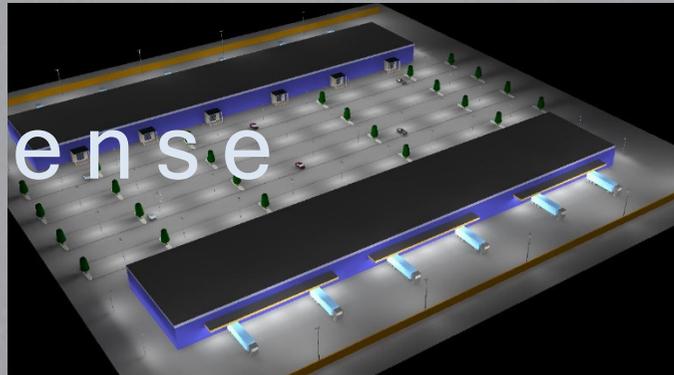


Retail and Amenity Lighting Experience

Light-sense

Lighting Consultants



Website : www.light-senseconsultants.com

Email : jtelford@light-senseconsultants.com

Project Experience

Retail store Chesterfield

Retail store at Chesterfield is a good example of the many retail parks I have designed requiring careful consideration for the environment around the site.

Retail stores are usually placed in prime locations, easily seen from main roads or close to residential areas, this requires careful consideration to avoid issues with light trespass and glare.

The lighting design was also changing the light source to LED from high pressure sodium, this will change the colour temperature to 4000K and colour rendering to 77Ra this results in a brighter appearance to the car park and better colour perception for the customer, creating a more pleasant experience and a feeling of safety. It is necessary to choose the correct luminaire when changing over to LED, both for quality and minimising glare, the traditional High pressure sodium luminaires place the lamp up in the reflector, easier to shield the lamp arc from causing glare. LED is more direct lighting using optics to distribute the light so the correct optics and their use within the luminaire is essential.

This site had two main issues to address with regard to overspill and glare, the site is down in a dip and a road slopes by it to the south, this meant that some of the luminaires were just above the road height, this required source intensity and threshold increment calculations to be carried out using the "ILP guidance notes for the reduction of obtrusive light" as the target values. To the west of the site there are two rail route each with two tracks, source intensity calculations were carried out to these track to ensure glare to train drivers were not an issue in the direction of travel, the ILP Guidance notes were used as the target.

The Abacus Orion LED post top 300W Luminaire was used on this site and the customer was really pleased with the results. The Orion LED luminaire was designed and developed in to production by myself while I was at Abacus Lighting.

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