

Case Study

EZ Roll[®] Gravel Pavers

NDS PAVERS STAND UP TO THE HEAT AT PHILADELPHIA REGIONAL AIRPORT'S AIRCRAFT RESCUE AND FIREFIGHTING TRAINING GROUNDS

The Aircraft Rescue and Fire Fighting (ARFF) Training Center at Philadelphia Regional Airport provides essential training for EMS and firefighters who work at airports and aviation facilities around the country. This specialized program requires that they go through mandatory "live burn" drills, which means the firefighters learn how to handle extreme situations such as aircraft fires and emergency evacuations.

NDS was called in by Airport Design Consultants, Inc. to help upgrade the stormwater and drainage system on the grounds. The new system needed to allow for emergency vehicle access since the training location included scenarios that would require fire trucks, military vehicles and first responders. The area would also experience high temperatures due to the simulation of fires so the stormwater management product must be engineered to withstand extremely high heat. In addition, the solution had to address important environmental regulations.

With the existing site adjacent to the Delaware River and within wetland and wildlife refuge areas, a solution that increased the amount of impervious space – such as using concrete or pavement – was not an option.

PAVERS MEET ENVIRONMENTAL AND HEAT CHALLENGES

Ultimately, NDS recommended its EZ Roll[®] Gravel Paver product. This system provides an alternative to traditional paving by offering a pervious solution that can handle an enormous amount of compressive strength. These pavers minimize runoff and don't require the addition of any impermeable space, which was critical from an environmental perspective.



In addition, the pavers could handle temperatures upwards of 325°F before any type of damage or deformity occurs, an optimal solution for firefighting scenarios.

DESIGN SUPPORT MINIMIZED WASTE

The NDS Design Worx[®] team provided the specifier and construction team with the appropriate CAD layout to ensure the pavers would fit exactly as needed around the area. It featured a ring-shaped design so the layout developed to accommodate the exact space helped minimize any potential waste. NDS also provided installation training onsite to ensure all went smoothly, which was a key differentiator compared to makers of competitive products.

PROJECT SUMMARY

PROJECT TYPE

Storage & Infiltration

PROPERTY

Airport

STAKEHOLDERS

Tony DePaul Construction
Airport Design Consultants, Inc.

NDS PRODUCTS USED

90,000 sq. ft. of NDS EZ Roll Gravel Pavers

NDS Design Worx Services Utilized:

1. Layout Drawings
2. Details
3. Storage Calculations