Typical Measure Continued

Sign illumination requirements

Since the update of the Traffic Signs, Regulations and General Directions guidance in April 2016 the only signs which must be directly illuminated during the hours of darkness in a street lit area are as follows:

• Warning and Regulatory signs at level crossings

• Headroom restrictions at low bridges or structures

• Warning of requirement to ‘Stop’ or ‘Give Way’ ahead

• Speed limit terminal signs on trunk or principal roads

• Regulatory terminal signs including give way, no entry, vehicle restrictions (including for low and narrow bridges) and banned manoeuvres

• Motorway entry, exit and gantry-mounted signs.

Those signs that no longer need direct illumination must be reflectorised as a minimum.

5. Scheme Investigation

Key factors that will be considered by an engineer when designing a scheme which either requires lighting or where lighting is the main focus may include:

• The highway boundary – Any light should be within the highway.

• Accident history, type, severity and identification of common factors.

• Speed limits and speed of traffic.

• Lighting will be required when a pedestrian crossing is introduced or upgraded.

• Is there a power source for the lighting?

• What utility apparatus is there within the highway that may need to be relocated?

• Where there are anti-social behaviour concerns will lighting be an improvements.

6. Costs and Timescales

Part of the Essex County Council contract with Ringway Jacobs is a target cost and not typically a fixed price contract. The contract also allows for a direct delivery method for small highway improvement schemes on a fixed cost basis.

An explanation of the process can be found in Appendix 1

7. Glossary of Terms

ECC	Essex County Council
EH	Essex Highways
LED	Light Emitting Diode
LHP	Local Highways Panel
SID	Speed Indicating Device
TSRGD	Traffic Signs Regulations and General Directions
VAS	Vehicle Activated Sign