



Case Study Fire Suppression Sector

nobel-fire-systems.com

FlameRanger™

Deployed at 'Major Waste' Site

After a significant fire shutdown at a UK city's waste and recycling facility, the rebuild came with a clear directive: improve fire protection dramatically. To protect the most vulnerable areas, FlameRanger™ - Unifire's autonomous robotic fire suppression system, was selected as a smarter, faster, more focused alternative to fixed suppression, and as a complement to the overarching sprinkler system.

A national Level 4 sprinkler company contracted Nobel Fire Systems to supply the full system, including six FORCE 50 robotic monitors and a central PLC

controller with UniFire's Ammolite™ GUI. The monitors (water cannons) and attendant pipework were installed by the sprinkler company, fed from the site's existing sprinkler tank infrastructure.

Working closely with the water cannon layout, Nobel designed and delivered a tailored flame detection, control, and monitoring solution for the site. Each individual waste bay was equipped with a high-level IR3 flame detector, linked to a Sigma A-XT suppression release panel, all panels monitored by a Syncro AS analogue addressable system.

On fire detection, the panel sends a hardwired signal to the FlameRanger™ PLC, which then activates the robotic water cannon which is pre-programmed to sweep the exact area of risk.

To visit the Nobel website [click here](#)

FlameRanger™

Scope of works by Nobel

IR3 Detectors. Installation of one detector per bay

Sigma A-XT. One panel per bay for suppression control

Hardwired interface from each panel to robotic monitor PLC

Custom programming of each monitor to its associated risk area

Syncro AS analogue addressable monitoring system

Full commissioning and live activation of all systems on site

Four high-risk zones protected

Bale Store. 6 waste bays, protected by 1 robotic monitor

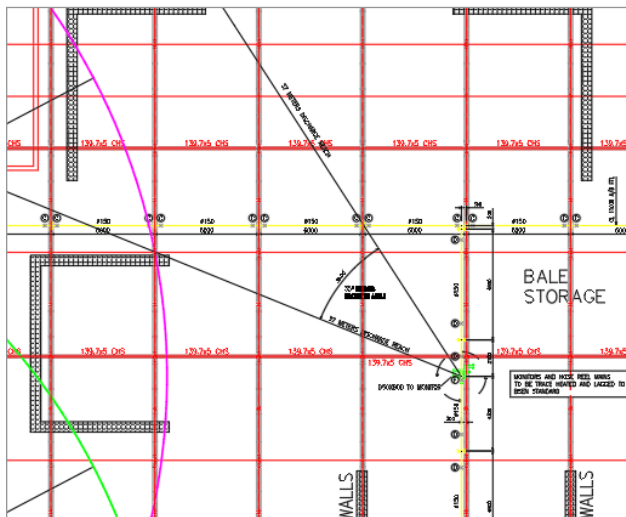
Bale Store 2. 3 waste bays, protected by 1 robotic monitor

Reception Hall. 4 bunkers, protected by 2 robotic monitors

RDF Area. 6 bays, protected by 2 robotic monitors

The Result

Fast, intelligent, targeted suppression-activated automatically, tested thoroughly, and fully integrated into the site's fire protection strategy. A future-ready system for a facility that's not taking chances a second time.



FlameRanger™ Water test at the waste client site
To view the video [click here](#)

IR3 Detectors



FlameRanger Force 50



Sigma A-XT



Syncro AS

