

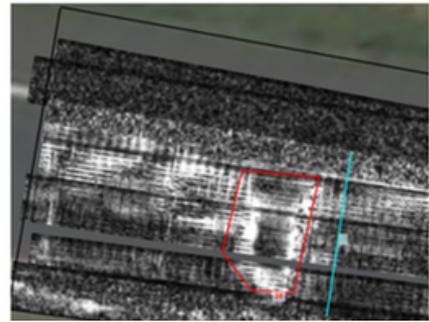
Detection of Subsurface Features in Roadway for New Construction

Maryland

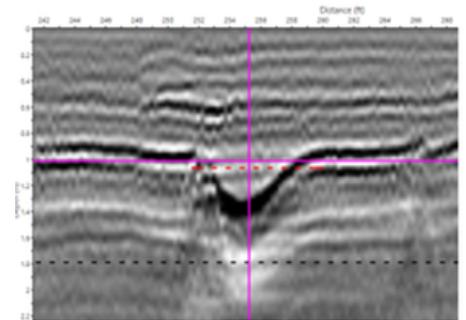


Joint & load transfer/dowel bars locations, rebar coverage map

NEXCO was contracted to detect any subsurface features beneath a range of composite pavement that might influence the installation of new utility lines. Among the findings were load transfer/dowel bars, areas with and without PCC reinforcement steel, cracks, corrosion of reinforcement, PCC expansion joints, subsurface patching, and spalling/other damage. CAD, KMZ, and imagery deliverable files were supplied in addition to a written report.



Plan view (C-scan)



Elevation view (B-scan)

Project Details

- Client : Engineering Firm
- Reference: [withheld]
- Target area: 18,000ft²
- Used Technologies: Ground Penetrating Radar 
- Project Period: February, 2026

Impression

The client could perform more efficient construction by avoiding obstacles and clearing out areas with potential damage. With georeferenced deliverable files, they are now able to determine the location of underground features.

Because the pavement had an asphalt riding surface over PCC concrete, the concrete pavement could not be directly observed, making GPR a go-to technology for determining the condition of the concrete or detecting things within the pavement, such as joints.