

# Stockton on Tees Borough Council Street Lighting Policy



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## **Purpose and Aim of this Policy**

This policy will detail how the Stockton Borough Council (SBC), as a responsible local Highway Authority, will provide and maintain Street Lighting on the adopted Highway subject to available funding. It aims to strike a balance between the continuing need to reduce energy and maintenance costs in conjunction with minimising the environmental impact of Street Lighting whilst maximising safe use of the highway for all users.

The term "Street Lighting" encompasses all illuminated assets on the adopted highway including street lights, signs, bollards and other street lighting furniture.

There is no legal obligation for highway authorities to provide Street Lighting however Section 97 of the Highway Act 1980 gives highway authorities powers to do so should it wish to in carrying out its duty of care for all users of the public highway.

The Council currently manages and maintains in excess of 29 000 street lights and over 2 000 illuminated signs and illuminated bollards.

Where Street Lighting is provided on the highway the Council is then required by the same Act to keep it in a safe condition under the Section 41 duty to maintain the highway free of danger for all users.

Highways England is the Highway Authority for Street Lighting on Trunk Roads (for example A66 and A19) and Motorways, and has its own policies for the design, provision and maintenance of those installations.

## **Policy Statement**

As with all areas of spending the Council has to ensure that the funding which is allocated for Street Lighting is invested as efficiently and effectively as possible.

Requests for new Street Lighting schemes are received and it's important that investment is directed at those schemes which will provide the greatest improvement to the community in general.

### **The benefits of Street Lighting are:**

- Reduce road traffic collisions.
- Reduce the severity of road traffic accidents and safety of all users of the highway.
- Reduce the fear of crime and actual crime.
- Promote the night time economy.
- Consideration to particular requirements for lighting in conservation areas & areas of outstanding natural beauty.

**SBC's Street Lighting Policy is divided into a number of distinct categories, which are:**

- Financial: Capital investment, maintenance and energy costs.
- Environmental: Carbon emissions and light pollution.
- Amenity: Visual and aesthetic impact.

This policy strikes a balance between the benefits of and the costs of the Street Lighting by applying the British & European Standards.

### **Purpose and Aim of the Policy**

The Council's vision is of a Borough that is more confident, more vibrant and more successful than ever before. A place where people can see that our drive, integrity and imagination have delivered genuine improvements and exceptional value for money and is a place that every single one of us is proud of.

The Council Plan sets out the overall ambitions and priorities for the Council, detailing the objectives, key actions and outcomes we aim to deliver during the three year-period of the plan (2019-2022).

The priorities are aligned to a number of themes, which include:

**Economic Regeneration & Transport** – Our vision of an economically prosperous Borough that is dynamic, exciting and inviting with infrastructure to support the development of business start-ups, business growth, new jobs and skills.

**Environment and Housing** – We aim to make the Borough a better place to live and a more attractive place to do business with clean streets, carefully tended parks and open spaces, affordable and desirable housing.

**Community Safety** – We want to make the Borough a place where levels of crime and fear of crime are low and people feel safe and secure.

**Health and Wellbeing** – We want the Borough to be a place where people are supported to be healthy.

**Children and Young People** – We want the Borough to be a great place to grow up, where children and young people are protected from harm and supported to be the best they can be in life.

**Strong Communities** – We are creating an environment where communities are diverse, cohesive, caring and vibrant.

**Adult Services** – We are working hard to make sure that people can get the right level and type of support at the right time to help, prevent, reduce or delay the need for ongoing support and maximise their independence.

**Arts, Culture and Leisure** – We are a Borough where our heritage, festivals, cultural activities, libraries and leisure facilities help us attract visitors and investment, courage literacy and learning and where sport and active leisure opportunities help people sustain healthier lifestyles.

Street Lighting plays a vital part in supporting the 'key' aims of the vision by helping to provide safer communities, supporting regeneration, helping to keep Stockton moving, tackling the impact of climate change and being a key factor in improving the environment.

The need for Street Lighting varies by location although it is generally accepted that urban and residential areas should be provided with Street Lighting, however the level and standard of lighting provided will be dependent on a number of factors. For example, town and large urban areas may have relatively higher crime rates and may benefit from the provision of a high level of Street Lighting where as in rural areas there may be constrained by the level and type of lighting considered necessary.

### **Additional Lighting Requests**

Requests for additional Street Lighting will be considered using the following factors prior to the commencement of any work, subject to available funding:

- Impact on existing lighting schemes.
- Impact on other stakeholders.
- Road safety issues.
- Maintenance implications.
- Ownership of the land.
- Crime statistics.
- Volume of night-time usage.
- Alternate illuminated routes available.
- Proximity of power supply
- Budgetary constraints

Any new scheme must achieve relevant standards and a risk based approach will be adopted that balances the risks presented against the costs associated with a new street lighting scheme.

The Council will only consider requests to provide new street lighting in alleyways or informal parking areas where there is high night-time use and history of crime or anti-social behaviour and addition to the aforementioned key factors.

### **Lighting Column Replacement**

All Street Lighting columns installed on the highway shall comply with the requirements laid down in the current edition of the Street Lighting Design Guide, with standard columns being galvanised steel, and will be of a type, height and spacing to ensure that the Councils desired lighting level is achieved and meets the relevant standard where practicable. Lanterns will be of a high International Protection (IP) rating and of modular construction to provide a future proof structure for installing latest technical advance in terms of lighting to be included as part of design guide.

The only exception to the requirement will apply to cast iron, cast aluminium on some decorative steel columns, which would be used in environmentally sensitive or areas of conservation. These columns would be subject to separate specification, when required, but generally they will be factory painted with a final decorative top coat of paint applied on site following erection. Particular note should be made of the requirements where columns are used for the support of street decorations, festive lighting and the imposed limitations.

Street lighting columns are currently replaced when they are damaged due to impact, vandalism or through deterioration, either through a planned replacement programme using a risk based asset management approach or in a reactive manner where circumstances dictate.

There are instances where residents, developers, public utilities or other bodies require lighting columns to be relocated to facilitate their works. We will however, work with stakeholders to progress their works subject to still maintaining the integrity of the lighting system and ensuring that the new lighting location still enables the scheme to meet the lighting requirements of the appropriate relevant standard. All costs associated with such works to be funded at by the requestor.

### **Column Attachments**

Any additional structural load imposed on a lighting column, including signs, banners, festive decorations and catenary wires increases the risk of failure. As such all applications to place an attachment onto a lighting column must be individually assessed to ensure that its safety and structural integrity is not compromised.

Depending on the attachment and lighting column a structural survey may be necessary at the requestors expense. Please refer to the Council's Street Lighting Engineer for guidance.

### **Column Relocation**

The Council can consider requests to relocate columns as part of new vehicle crossings. All relocation requests will be individually assessed and if agreeable, costs associated with the relocation funded by the requestor.

Please note that before we can agree to relocate a street light as part of a new vehicle crossing, permission must be granted for the alternations and evidence provided to the Street Lighting Engineer. All relocation costs to be funded at by the requestor.

### **Use of Passively Safe Columns**

The Council, as the Highways Authority, has a duty of care to aid the safe passage of traffic on the highway and as such careful consideration is given to the placement and specification of any street furniture to provide core purpose and value, whilst also mitigating potential hazards for highway users.

Vehicular collisions at higher speeds with street furniture are likely to result in higher severity of injury, additionally in such areas street furniture is not the only potential source of a collision which could cause injury. Therefore in urban areas where speeds

are below 40mph, or on housing estates, there is little advantage in using passively safe signposts and lighting columns, consequently passively safe products will typically not be considered.

For all new schemes on roads where the speed limit is 50mph or above, rural roads where the speed limit is 40mph or above, or urban dual carriageways where the speed limit is equal to or above 40mph a determination on the use of passively safe lighting supports should be undertaken in accordance with BS EN 12767:2007. This risk assessment should determine if passive equipment is appropriate and if passive equipment is required then the required class or equipment should be detailed.

It is not proposed that lighting columns should be replaced before they are life expired. However, the use of passively safe columns should be considered when there is a general replacement of lighting columns on existing roads where speeds are 40mph or above.

There may be instances whereby locations which do not meet the aforementioned criteria do require passive safe columns due to local factors. The risk assessment for existing roads is detailed below:

Locations where typically passively safe equipment will not be used:

- If the road is lined with parked cars the use of passively safe equipment is unlikely to be required.
- If the geometry of road, road use and other factors effectively limits the speed to 25mph or less passively safe equipment is unlikely to be required.
- There is a significant secondary collision item such as a tree or wall within 5m of the asset in the direction of travel.
- If equipment is protected by existing Road Restraint System (RRS).
- There is a high risk secondary accident potential such as a bus stop or school crossing point where it is likely there is potential for significant stationary pedestrians, within 10m in the anticipated direction of travel.

Locations where typically passively safe equipment could be used:

- If equipment is sited on a bend or in a high risk location passively safe equipment could be used.
- Traffic Speed is equal to or above 50mph.
- A history of repeated accidents.

### **Service Inspections-Street Lighting and Illuminated Signs**

Street Lighting and illuminated signs undergo service inspections as follows:

<b>Inspection Type</b>	<b>Frequency</b>
Electrical Test & Cleaning	Every 6 years
Structural Testing	As required based upon GN22 Risk Assessments.

The Council will carry out Periodic Electrical Testing once every 6 years in accordance with the Electricity at Work Regulations 1989 and BS7671:2008 Requirements for Electrical Installations Guidance Note 3 Inspection & Testing.

Structural Testing is carried out in accordance with the Institution of Lighting Professionals Guidance Note 22, Asset-Management Toolkit: Minor Structures (ATOMS). A risk assessment is carried out based upon age, material, previous treatments, environmental location, traffic density and consequence of failure.

## Electricity Supply Services

### Distribution Network Operator (Northern Power Grid or Independent Distribution Operator)

Street Lighting and illuminated signs rely on electrical supplies from the Distribution Network Operator (DNO) or Independent Distribution Network Operator (IDNO). The local DNO is Northern Power Grid (NPG) who undertakes work in accordance with a Service Level Agreement with SBC.

Defects may occur affecting street lighting due to problems with the wider electrical supplies and as such these problems are outside the control of the Council to resolve. The electrical providers have to adhere to statutory performance targets determined by the electricity industry regulator, OFGEM (Office of Gas and Electricity Markets) as part of their licence conditions which can be found at the following link:

<https://www.ofgem.gov.uk/licences-codes-and-standards/licences/licence-conditions>

All illuminated signs that are not required to be lit under the Traffic Signs Regulations and General Directions (TSRGD) 2016 will gradually be de-illuminated by way of a risk based approach as part of ongoing reactive maintenance. Signs should be mounted on columns wherever possible but within the limitations imposed by the appropriate guidance.

## Service Specification

Defects within the control of the Council are rectified within the following response time where reasonably practicable:

<b>Issue</b>	<b>Approach</b>	<b>Rationale</b>
Lantern outages, including belisha beacons (not supply fault)	To be repaired within 10 working days	To maintain the safe level of lighting
Lantern outages (supply fault)	To be visited by SBC within 10 working days to determine fault and repaired by NPG/IDNO/SBC within 25 working days.	To maintain the safe level of lighting
Street Light column knock downs	To be made safe within two hours. To be replaced within 25 working days	To ensure the safety of the public and to secure

	and power supplied by NPG/SBC within 25 working days(see note below)	insurance claims efficiently
Illuminated bollard or sign light out	Low priority to be repaired as part of area based maintenance and within 20 working days	To enable the focus to be maintained on high priority areas
Illuminated bollard knock down	To be visited and made safe within 2 hours. To be replaced with non-illuminated reflective bollards within 25 working days	To secure long term efficiencies and cost savings

Note: Where Street Lighting columns are knocked down they will be replaced within 25 working days providing the columns are held in stock.

### **Greenhouse Gas Emissions and Climate Change**

The Council has an adopted Climate Change Strategy (2016 – 2020) in place, which is part of the governments 'Emissions Reduction Pledge 2020' and publicly commits to reduce greenhouse gas emissions:

- from SBC assets and operations by 21% on 2014/15 levels by March 2020
- from Stockton Borough by 18% on 2013 levels by 2020.

Street lighting has played a significant role in achieving some challenging emissions reductions, and following the fourth complete financial year of the implementation of the street lighting LED replacement programme, CO2e emissions from lighting assets has reduced by 24.6% in 2018, and have fallen by 76% since 2012.

Detail on the Council's response to climate change and emissions reduction can be found on the Climate, Carbon and Energy pages of the Council's website including our Strategy, action plans, annual reports of performance and advice and guidance: <https://www.stockton.gov.uk/environment-and-housing/climate-carbon-and-energy>

LED lighting has a significantly lower environmental impact than conventional lighting, being more resource efficient, producing less heat, being highly energy efficient and having significantly lower harmful component parts, and this contributes to the Council's overall sustainability performance.

### **Environmental Zones**

#### ***Zone E1: National Parks, Areas of Outstanding Natural Beauty, Sites of Scientific Importance and other Dark Areas.***

- Roads in Zone E1 are defined as all roads within designated boundaries excluding roads in urban areas.
- The general presumption is that Street Lighting should not be provided in Zone E1 areas due to light pollution and loss of amenity unless there is an overriding

road safety issue which cannot be overcome by other means such as improvements to the carriageway delineation by reflective road studs, carriageway markings and improved signing.

### ***Zone E2 – Areas of Low District Brightness (Rural Locations outside Zone E1)***

- Residential areas of villages and settlements within a Zone E2 area are generally provided with the lighting in accordance with the relevant standard applicable to the type and the adopted highway.
- Adopted footpaths and cycle tracks will only be lit where there is high time night-time use, recorded crime issues and not alternative routes.
- On roads between villages and settlements in Zone E2 areas lighting will only be provided where there is a known night-time road safety problem that cannot be controlled by other means such as improvements to the carriageway delineation by reflective road studs, carriageway marking and improved signing.

### ***Zone E3 – Areas of Medium District Brightness (Urban Locations)***

- Urban roads within Zone E3 areas are generally provided with lighting in accordance with the relevant minimum relevant standards applicable to the type and use of the adopted highway.
- Adopted footpaths and cycle will only be lit where there is high night-time use, fear of crime issues and no alternative route.

### ***Zone E4 – Areas of High District Brightness (urban Centres with high night-time use, fear of crime issues and no alternative route.)***

- Urban centres within a Zone E4 area are generally provided with lighting in accordance with the relevant minimum relevant standard applicable to the type and use of the adopted highway.
- Roads in such areas that carry high traffic volumes will be treated as traffic routes and lit accordingly.

If unsure on any of the above reference should be made to SBC Design Guide or guidance from SBC Street Lighting Engineer

### **Variable Lighting Levels**

The primary requirement for Street Lighting is to provide a sustainable and appropriate level of lighting to the road network at the appropriate times.

There are various variable lighting methods available and the introduction of these devices must be in keeping with the Council's existing infrastructure and referred to the Council's Street Lighting Engineer for guidance.

The Council will constantly review new and emerging technologies to ensure the most technically and economically advantageous Street Lighting technology is utilised.

## **New Developments and Adoptions**

New developers will generally request for new highway's to be adopted and subsequently maintained at public expense by the Council under Section 38 of the Highway's Act 1980.

The Council requires developers to follow this policy document should they wish the Council to adopt Street Lighting. In addition the Councils Design Guide and Specification Street Lighting Section will also provide developers with all the details necessary to enable a design to be progressed that encompasses the principals of our Street Lighting vision for the future.

The primary consideration is to ensure the safety of all road users. In addition all new Street Lighting provided on the highway should be designed and installed to the current British/European Standard Norm (BSEN) appropriate for the carriageway in question.

In order to reduce light pollution, lighting will be specified according to the environmental zone in which it is located. These zones have been developed from the recommendations put forward by the Institution of Lighting Professionals and detailed under "**Environmental Zones**".

Detailed design of any new developments requires care and sensitivity to ensure the highest possible environmental standards are achieved, in addition to ensuring a consistent approach to lighting design that follows the lighting principals the authority adheres to, such as maximising energy efficiency, reducing carbon emissions and minimal future maintenance.

## **Crime and Disorder**

Either with a new development or where Street Lighting columns are due for replacement, then the crime and disorder statistics for an area must be taken into account when designing the scheme. The Council are fully committed to reducing crime and disorder by introducing and maintaining energy efficient lighting where possible to ensure safety for everyone.

### **Appendix 1** Additional Supporting Documentation and references.

- [Electricity at Work Regulations 1989](#)
- [Design Guide and Specification](#)
- [Design Guide – Standard Details](#)
- [Highway Infrastructure Asset Management Policy](#)