

**Project:** McCann London Borough of Hounslow Sport England

**Location:** Osterley Sports and Athletics Centre



## Lighting solution optimises track use time, increasing athletics take-up in the London Borough of Hounslow

The design and build lighting contract delivered by McCann within the Sport England framework optimised the track use time at London Borough of Hounslow's Osterley Sports and Athletics Centre.

The result has been to extend the reach of athletics into clubs and schools within the borough. The lighting solution was delivered in line with the borough's tough procurement requirements and strict planning and Civil Aviation Authority (CAA) guidelines.

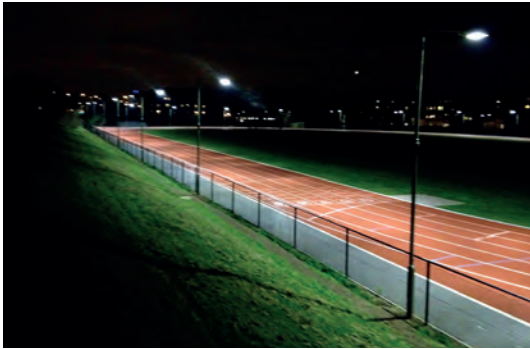
"Before the lighting was installed, track use at the London Borough of Hounslow's Osterley Sports and Athletics Centre was severely curtailed during the winter months as there was no lighting at all," explains McCann project manager Jonathan Cummins. "When an athletics club expressed an interest in basing itself at the centre and using the track facilities all year round, Hounslow's leisure services team launched a project to find the right lighting solution."

This was not as simple as might be imagined, as the site presented unique challenges: it is on Heathrow flight paths, close to a major highway and near local residents. So the Sports England framework required a controlled distribution of light onto the running track to be achieved alongside tough energy efficiency targets. Despite these challenges, the project was completed by McCann on time and to budget.

McCann, which is known for its Brilliance Project to provide lighting for Blackpool Council's Regeneration by Light programme, specialises in providing innovative and low energy outdoor lighting installations. These are already widely used on highways, in car parks, for street lighting and in sports facilities.

### The procurement and planning process

Andrew Smith, the borough's leisure services client manager, explains there are strict procurement rules and internal authorisation processes that must be navigated before such a complex project can start: "The project was initiated by my colleague, leisure manager Lynne Reynolds, who worked with sports centre managers Fusion Lifestyle to define the project's specification."



The lighting design ensures the entire track can be lit with low energy use.

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After internal approvals by local authority officers and elected members, the project was released for competitive tender to nominated contractors. “As the successful bidder McCann displayed the right combination of compliance, quality and cost in its tender,” says Andrew. “Their winning tender also emphasised their appreciation of the challenges, and had vital checks and balances throughout the planning and construction processes.”

One of the major challenges facing McCann's design team was how to resolve the planning issues associated with the nearby airport, trunk road and housing.

Osterley is situated directly under the flight path into London's Heathrow airport, and the sports ground is situated by the A4, one of the key arterial roads into London. Furthermore, the residents of the blocks of flats adjacent to the sports ground had legitimate concerns about the impact of a major lighting project nearby.

According to Jonathan, it took both his specialist colleagues, well versed in the UK's complex planning laws, and the lighting designers' expertise to overcome these challenges.

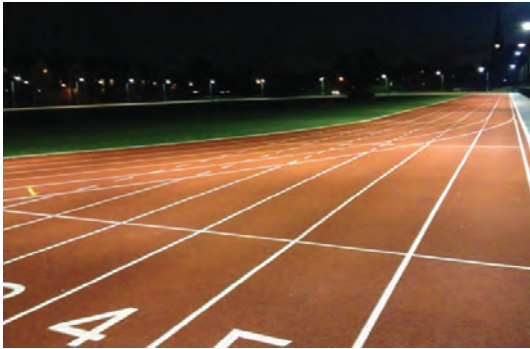
### Low level energy lighting solution

The low level lighting solution created meets all the project's requirements. Jonathan explains: “It provides a low energy, fit-for-purpose level of light for the sports track; it conforms to the Civil Aviation Authority's requirements and it also satisfies local planning regulations.”

As an expert in designing and installing lighting solutions, McCann delivered a solution that specified Philips WRTL arc lanterns, which incorporate a 400W Osram HQI-T lamp. These metal halide lighting configurations comply with the Chartered Institute of Building Services Engineers (CIBSE) LG 4 guidance, which also meets Sport England's requirements.

The lights were mounted on 6m high steel mid-hinged raise and lower lighting columns with a planted base. “The project required civil engineering works to excavate a trench around the track to accommodate cabling, and subsequent reinstatement,” says Jonathan. “The cabling configuration we installed also allows certain sections of the track to be switched on and off independently. This delivered further energy savings because a 100m sprint training session only required the sprint track lit, and not the other circuits.”

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The sprint track and other sections can be controlled independently, ensuring energy is only used to light areas in use.

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### The impact – promoting athletics in Hounslow

According to the London Borough of Hounslow’s Andrew Smith, by delivering the latest lighting design and installation technologies, McCann has been able to offer a sports lighting solution that meets multiple and conflicting demands: it gives athletes night-time access, it satisfies planning and regulatory requirements, and it meets the needs of local residents.

He explains: “McCann’s smart solution optimises the track, enabling it to be used throughout the year. There is a new athletics club with 150 members now using the centre as a result of the lighting installation. Furthermore, we have hired a full-time athletics development officer who is working with local clubs, schools and disabled residents of the borough to promote sport. Indirectly, the whole borough will benefit from McCann’s solution, and we now have a facility that can be used at a very high level.”

Andrew is delighted with the outcome: “From start to finish, the project ran smoothly, with McCann overcoming all the challenges and meeting Sport England’s specifications. Plus, McCann overcame seemingly minor but significant project parameters, such as the restricted access to the site for plant and machinery.”

Jonathan concludes: “We began work in January 2013 and completed the project less than three months later, by March. This project has been a model Sports England framework project that has met the needs of multiple stakeholders.” ■

