



Duke of Gloucester Barracks

Prolectric replaced failing mains-powered lights at Duke of Gloucester Barracks with solar streetlights, bollards and a ProTemp unit, delivering reliable off-grid lighting that improved safety, avoided costly excavations and supported MOD sustainability goals.

PROJECT OVERVIEW

VIVO Defence Services, responsible for maintaining and upgrading facilities across the UK Defence estate, required a sustainable and cost-effective solution for lighting internal roadways and pathways at the Duke of Gloucester Barracks.

The existing mains-powered streetlights and bollards were failing, creating safety risks for personnel and visitors. Vivo sought an alternative that would eliminate costly cable trenching, reduce ongoing maintenance and support the Ministry of Defence's (MOD) sustainability goals.

KEY PROJECT STATS

-  177 AE6 solar streetlights installed
-  1 ProTemp unit deployed for no-dig area
-  10 Solar ST bollards for pathways
-  Estimated carbon savings: 6,599 kg of CO2e
-  Estimated energy cost savings: £9,934 annual electricity savings
-  Excavation avoided in high-risk service areas

CHALLENGES

- **Ageing infrastructure:** Traditional mains-powered street lighting and bollards were no longer reliable.
- **Complex underground services:** Large numbers of buried utilities made trenching and cabling impractical and potentially hazardous.
- **Safety & security needs:** The site required consistent, dependable lighting to maintain a safe environment for military personnel and visitors.
- **Sustainability targets:** Vivo needed an off-grid solution that aligned with the MOD's net zero ambitions.



THE SOLUTION

Following a successful tender process, Prolectric was contracted to deliver a fully off-grid lighting upgrade. The installation included:

- **AE6 Solar Street Lights (x177)** – providing powerful, reliable illumination for internal roadways and key access routes.
- **ProTemp Solar Tower Light (x1)** – selected to illuminate an area where buried services prevented safe excavation, offering a “no-dig” lighting solution.

- **Solar ST Bollards (x10)** – ensuring safe pedestrian pathways with uniform lighting and zero cabling.

Our team also carried out the safe removal of existing mains-powered columns, delivering a complete installation service with robust RAMS to support safety and compliance on-site.





We've worked with Prolectric on several projects now, and they have consistently delivered innovative, sustainable solutions that meet the unique challenges of working across the Defence estate.

At Duke of Gloucester Barracks, their solar lighting provided a reliable, off-grid alternative to ageing mains-powered units, overcoming complex underground service issues without disruption.

Beyond the technology itself, their team has been proactive, responsive and professional from start to finish - ensuring safe installations, supporting our sustainability objectives, and giving us the confidence that these systems will perform for years to come.

Prolectric has become a trusted partner for us, and we look forward to continuing our collaboration.



Shaun Hobbs
Project Manager
VIVO Defence Services

RESULTS

The project has transformed lighting at Duke of Gloucester Barracks, by adopting Prolectric's solar lighting solutions, VIVO achieved:

Off-grid reliability
Solar-powered units operate independently, removing reliance on underground cabling.

Health & Safety improvements
Reduced excavation work meant no risk of damaging buried services, improving site safety during installation and long-term operation.

Future-proofing
Maintenance-free LED lighting with built-in smart controls ensures long-term performance and reduced operational burden.

Cost savings
The annual electricity cost savings equate to £9,934, this doesn't take into consideration the savings made through no trenching/cabling requirements and not needing a grid connection.

Carbon savings
6,599 kg of CO₂e - annual emissions reduction compared to mains-powered lighting.

