

Case Study

BG-FILCOTEN® TRENCH DRAINS

BG-FILCOTEN® TRENCH DRAINS INSTALLED ON DRIVING TRACK AT INTERNATIONAL AFFAIRS TRAINING FACILITY

In Virginia, a government agency developed a facility to provide advanced tactical training to the foreign relations community. This global security training location offers a number of special hard skills security and life-saving training courses to its agents. As part of the facility's complex, two high intensity driving courses designed for use with a variety of vehicle types were constructed on the premise to ensure personnel had proper experience with wet-track and high-speed driving.

To meet the physical demands of a driving course as well as the requirements of a government contract, the training complex needed an effective, high-performance drain system that could support a heavy vehicle load rating.

CONCRETE DRAIN CAPABLE OF HANDLING HIGH LOADS AND VOLUMES OF WATER

Contractors at the construction management firm collaborated with NDS on a plan that suited the needs of the facility. Civil engineers and stormwater specialists from the Design Worx® team worked with contractors to make sure they had the right solution, the right channel size, and the right specifications. Part of the project's complexity was that the product needed to be configured in large arcs to follow the shape of the skid pad. The system would also need to withstand high loads and be able to move large volumes of water for wet track driving exercises.

NDS recommended BG-FILCOTEN®, a high-performance concrete channel drain that offers higher compression strength than competing polymer products. And unlike most polymer concretes, it is manufactured without VOCs or heavy-metal residue that can leach into the ground. BG-FILCOTEN drains are fiber reinforced, 100% recyclable, have 0% harmful substances and are tested to class D (according to DIN EN 1433).



NDS EXPERTS TACKLE SEVERAL UNIQUE CIRCUMSTANCES

A detailed layout was provided by NDS to help simplify what might have become a difficult installation due to the number of components that needed to be placed with the utmost precision. There were many unique circumstances, so the project required the support of NDS' highly qualified technical support team.

During installation, a NDS stormwater expert was onsite to provide technical support and assist the contractor while 3,700 lf of BG-FILCOTEN trench drains with ductile iron grates were placed around two curved tracks – one that's now used for wet driving, the other for high-speed training. As one of the largest BG-FILCOTEN installations in NDS history, this was the first time the product was utilized along a high-intensity course meant for defensive driving maneuvers.

PROJECT SUMMARY

PROJECT TYPE
Capture

PROPERTY
Driving Course

NDS PRODUCTS USED
3,700 linear ft. of BG-FILCOTEN® NW150 6" channel NW300CB

NDS Design Worx® Services Utilized:

1. Product specification
2. Drainage calculation
3. Plan evaluation
4. CAD file creation