

MD Roadway Depth Mapping, Debonding, and Utility Mapping



NEXCO partnered with iSee, LLC to scan and identify problematic areas in a mile-long stretch of roadway. The road way featured three distinctly different designs, as well as recently paved and older sections. Subsurface reflections suggested several areas featuring debonding of bituminous pavement layers with underlying subgrade material. Utilities spanning the scanned area were identified and mapped.

From the total percent area coverage of debonded pavement area, the client was able to determine which areas of the roadway should be slated for repaving, with a possible subgrade rehabilitation.

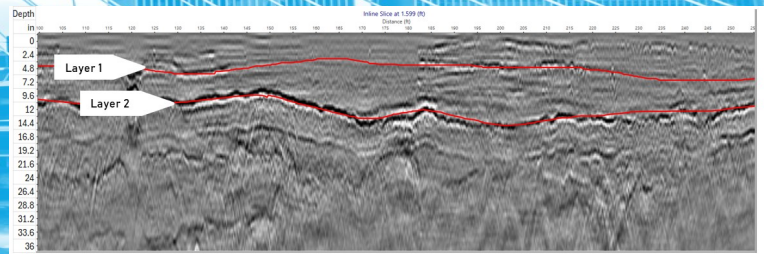


Figure 3: Typical pavement profile within section 1 (108+50 to 111+50)

Project Details

Client	[Contractor in MD]
Reference	iSee, LLC EBA Engineering
Target Area Target Length	16,000 ft ² 1mi
Project Period	05/2024

Impression

A team of city officials, primes, and subs were able to expedite their decision making regarding how much current roadway asset could be preserved, and how much should be repaired. The team was appreciative of how this question could be answered through visual depictions and objective area calculations.

Using a grayscale heatmap visual, NEXCO generated maps of areas with less than 7in of pavement coverage. This helped visualize tendencies with problematic areas.