

CASE STUDY

Civils & Electrical Works, Casement Aerodrome, Baldonnell

LOCATION: Casement Aerodrome, Baldonnell, County Dublin
CLIENT: Environmental Protection Agency
DATE: December 2021



Introduction

Casement Aerodrome is a military airbase in southwest Dublin. It is the headquarters and sole airfield of the Irish Defence Forces Air Corp. Global Rail Services Ltd (GRSL) were commissioned to install

new outdoor radiation measurement equipment within the confines of the airfield on behalf of the Environmental Protection Agency (EPA).

Project Deliverables

Global Rail Services Ltd were appointed Project Supervisor Construction Stage (PSCS) for the works. Works involved the construction of two concrete plinths complete with a galvanised ESB approved mini pillar on each. Trenching and ducting works, including 6 access junctions, were carried out through a field adjacent to the airfield runway and on a concrete footpath adjacent to the transmitter hut building, to allow for cable entry to the building. On completion, the grass area was re-graded and re-seeded. The concrete footpath was reinstated to match existing.

Global Rail Services carried out all cabling, electrical connection and commissioning works from the transmitter building to the radiation monitoring equipment. GRSL also collected and sited the

radar monitoring equipment into place using the company's in-house crane mounted lorry.

As the works were carried out air side, on a live military airbase, security and planning was paramount to allow for the continued operation of the airbase. Communication with the tower had to be continuously maintained, due to the proximity to the runway.

Global Rail Services worked closely with the EPA and Defence Forces to ensure that all security measures, such as Employee Garda Vetting and air side training, were adhered to prior to commencing work on site.

Challenges and Solutions

Access and egress into the signal room could only take place under the supervision of the Irish Defence Forces. Global Rail Services liaised closely with the Defence Forces to plan these works around shutdowns to ensure that no disruption took place to existing radar equipment, whilst ensuring there were no delays to the project programme.

The works were carried out in December which was not the ideal time of year for the specialist topsoiling and seeding works required on the grass area. To overcome this, Global Rail Services carefully

removed the existing sod (the natural grass and soil held together by the roots) and replaced it in the same location to prevent any revisits and speed up the overall program.

Power cables were known to be present close to and entering the existing transmitter hut building. The area was cat scanned by CSCS certified staff, marked out and trial holes dug to identify the location of the cables. The duct route was then marked out to avoid the cables. Excavation methods were agreed with the client and a 'Permit to Dig' was issued and signed prior to works commencing.

Benefits

Global Rail Services have in-house Civils and Electrical teams so were able to offer a full turnkey service to the EPA. Having worked on similar projects where Garda Vetting was required, we were familiar with the process. This prevented any delays in mobilising on site.

We have also completed various projects where works need to be completed during shutdown of live services. Our programme of works was adhered to, ensuring that we could take full advantage of shutdowns to the existing radar equipment.

Testimonial

"Global Rail Services worked with the EPA on a number of projects at a few sites all over Ireland. We continue to work with them on more projects at a large number of sites. We are very happy with their ability to mobilise different crews and to deliver projects on time and within budget.

"The quality of their work is very high and they are easy to work with. They have performed many required aspects of modern projects including preparing RAMS documents, obtaining

security clearances and providing both air side and climbing insurances. They have performed site surveys with our teams, they did groundworks, trenching and ducting as well as civils works, electrical and rigging works.

"I have no hesitation in recommending them for similar works."

Seamus O'Leary
Project Manager