

CASE STUDY

Springfield applies the smarts to sports precinct lights and controls



Ipswich City Council's Springfield Central Sports Precinct is a brilliant example of where engineering, lighting design and planning all come together.

The project by Lend Lease, was project delivered by JMAC Constructions with the lighting and masts supplied by Smartlux, a Local Buy approved supplier.

Smartlux Director, Craig Nicholls knew Springfield had a range of sports they needed to cater to – for both playing and training and for both amateur and competition standards.

"There are two AFL multi use fields that can be also used for football, rugby league and athletics as well as 16 competition standard netball courts," he said.

The design included

- 4 x 35m base hinge lowering masts with
- 30 LED smart lights for the Senior Oval
- 28 LED smart lights for the Junior Oval
- 4 x 23m base hinge lowering masts for one six netball court group and
- 16 x 15m masts for the other two groups of 5 courts.
- 40 LED smart lights for the Netball courts.

"For safety, accuracy and player and spectator enjoyment, it was critical that the AFL fields were fully lit to training (50 lux) and amateur competition (100 lux) while netball was lit to training (100 lux) and competition (200 lux) standards," he said.

By using all Abacus Base hinge masts, this allowed access to the luminaires for cleaning and maintenance from the ground, which is very safe, and no working at heights, requiring no high mast cranes and no requirement for heavy crane footpads.

The project fluency also allowed the contractors to work around priorities, without having to worry about crane hire fees or timelines with the masts installed prior to luminaire arrival.

Springfield used smart remote control of lights for the fields and netball courts and auto/remote switch to de-energise the masts. The smart controller also completes regular energy and performance diagnostics.

"This is an electrical engineer's dream and John van der Boor from JVA and Associates proposed this solution to the site engineering team as an option to reduce cost and improve innovative control of the site.

The engineers on the project also wanted to have the ability to have the contacts at the base of each mast turned off, allowing the poles or a group of poles to be de-energised.

The combination of the lighting control system wirelessly energising the pole and then communicating with the luminaires directly to training or competition levels is new.

This also meant there was no conduit cabling to each pole, reducing the cost of installation. This was the proprietary lighting control outputs working in conjunction with the VRT site management system.

We use the mesh of the street lights to communicate with, and turn the power to the poles on/off when the luminaires are not in use.

It has been adopted for Stage 2, which will eventually have more fields and eight tennis courts, which will have 8 m based hinge columns on the 4 pole tennis courts, an Australian first.

"Maybe one day in the future we will hear from a future Kangaroo, Wallaby or Diamond who said training under lights at Springfield is where they started and trained as youngster growing up in Ipswich."

Smartlux is proud to partner with both ABACUS Lighting and AAA-LUX to assemble a complete solution.

CASE STUDY

Fraser Coast kicks regional goals



The Fraser Coast Sports and Recreation Precinct in Hervey Bay is a multi-stage development spread over more than 60 hectares.

Smartlux in conjunction with Precision Sports Lighting installed a Sports Lighting package for stage 1 of the \$48 million master planned development that will be home to a variety of sports fields for football [soccer], netball, AFL and Rugby League.

Smartlux Director, Craig Nicholls sees this as a great win for regional Queensland.

“There are so many players that come from regional areas in Australia, and they deserve the investment and facilities to help them grow into future champions,” he said.

“Having the ability to train and play at night, under lights opens up a range of possibilities for clubs, players and the council.

The design included

- 14 x 25m base hinge poles
- 6 x 15 m poles
- 88 LED lights
- 4 fields
- 8 netball courts

Abacus base-hinged masts do exactly what they say on the tin: raise and lower from ground level up to a height of 50 metres. They are robust, simple to install and easily accessible which makes them incredibly cost effective, since they require minimal ongoing maintenance.

These are a safe option, as there is no climbing involved as all maintenance and floodlight adjustments can be done at ground level with no cherry pickers required.

Their design also means there is no ladder or platform to interrupt the mast’s clean, modern lines.

With the installation of the new LED lighting system, the fields and precinct at Fraser Coast have better and more uniform lighting, and can be controlled remotely to determine the light intensity and save immensely on annual electricity costs.

“These lights were chosen to be able to meet the quality requirements and standards to be able to attract and host regional, state and national sporting competitions and carnivals in this growing region.”

There is the possibility to dim the lights, to only illuminate part of the field or to decrease light intensity during, for instance, practice. Thanks to this high directional lighting, the precinct can save 50 – 70% on energy costs.



AUTHORISED RESELLER

AAA-LUX®
TRIPLE A LIGHTING

Abacus
Leaders in Lighting

APPROVED CONTRACTOR

Local Government
PROCUREMENT
APPROVED CONTRACTOR



Contact: Craig Nicholls ☎ 0450 747 337 ✉ enquiry@smartlux.com.au 🌐 smartlux.com.au