

Tenax MS330 aids in raising the elevation and widening of a full-depth asphalt roadway

PROJECT NAME:	Bungalow Road
LOCATION:	Channahon, IL
DATE:	November 2007
PRODUCTS:	MS330
OWNER:	Village of Channahon
CONTRACTOR:	D-Construction
ENGINEER:	Strand Associates, Inc.
GEOTECHNICAL CONSULTANT:	Midwest Testing Services/ McCleary Engineering



Bungalow Road had not been built to sustain the high volume of heavy truck traffic it has to support today.

PROBLEM

Most of Bungalow Road was in desperate need of repair. The road sits atop black topsoil in many locations and is highly susceptible to weakening during wet periods. Most of the ditches are very shallow and overgrown with vegetation greatly reducing what flow may exist. Built several years ago for light to moderate traffic, the road now serves an industrial area and is the primary access to businesses and an aggregate quarry. It is estimated that 3500 trucks per day use the road.

The existing pavement was completely destroyed. Laden with potholes and damage from frost boils, loose aggregate had been added to fill the holes. Trucks could not travel more than just a few miles per hour. The depth of the existing pavement

structure was within the same elevation as the ditch bottoms so the section never completely drained. Ditches were overgrown and often held standing water.

In addition, the city has no PCC roads and did not want to change maintenance routines for only one stretch of road. They elected to use full depth asphalt.



Much of Bungalow Road remained saturated due to overgrown ditches and poor soils; eventually leading to complete failure.

SOLUTION

To raise the elevation of the new road, the existing road was pulverized and the new section built on top of it. 2.5in HMA Surface, 12in HMA Binder, 12" Aggregate Base. The new pavement structure is widened by 2ft on either side and deeper ditches were created to better drain the pavement structure. In the areas of widening, the vegetation and topsoil were stripped to a minimum depth of 12" and replaced with well graded aggregate back to the level of the existing pavement. MS330, multiple layer geogrid was installed over the entire width and the new pavement section built on top of it.



A representative from the local distributor is on site to offer support during installation.