

Bob Randolph - Zachry's experience with EMC2

From: "Ortiz, Abel" <Abel.Ortiz@Zachrycorp.com>

To: Bob Randolph

Date: 12/16/2013 5:48 AM

Subject: Zachry's experience with EMC2

Dear Bob,

As you are aware, in 2009, I was tasked by our Joint Venture (NorthGate Constructors, a Kiewit-Zachry Joint Venture) to evaluate alternative soil stabilization products for the DFW Connector Project. Our goal was to reduce the risk of sulfate-induced heave while also reducing construction costs. Sulfate-induced heave was a concern for us because we were constructing the project in an area known to have sulfate problems. As part of my due diligence, I looked in to several products among them EMC2. EMC2 appealed to us because TxDOT constructed a number of test projects in the Dallas District and after visiting all of those projects it was easy to realize the pavement placed over EMC2 was performing better than the pavement over other subgrade treatment options.

At that time, I felt more at ease with the possibility of utilizing EMC2 because my company (Zachry Construction Corporation) had constructed 3 of these Dallas District projects: a section of Luna Road, a section of the I-30 Tom Landry Freeway and section of the I-635 frontage roads.

In the end, TxDOT's reluctance to utilize alternative products kept us from further pursuing these alternatives. As a result, the DFW Connector project removed and replaced over 200,000 cy of soil that was potentially high in sulfates.

Although many of the managers involved in the construction of the EMC2 projects are no longer employed by Zachry, I was able to speak with several managers that where either involved or had firsthand knowledge of these projects, among them, Mr. Mark Brown P.E. who is Zachry's Quality Manger, Mr. Duane Herbort who is Zachry's Project Controls Director, Mr. Gary Doty, V.P., who was the Project Manager for the Dallas High Five Project, Mr. JD White and Mr. Bob Hoffer, two of our dirt superintendents responsible for treating the soils. The consensus at Zachry is that when we applied EMC2 at our projects in Dallas, we found that it provided a stable working platform at a reduced cost over conventional stabilization methods and without any significant application challenges. Visiting the projects several years later confirmed to me that the pavements placed over EMC2 are performing better than the pavements placed over conventional stabilization products.

As a contractor with experience working in the DFW area, Zachry Construction welcomes further evaluation of products that can provide a stable working platform at a reduced cost, and in some markets we are very interested in products that can eliminate the risk of sulfate-induced heave. If I can be of any assistance please feel free to contact me at 281-830-3114.

Best regards,

Abel Ortiz
Project Manager

Mr. Ortiz has since left Zachry Construction Corporation for other positions in the heavy highway construction industry