



TAYLOR COUNTY LANDFILL MSW LANDFILL

LOCATION

Mauk, GA

OWNER

Waste Industries

ENGINEER

Smith & Gardner

CONTRACTOR

ESI

SIZE

25 Acres

DATE COMPLETED

2018

PROJECT DESCRIPTION

Taylor County Disposal Landfill has been in operation since 1990 and has accepted waste from both trucks and rail from any location. When the latest 25 acres reached capacity and was ready to close, Waste Industries chose ClosureTurf® for the final cover due to its ability to resolve tough erosion challenges.

Because of its geographic location in Georgia near the fall line, the soils at Taylor County are mixed with clay, sand and rock, making it extremely difficult to establish vegetation. Faced with long slopes over large areas, the owner needed to ensure the landfill be protected from erosive forces especially when facing annual severe weather events such as tropical storms and hurricanes.



A view of the landfill showing the benchless slopes and the perimeter channel at the bottom.



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ClosureTurf provided an excellent solution to these technical performance challenges as well as many other environmental needs. As an example, the site was hit mid-way through construction by 60+ mph winds from Hurricane Michael. Because of its ability to withstand wind uplift and heavy rains, the portion with ClosureTurf installed remained undamaged with no maintenance required.

Watershed Geo was able to apply a unique benchless design to the approximately 650 foot, 4H:1V slopes. The benchless design eliminated the need for diversion berms and down slope channels, and instead, allowed for the storm water to stay in sheet flow for the maximum distance before being converted to shallow concentrated flow. The channel flow does not occur until the water reaches the perimeter channels. It also reduces the need to dissipate the converted energy that channelized water and gravity cause with steep slopes. This ultimately saved in construction cost on the total project.

The Taylor County Disposal Landfill is now the second ClosureTurf benchless design to be installed in the state of Georgia. In addition to major construction savings, ClosureTurf will save on annual operations budgets with reduced maintenance activities such as vegetation, mowing, fertilization, irrigation, re-vegetation, erosion repairs, and stormwater pond cleaning associated with traditional soil covers. ClosureTurf is also able to provide an aesthetically pleasing view to the public when they first enter the landfill.



The site conditions prior to ClosureTurf installation.