

Mr. Sammie McCoy, PE Tennessee Division Manager Benesch 574 Franklin Road, Suite 300 Franklin, TN 37069



Re:

California Bearing Ratio Laboratory Test Results

I-40 Memphis Alternative Delivery Pavement Rehabilitation

Memphis, Shelby County, Tennessee

Dear Mr. McCoy

Bacon Farmer Workman Engineering & Testing, Inc., has completed the requested laboratory testing associated with the aforementioned project, specifically California Bearing Ratio testing. After evaluating the subgrade at the five locations identified on the attached Laboratory Summary and our experience in the area, we recommend a **CBR value of 4.0%** for the pavement design on this project. We appreciate the opportunity to serve you and look forward to future association with you on this and other projects. If you have questions concerning this report, please call our office.

Sincerely,

BACON | FARMER | WORKMAN

ENGINEERING & TESTING, INC.

Matt Bullard, P. E.

Tennessee Regional Manager

Attachment: Laboratory Data Summary



Laboratory Testing Summary

| Project Number: | 25047 | | |
|-----------------|--|--|--|
| Project Name: | Shelby County I-40 Pavement Rehab WO#1 | | |
| Date: | 4/1/2025 | | |

| Sample | Depth | Sample Description | Moisture% as received | Maximum Dry Density (PCF) | %Optimum Moisture Content | CBR % |
|--------|---------|---|-----------------------|---------------------------------|---------------------------------|-------|
| B-1 | 0.3-2.0 | Yellowish Brown Lean Clay with silt | 12.9 | 117.7 | 12.9 | 4.0 |
| B-2 | 0.3-2.0 | Yellowish Brown Lean Clay with silt | 18.4 | 109.6 | 15.0 | 2.4 |
| B-3 | 0.3-2.0 | Brown fine to coarse Sand | 6.7 | 106.2 | 7.0 | 10.6 |
| B-4 | 0.3-2.0 | Grayish Brown Lean Clay with Silt | 21.7 | 105.5 | 17.9 | 6.7 |
| B-5 | 0.3-2.0 | Brown Lean clay with Silt | 20.6 | 105.5 | 17.8 | 5.4 |

Prior to sampling each location, topsoil was removed. Each sample was obtained from approximately 4" - 24" inches depth taken from the median.

Samples were obtained from the following coordinates:

- **Sample #1** = 35.19260 °N, 89.99098 °W
- **Sample #2** = 35.19278 °N, 89.99835 °W
- **Sample #3** = 35.19209 °N, 90.00589 °W
- Sample #4 = 35.19168 °N, 90.01273 °W
- Sample #5 = 35.18888 °N, 90.01740 °W