

Case Study

EZ Roll[®] Gravel Pavers

EZ ROLL[®] GRAVEL PAVERS WITHSTAND HEAVY TRAFFIC AND RAINFALL AT CHARLESTON AREA INDUSTRIAL PARK

James Island Business Park boasts a number of large warehouses as one of James Island's most spacious industrial parks, but as an expansion project began, there quickly became a need for additional parking. Creating more spots for large vehicles was essential to accommodating the expected increase in traffic to the area.

The challenge was looking for an ideal location within the park that allowed for an alternative to concrete since the property's impermeable areas had been maxed out. The design firm turned to NDS for guidance, communicating that the specified product would also need to allow for proper drainage as well as be environmentally friendly.

PAVERS OFFER SUSTAINABLE SOLUTION

Upon review of the space, the NDS spec manager determined that EZ Roll Gravel Pavers were the most ideal solution. Installing pavers would add much needed parking spots while still enabling the drainage of large amounts of water. Outside of space constraints, any type of hardscape surface would have been problematic since the area experienced very heavy amounts of rain fall.

These gravel pavers are also specially designed to withstand high traffic loads – which was critical for the project since the warehouse location often experiences extensive traffic with Class 8 trucks and utility vehicles. Once filled, the pavers have a compressive strength of 53,683 psf, completely capable of bearing the weight of the vehicles coming and going at James Island Business Park.

Another benefit of the gravel pavers is that they are manufactured from recycled HDPE plastic with UV inhibitors – making them extremely friendly to the environment – and a perfect solution for the city of Charleston and James Island Business Park as the two organizations were looking for more sustainable and environmentally responsible products during construction.



HEAVY RAIN DURING CONSTRUCTION PROVED NEED FOR PAVERS

NDS specified the use of more than 37 rolls of EZ Roll Gravel Pavers in order to add approximately 130 new parking spaces. Installation was pushed out more than once due to the amount of rainfall that took place during construction. Dewatering pumps were needed to drain other construction areas that prevented the work on the parking addition, which provided confirmation as to the importance of using the pavers to help move/reduce the amount of water runoff in the area.

The pavers come pre-assembled and connect together easily, which made installation go smoothly and quickly once the ground was ready. This alternative solution to traditional paving methods created a strong gravel surface that once filled would support heavy vehicles and maintain permeable surface areas, eliminating or reducing stormwater runoff. The design firm was happy with the look of the solution as well.

PROJECT SUMMARY

PROJECT TYPE Storage & Infiltration	PROPERTY Parking Lot
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STAKEHOLDERS
Seacoast Supply
City of Charleston

NDS PRODUCTS USED
21,349 sq. ft. of 4x150 EZ Roll Gravel Pavers

*"I was shocked at the ease of installation.
Great product that I will use again."*

- Robert T., Project Manager