



TENNESSEE DEPARTMENT OF TRANSPORTATION

ASBESTOS INSPECTION REPORT

Bridge Number 57I00400011
Lower Brownsville Rd over I-40 LM 4.54
PIN: 136174.00; PE-N: 57I040-F0-008
Madison County, Tennessee



PREPARED BY:

TTL

624 Grassmere Park, Suite 14
Nashville, Tennessee 37211
TTL Project No. 250800975.00
June 11, 2025

A handwritten signature in black ink that reads "Michael Andrews".

Michael Andrews (Signature)
Tennessee Asbestos Inspector
Accreditation A-I-181125-165164

A handwritten signature in blue ink that reads "David B. Carden".

David B. Carden, PG (Signature)
Environmental Regional Business Unit Leader

June 11, 2025



624 Grassmere Park, Ste. 14
Nashville, TN 37211
615.331.7770

www.TTLUSA.com

Mr. Kyle Kirschenmann
Statewide Technical Specialist
Tennessee Department of Transportation
Environmental Division
Hazardous Materials, Air Quality and Noise Studies Unit
James K. Polk Building, Suite 900
505 Deaderick Street
Nashville, Tennessee 37243

Re: Asbestos Inspection Report
Bridge No.: 57I00400011
Termini: I-40 08290 Bridge over I-40, LM 4.54
PIN: 136174.00; PE-N: 57I040-F0-008
County: Madison
TTL Project Number 250800975.00

Dear Mr. Kirschenmann:

TTL, Inc. (TTL) appreciates the opportunity to submit this asbestos inspection report that summarizes work conducted at the above-referenced bridge in Madison County, Tennessee. Our services were authorized per Work Order Number 29 and were performed in accordance with TTL's Master Services Agreement with the Tennessee Department of Transportation (TDOT) under Contract Agreement Number E2482.

Thirty samples were collected from the Lower Brownsville Rd over I-40 LM 4.54 bridge. Asbestos minerals were not identified in the samples collected from the bridge.

We appreciate the opportunity to support TDOT on this project and look forward to working with you in the future. If you have any questions concerning this report or if you need additional information, please contact our office at your convenience.

Sincerely,

A handwritten signature in black ink that reads 'Michael Andrews'.

Michael Andrews
Tennessee Asbestos Inspector

A handwritten signature in blue ink that reads 'David B. Carden'.

David B. Carden, PG
Environmental Regional Business Unit Leader

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1.0 INTRODUCTION

This report presents the findings of an inspection for asbestos-containing materials (ACM) completed on the bridge identified in **Section 1.1**. The inspection was completed by TTL, Inc. (TTL) in accordance with the State of Tennessee, Department of Transportation (TDOT) Environmental Division, Hazardous Materials Section requirements.

1.1 TDOT Bridge Identification

The bridge is identified in the TDOT Project System / Bridge Management System as:

Bridge Number: 57I00400011 / 57-OB290-04.55
Termini: I-40 08290 Bridge over I-40, LM 4.54
PIN: 136174.00
PE-N: 57I040-F0-008
County: Madison

1.2 General Description

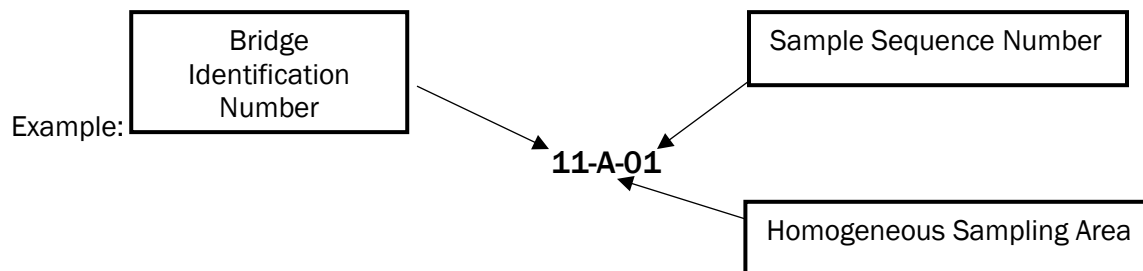
The Lower Brownsville Rd over I-40 LM 4.54 bridge is a two-lane, 236-foot, four-span bridge constructed of concrete girders with a concrete deck and asphalt wearing surface. The bridge was constructed in 1960. The bridge location is shown in **Figure 1**, derived from a portion of the Westover, Tennessee USGS 7.5-minute topographic quadrangle (2025). Select photographs of the bridge and sample locations are presented in **Appendix A** and **Figure 2**.

2.0 INSPECTION

The identification of ACM is performed by collecting bulk samples of suspect materials and having those samples analyzed by a laboratory. ACM are materials found to contain greater than one percent asbestos by calibrated visual area estimation using Polarized Light Microscopy (PLM).

Bulk sampling is a procedure in which representative homogeneous sampling areas are identified and then sampled. A homogeneous sampling area is defined as an area that contains material of the same type (uniform in color and texture) and was applied during the same general time period. Once the homogeneous sampling areas were identified, bulk samples of suspect materials were collected at the discretion of our inspectors based on site conditions and past experience.

For each asbestos sample collected during the survey, a unique identification is assigned that identifies the bridge location, homogeneous sampling area, and sampling sequence number.



Samples were collected by carefully removing small portions of the suspect material with a clean, sharp knife or other hand tool suitable for the material being sampled. Each sample was placed in a labeled plastic container immediately after collection. Sample containers were then placed in a large re-sealable plastic bag for transportation to the laboratory. The sampling instrument was wiped with a clean moist cloth to decontaminate the tool and minimize the potential release of asbestos fibers or cross-contamination of subsequent samples. Data pertinent to each sample (e.g., date, homogeneous sampling area, sample number, and material description) was recorded on a field survey sheet.

The survey was limited to an evaluation and confirmation of the presence of accessible ACM for the bridge. The survey did not include assessments for other regulated materials, such as lead paint, and did not include destructive sampling to identify the potential presence of concealed ACM.

2.1 Personnel and Date of Inspection

The sampling and field activities were performed on April 17, 2025, by Michael Andrews and Bri Shaw. Mr. Andrews is an asbestos inspector accredited with the State of Tennessee. Current copies of TTL's company accreditation and the inspectors' accreditations from the State of Tennessee are included in **Appendix B**. A site-specific Health and Safety Plan, prepared prior to field mobilization, is included in **Appendix C**.

No assistance was needed from TDOT Bridge Maintenance Department for mobilization, traffic control, or access to this bridge.

2.2 Visual Survey

TTL's inspection began with a visual survey of the bridge. The visual survey consisted of:

- Sketching the structure and/or verifying the plans provided;
- Locating and identifying homogeneous areas (HA) of suspect materials that may contain asbestos minerals; and
- Determining applicable sampling locations.

A list of the HA identified during our visual survey is presented in **Table 1**.

2.3 Access to Bridge Components

Individual bridge components sampled during our survey are as described in the following subsections. Materials such as metal, wood, fiberglass, and foam (if present) were not considered suspect ACM and not sampled. Materials associated with the upper bridge wearing surfaces (i.e., reflector mastic, asphalt, pavement marker mastic, etc.) were not sampled per TDOT's request. TTL collected bulk samples of each identified HA in a representative manner, as determined by the inspector. The sample locations are depicted on **Figure 2**.

2.3.1 Bents (Homogeneous Area A)

Three bulk samples of concrete were collected from the bents.

2.3.2 Slope Wall (Homogeneous Area B)

Three bulk samples of concrete were collected from the slope wall.

2.3.3 Beams (Homogeneous Area C)

Three bulk samples of concrete were collected between the beams.

2.3.4 Bottom of Bridge Deck (Homogeneous Area D)

Three bulk samples of concrete were collected from the bottom of the bridge deck.

2.3.5 Abutments (Homogeneous Area E)

Three bulk samples of concrete were collected from the abutments.

2.3.6 Endwall (Homogeneous Area F)

Three bulk samples of concrete were collected from the endwall.

2.3.7 Bearing Padding (Homogeneous Area G)

Three bulk samples of bearing padding were collected from under the bearings.

2.3.8 Felt Padding (Homogeneous Area H)

Three bulk samples of felt padding were collected from between the slope wall and the abutments.

2.3.9 Parapets (Homogeneous Area I)

Three bulk samples of concrete were collected from the parapets.

2.3.10 Wearing Surface (Homogeneous Area J)

Three bulk samples of concrete were collected from the wearing surface.

2.3.11 Bridge Drainage System

The bridge drainage system is comprised of metal drains. No suspect materials related to the bridge drainage system were observed during the site visit.

2.3.12 Utility Conduits

Utility conduits were not observed during the site visit.

2.3.13 Other Environmental Concerns

Other environmental concerns related to the bridge were not observed during the site visit.

3.0 ANALYTICAL PROCEDURES

3.1 Asbestos Analysis Procedures

The bulk samples were analyzed in the laboratory using PLM coupled with dispersion staining (Environmental Protection Agency [EPA] Method 600/R-93/116). PLM is an analytical method which identifies specific asbestos minerals by their unique optical properties. The optical properties are a result of the mineral's chemical composition, physical atomic structure, and visual morphology. This is the EPA recommended method of analysis for asbestos identification in bulk samples.

Samples which contain multiple layers, or that have associated mastic or adhesive backing, are analyzed as two or more separate samples.

3.2 Laboratory Name and Accreditation

The bulk samples were analyzed by Frost Environmental Services, LLC (Laboratory ID Number: 102104-0) that has received accreditation from the American Industrial Hygiene Association's (AIHA) Laboratory Accreditation Program.

4.0 REGULATORY OVERVIEW

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

The EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations (40 CFR 61, Subpart M) requires that all regulated asbestos-containing materials (RACM) be properly removed prior to any renovation or demolition activities that will disturb them. These regulations define RACM as:

- Friable asbestos material.
- Category I non-friable ACM that has become friable.
- Category I non-friable ACM that will be or has been subject to sanding, grinding, cutting, or abrading.
- Category II non-friable ACM that has a high probability of becoming, or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material during demolition or renovation operations regulated by this subpart.

DEFINITIONS

Significant definitions related to regulation of asbestos under NESHAP regulations (40 CFR Part 61, Subpart M, Section 61.141) include:

Friable ACM is defined as any material containing more than 1% asbestos as determined using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, PLM, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.

Non-friable ACM is any material containing more than 1% asbestos as determined using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, PLM, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. EPA also defines two categories of non-friable ACM that are described as follows:

Category I non-friable ACM is any asbestos-containing packing, gasket, resilient floor covering, or asphalt roofing products containing more than 1% asbestos as determined using methods specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, PLM.

Category II non-friable ACM is any material, excluding Category I non-friable ACM, containing more than 1% asbestos as determined using PLM according to the methods specified in Appendix E, Subpart E, 40 CFR Part 763 that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

5.0 RESULTS OF ASBESTOS BULK SAMPLE ANALYSIS

Thirty samples were collected from the Lower Brownsville Rd over I-40 LM 4.54 bridge. The samples were collected in accordance with TDOT Environmental Division, Hazardous Materials Section requirements and delivered to the laboratory for visual observation and microscopic analysis. Sample locations were selected based on HA of suspect materials, as described in **Section 2.3**.

Asbestos was not identified in the samples collected from the bridge. The laboratory report for the samples collected from the bridge, along with the chain-of-custody records, are included in **Appendix D**.

6.0 QUALIFICATIONS

The information presented herein is based on information obtained during the site visit and from previous experience. If additional information becomes available, which might impact our conclusions or recommendations, TTL requests the opportunity to review the information, reassess the potential concerns, and modify opinions, if warranted.

This report has been prepared on behalf of TDOT. This document is not a Bid Document or a Contract Document. Use of this report or reliance upon information contained in this report by any other party implies an agreement by that party to the same terms and conditions under which service was provided. Furthermore, any party other than our Client relying on this document is cautioned that all conclusions made, or decisions arrived at, based on their review of this document, are those solely of the third party, without warranty, guarantee, or promise by the author. These findings are relevant to the dates of our services and should not be relied upon to represent conditions at substantially earlier or later dates.

TABLES

TABLE 1: BRIDGE COMPONENT DESCRIPTIONS

HOMOGENEOUS AREA	DESCRIPTION	SAMPLE NUMBERS
A	Bents	11-A-01, 11-A-02, 11-A-03
B	Slope Wall	11-B-04, 11-B-05, 11-B-06
C	Beams	11-C-07, 11-C-08, 11-C-09
D	Bottom of Bridge Deck	11-D-10, 11-D-11, 11-D-12
E	Abutments	11-E-13, 11-E-14, 11-E-15
F	Endwall	11-F-16, 11-F-17, 11-F-18
G	Bearing Padding	11-G-19, 11-G-20, 11-G-21
H	Felt Padding	11-H-22, 11-H-23, 11-H-24
I	Parapets	11-I-25, 11-I-26, 11-I-27
J	Wearing Surface	11-J-28, 11-J-29, 11-J-30

FIGURES

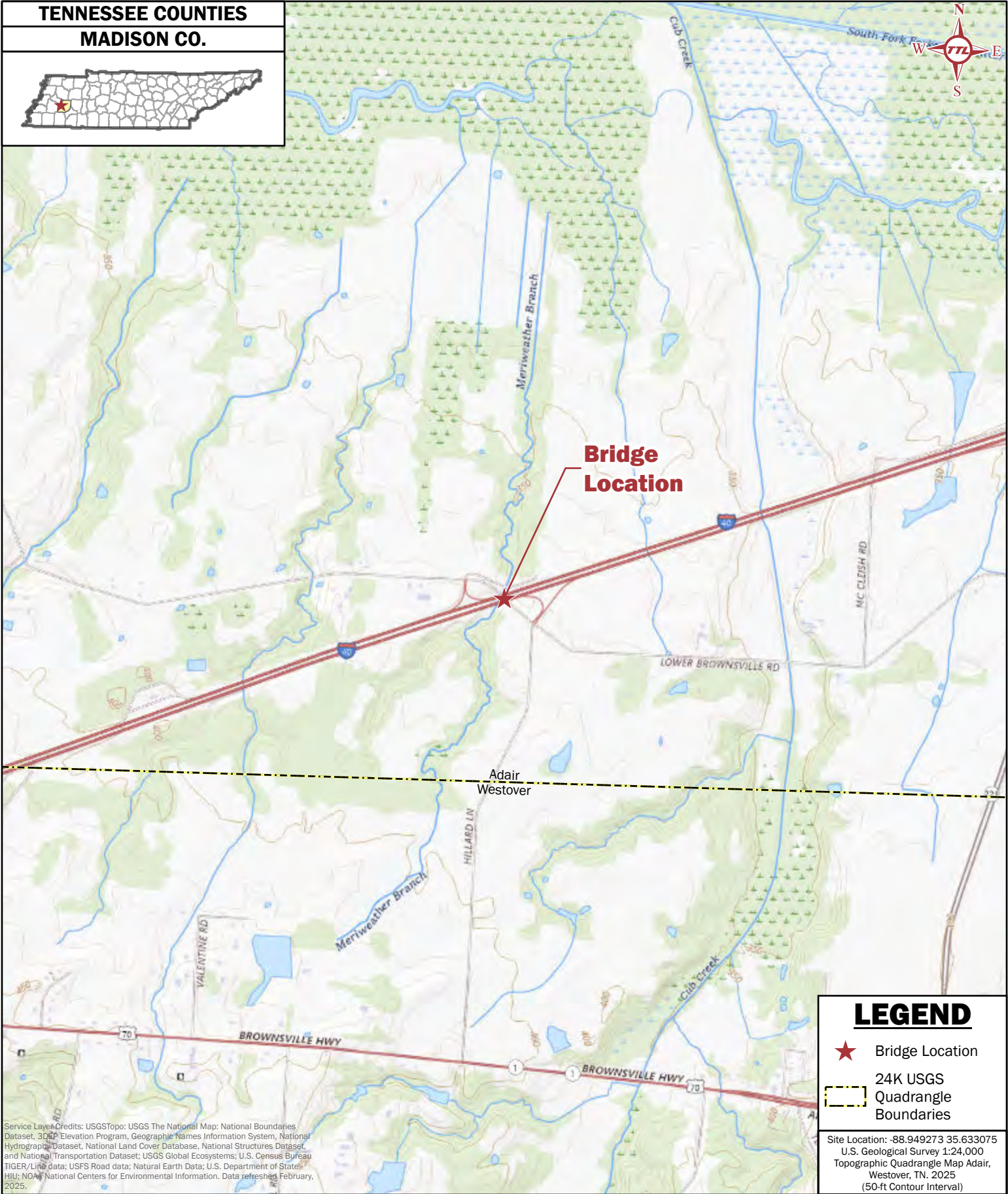
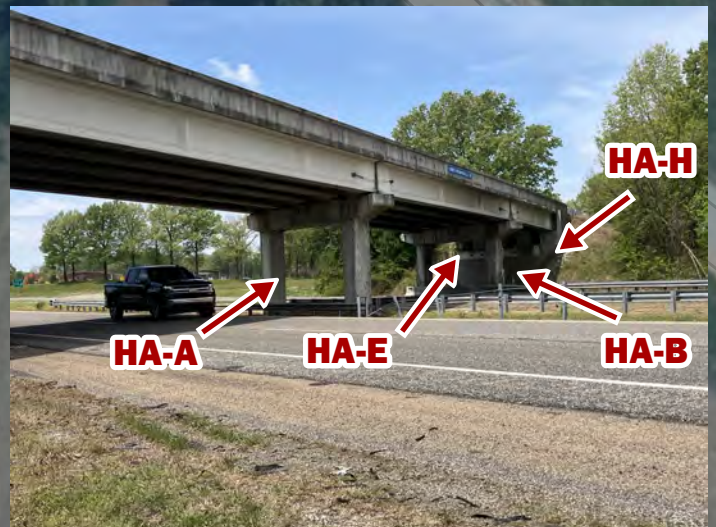
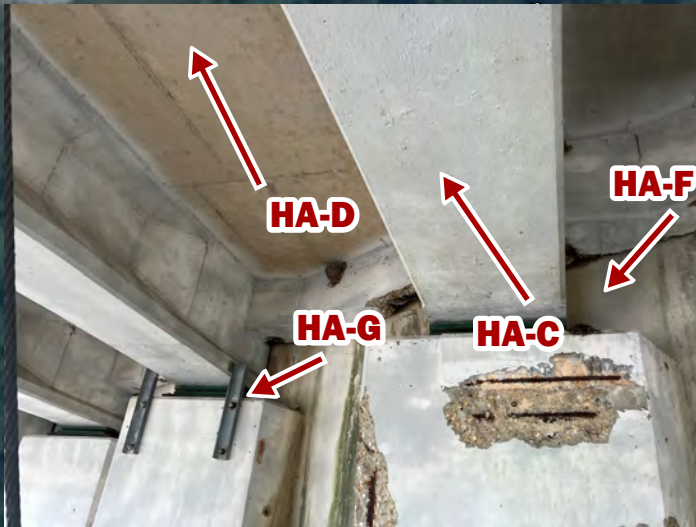


FIGURE 1: BRIDGE LOCATION (TOPOGRAPHIC)

TENNESSEE DEPARTMENT OF TRANSPORTATION
ASBESTOS INSPECTION REPORT
BRIDGE NO.: 19I00650311
MADISON COUNTY, TENNESSEE



DRAWN BY: KL
CHECKED BY: MA
DRAWING DATE: 5/2/2025
REVISION DATE: N/A
PROJECT #: 000250800975.00
1" SCALE 2,000'



Service Layer Credits: Subject Property (0.2± AC);
 Google Satellite; Google Satellite Basemap
 BASEMAPS/IMAGERY_WEB_MERCATOR: TDOT Aerial Surveys
 Hybrid Reference Layer Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors

HA	HA-A	HA-B	HA-C	HA-D	HA-E	HA-F	HA-G	HA-H	HA-I	HA-J
Description	Bents	Slope Walls	Beams	Bottom of Bridge Deck	Abutments	Endwall	Bearing Padding	Felt Padding	Parapets	Wearing Surface



FIGURE 2: SAMPLE LOCATION (AERIAL PHOTOGRAPH)

TENNESSEE DEPARTMENT OF TRANSPORTATION
 ASBESTOS INSPECTION REPORT
 BRIDGE NO.: 19I00650311
 MADISON COUNTY, TENNESSEE

DRAWN BY: KL
CHECKED BY: MA
DRAWING DATE: 5/22/2025
REVISION DATE: N/A
PROJECT #: 000250800975.00
1" SCALE 80'

APPENDIX A: SELECTED PHOTOGRAPHS



Photo 1: View of the bridge number.



Photo 2: View of HA-A from the southeast portion of the bridge.

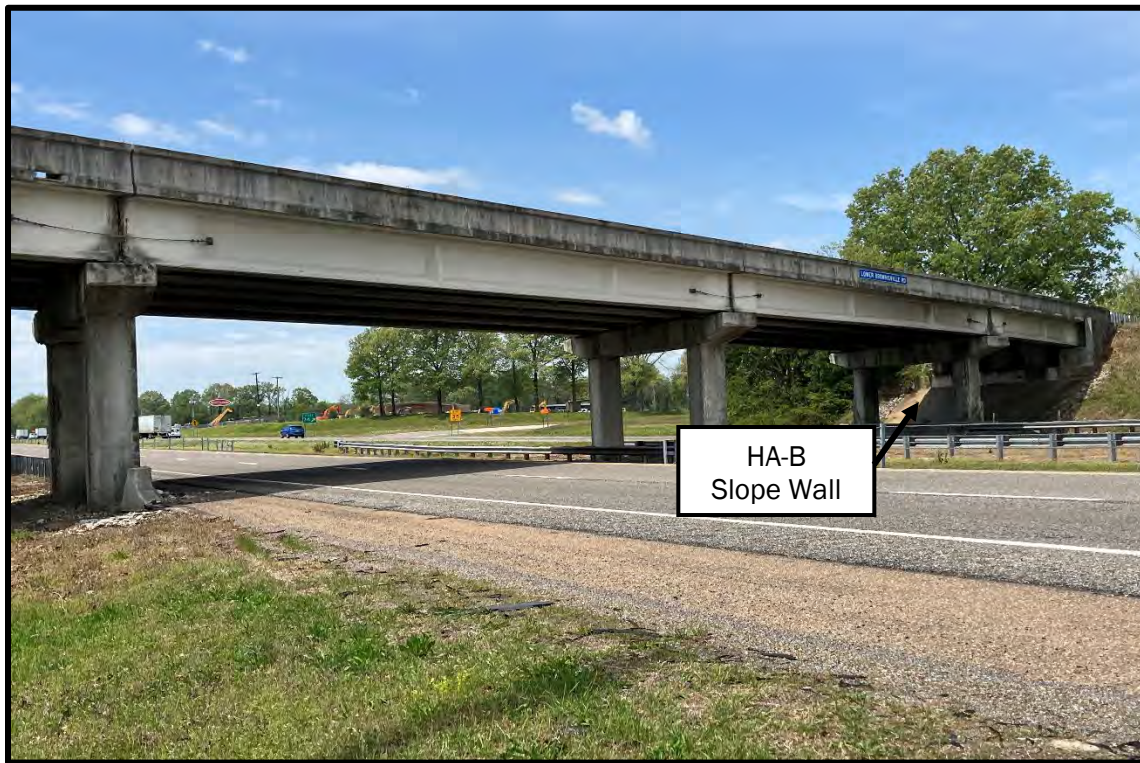


Photo 3: View of HA-B from the west of the bridge.

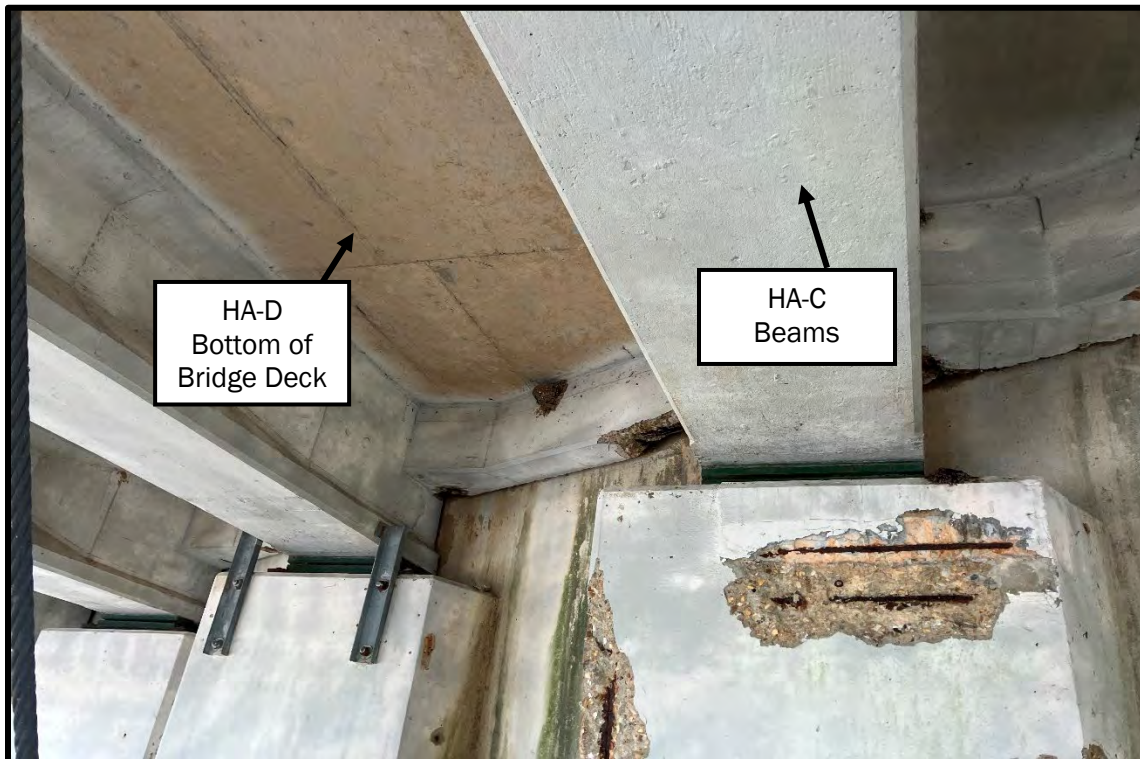


Photo 4: View of HA-C and HA-D from under the southeast side of the bridge.



Photo 5: View of HA-E and HA-F from the southeast end of the bridge.



Photo 6: View of HA-G present at the northwest portion of the bridge.

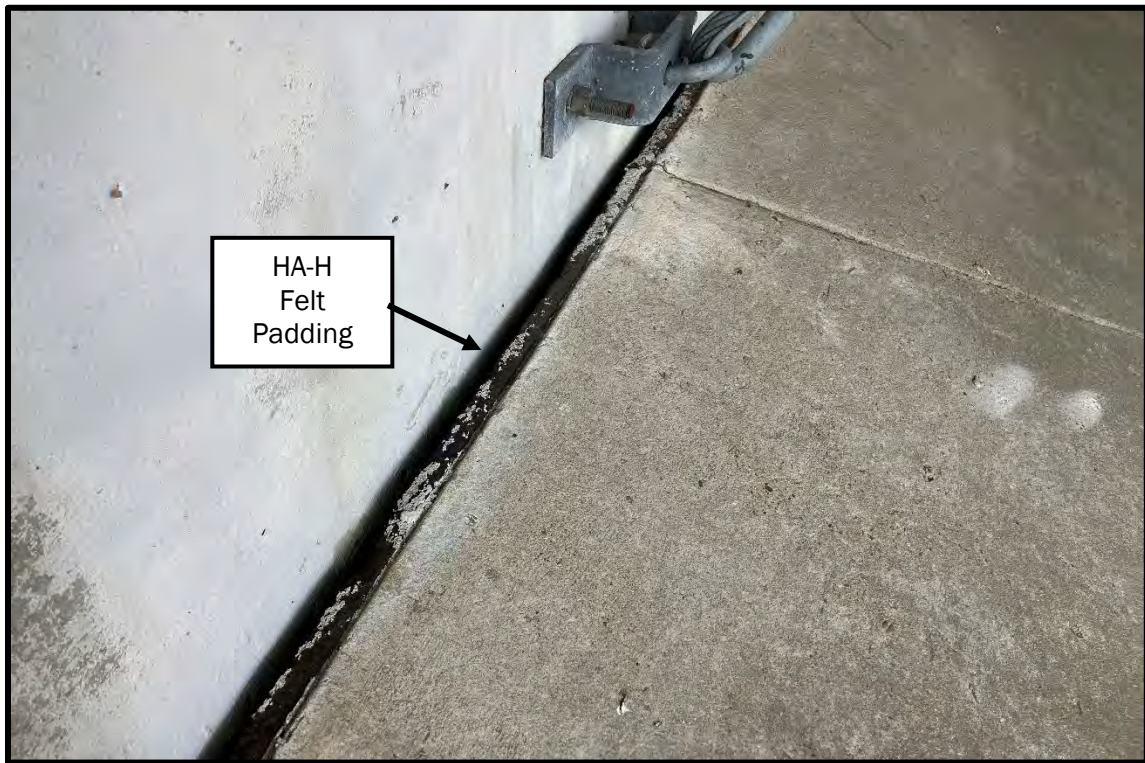


Photo 7: View of HA-H from under the northwest end of the bridge.

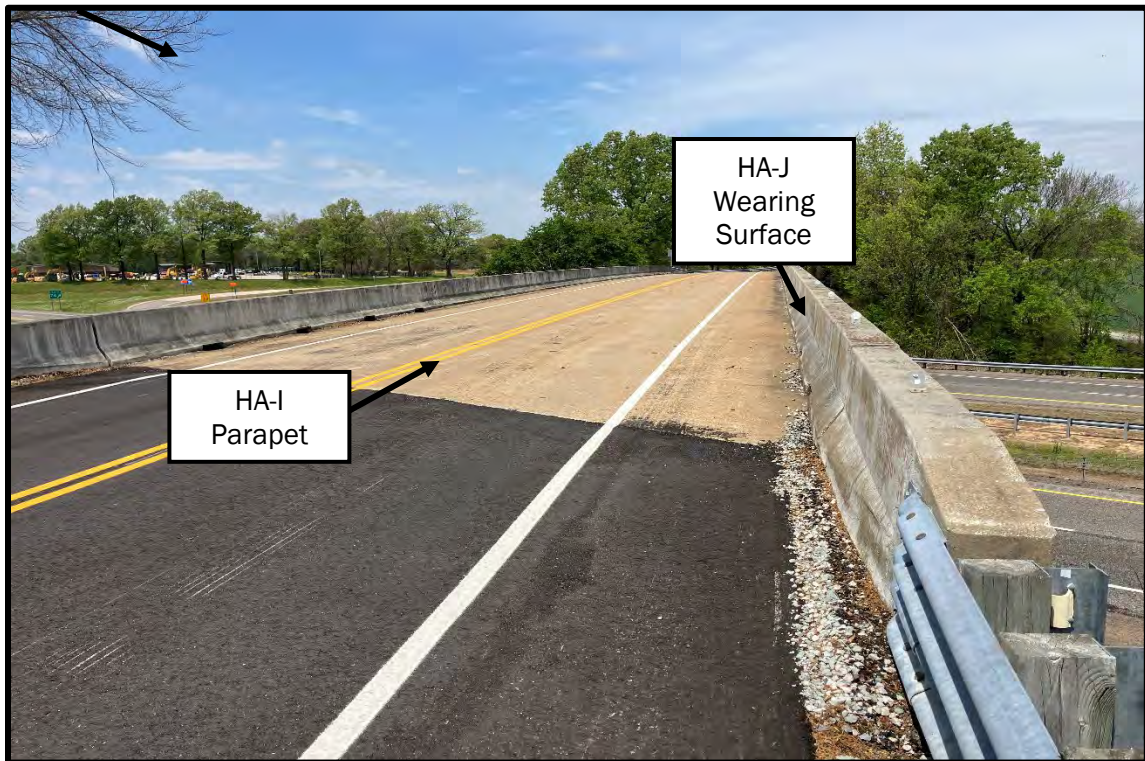


Photo 8: View of HA-I and HA-J from the southeast side of the bridge.

APPENDIX B: ASBESTOS INSPECTION PERSONNEL ACCREDITATIONS



THE STATE OF TENNESSEE

Department of Environment and Conservation Division of Solid Waste Management
Toxic Substances Program

William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 14th Floor Nashville TN 37243

By virtue of the authority vested by the Division of Solid Waste Management, the Company named below is hereby accredited to offer and/or conduct Asbestos activities pursuant to Rule 1200-01-20:

TTL, Inc.

624 Grassmere Park, Ste. 14 Nashville TN, 37211

**To conduct ASBESTOS ACTIVITIES in schools or public and commercial buildings in Tennessee.
This firm is responsible for compliance with the applicable requirements of Rule 1200-01-20.**

Discipline	Type	Accreditation Number	Effective Date	Expiration Date
Accreditation	Re-Accreditation	A-F-1068-161566	June 01, 2024	June 30, 2025



Given under the Seal of the State of Tennessee in Nashville.

This **13th** Day of **May 2024**

Division of Solid Waste Management
Toxic Substance Program

THE STATE OF TENNESSEE

Department of Environment and Conservation
Division of Solid Waste Management

132063-91312

Toxic Substances Program



Date Issued 1/22/2025

Re-Accreditation

Michael T Andrews

DOB	Sex	HGT	WGT
23-Dec-1996	M	6' 3"	240

Discipline	Accreditation	Expiration
Inspector	A-1-181125-165164	Jan-31-2026

Asbestos Accreditation

APPENDIX C: HEALTH AND SAFETY PLAN

Health and Safety Plan

Lower Brownsville Rd over I-40 LM 4.54
Madison County, Tennessee
TTL Project Number: 250800975.00



JOB NAME/LOCATION: Lower Brownsville Rd over I-40 LM 4.54
Madison County, Tennessee

REVIEW AND APPROVAL

Project Manager: Mr. David Carden (615) 727-1844

Project Coordinator: Mr. Michael Andrews (931) 308-6528

Field Safety Coordinator: Mr. Jonathan Hopkins (615) 727-1823

Company Safety Officer: Jim Poland (205) 345-0816

DATE OF PLAN PREPARATION: 4/17/2025

PREPARED BY: Michael Andrews

DATE OF PLANNED FIELD ACTIVITIES: 4/17/2025

PLANNED FIELD ACTIVITIES

- Perform ACM survey on Bridge.

CLOTHING AND PROTECTIVE GEAR REQUIRED

Standard work uniform with hard hat, gloves, Class III safety vest, safety glasses, and steel toe boots with a proper respirator.

EMERGENCY PROCEDURES

In event of personnel injury:

- Administer basic first aid
- Major Injuries: **CALL 911**
- Minor injuries - transport to nearest medical emergency facility
- Notify Field Safety Coordinator (FSC): Mr. David Carden (615) 727-1844

In event of potential or actual fire or explosion:

- Evacuate area immediately.
- Assemble in pre-designated area.
- **Notify fire department - Dial 911**
- Do not attempt to fight the fire.

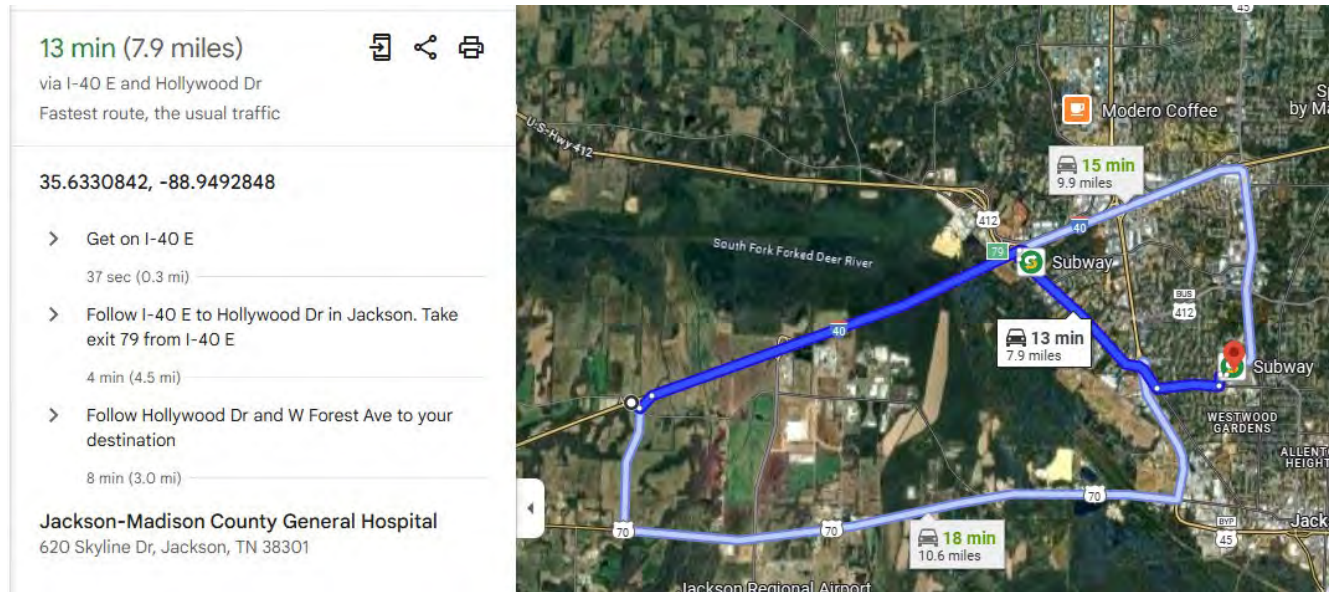
MAP TO NEAREST 24-HOUR EMERGENCY CARE CENTER

SITE: Lower Brownsville Rd over I-40 LM 4.54

Madison County, Tennessee

DIRECTIONS TO: Jackson-Madison County General Hospital
620 Skyline Dr, Jackson, TN 38301

PHONE: (731) 541-5000



TASK HAZARD ANALYSIS (THA) SHEET **ASBESTOS INSPECTION FIELD WORK**

ACTIVITY / PHASE	POTENTIAL HAZARDS	RECOMMENDED ACTIONS / CONTROLS
Driving	1. Accidents 2. Backing	1. All passengers must wear seatbelts while in moving vehicle. Do not exceed posted speed limits. Use caution when driving on uneven ground, grassy areas, and wet areas. Driver should not use cell phone while vehicle is moving. 2. Use mirrors and drive slowly while backing. If necessary, use a ground guide to assist.
Site set-up	1. Slips, Trips, Falls 2. Traffic	1. Wear appropriate foot protection to prevent slips and trips. Use caution when walking on uneven and wet ground surfaces. 2. As appropriate, utilize "Men Working" signs, flashing lights on top of vehicle, and safety cones. Ensure worker safety by walking on the side of roads against traffic, if necessary. Always keep an eye on incoming traffic.
Prior to commencing work	1. Muscle Strain 2. Biohazards 3. Weather	1. Stretch all major muscle groups for at least 5 minutes 2. Wear snake chaps and mosquito repellant as applicable 3. Check weather forecast to ensure worker safety.
Environmental and Other Field Concerns	1. Heat/cold 2. General Safety	1. Drink ample water during field activities. Wear sunscreen as applicable. Take breaks as needed during hot weather. 2. Always wear proper PPE. At least two people on site should have first aid and CPR training. All personnel are required to have at least 10-hour OSHA training. Refer to emergency action plan in case of emergency. A first aid kit should be kept in vehicle.

By signing below, I acknowledge that I understand and will follow all components of the Task Hazard Analysis (THA) Sheet for asbestos inspection field work.

NAME (PRINTED)

SIGNATURE

DATE

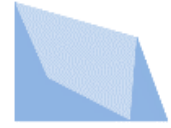
<u>Mike Andrews</u>	<u>[Signature]</u>	<u>April 17 2025</u>
<u>[Signature]</u>	<u>[Signature]</u>	<u>April 17, 2025</u>
<u> </u>	<u> </u>	<u> </u>
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APPENDIX D: ASBESTOS LABORATORY REPORT

FROST ENVIRONMENTAL SERVICES, LLC

339 ROCKLAND ROAD, SUITE E, HENDERSONVILLE, TENNESSEE 37075

(615) 562-2669 office - (615) 473-9047 cell - email: lab@frostenvironmental.com



POLARIZED LIGHT MICROSCOPY (PLM) LABORATORY ANALYSIS REPORT (EPA/600/R-93/116 (JUNE 1993))

CLIENT: TTL

PROJECT: TDOT Bridge#57I00400011 Project#250800975.00

LOCATION: Madison County

Date Received: 4/21/2025

Date Analyzed: 4/23/2025

Date Reported: 4/23/2025

ANALYST: Codi Maddox

Codi Maddox

Sample Number	Location	Material Description	Binder (Non-Fibrous) Material	Non-Asbestos Fiber	Asbestos Type & Percent
11-A-01	Bent	Tan & Grey Cementitious Material	100	None Detected	None Detected
11-A-02	Bent	Tan & Grey Cementitious Material	100	None Detected	None Detected
11-A-03	Bent	Tan & Grey Cementitious Material	100	None Detected	None Detected
11-B-04	Slope Wall	Tan & Grey Cementitious Material	100	None Detected	None Detected
11-B-05	Slope Wall	Tan & Grey Cementitious Material	100	None Detected	None Detected
11-B-06	Slope Wall	Tan & Grey Cementitious Material	100	None Detected	None Detected
11-C-07	Beams	Light Grey Coating	100	None Detected	None Detected
		Tan & Grey Cementitious Material	100	None Detected	None Detected
11-C-08	Beams	Light Grey Coating	100	None Detected	None Detected
		Tan & Grey Cementitious Material	100	None Detected	None Detected
11-C-09	Beams	Light Grey Coating	100	None Detected	None Detected
		Tan & Grey Cementitious Material	100	None Detected	None Detected
11-D-10	Bottom of Bridge Deck	Light Grey Coating	100	None Detected	None Detected
		Tan & Grey Cementitious Material	100	None Detected	None Detected
11-D-11	Bottom of Bridge Deck	Light Grey Coating	100	None Detected	None Detected
		Tan & Grey Cementitious Material	100	None Detected	None Detected

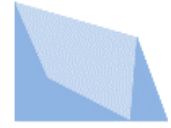
Asbestos Containing Material (ACM) is defined as any material containing more than one percent asbestos.

Analysis was performed using EPA/600/R-93/116 (June 1993)), Test Method for the Determination of Asebstos in Bulk Building Materials.

FROST ENVIRONMENTAL SERVICES, LLC

339 ROCKLAND ROAD, SUITE E, HENDERSONVILLE, TENNESSEE 37075

(615) 562-2669 office - (615) 473-9047 cell - email: lab@frostenvironmental.com



POLARIZED LIGHT MICROSCOPY (PLM) LABORATORY ANALYSIS REPORT (EPA/600/R-93/116 (JUNE 1993))

CLIENT: TTL

PROJECT: TDOT Bridge#57I00400011 Project#250800975.00

LOCATION: Madison County

Date Received: 4/21/2025

Date Analyzed: 4/23/2025

Date Reported: 4/23/2025

ANALYST: Codi Maddox

Codi Maddox

Sample Number	Location	Material Description	Binder (Non-Fibrous) Material	Non-Asbestos Fiber	Asbestos Type & Percent
11-D-12	Bottom of Bridge Deck	Light Grey Coating	100	None Detected	None Detected
		Tan & Grey Cementitious Material	100	None Detected	None Detected
11-E-13	Abutment	Tan & Grey Cementitious Material	100	None Detected	None Detected
11-E-14	Abutment	Tan & Grey Cementitious Material	100	None Detected	None Detected
11-E-15	Abutment	Tan & Grey Cementitious Material	100	None Detected	None Detected
11-F-16	End Wall	Light Grey Coating	100	None Detected	None Detected
		Tan & Grey Cementitious Material	100	None Detected	None Detected
11-F-17	End Wall	Light Grey Coating	100	None Detected	None Detected
		Tan & Grey Cementitious Material	100	None Detected	None Detected
11-F-18	End Wall	Light Grey Coating	100	None Detected	None Detected
		Tan & Grey Cementitious Material	100	None Detected	None Detected
11-G-19	Bearing Padding	Rusted Metal	100	None Detected	None Detected
11-G-20	Bearing Padding	Rusted Metal	100	None Detected	None Detected
11-G-21	Bearing Padding	Rusted Metal	100	None Detected	None Detected
11-H-22	Felt Padding	Black Fibrous Material	25	75 Cellulose	None Detected
11-H-23	Felt Padding	Black Fibrous Material	25	75 Cellulose	None Detected

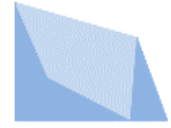
Asbestos Containing Material (ACM) is defined as any material containing more than one percent asbestos.

Analysis was performed using EPA/600/R-93/116 (June 1993)), Test Method for the Determination of Asebstos in Bulk Building Materials.

FROST ENVIRONMENTAL SERVICES, LLC

339 ROCKLAND ROAD, SUITE E, HENDERSONVILLE, TENNESSEE 37075

(615) 562-2669 office - (615) 473-9047 cell - email: lab@frostenvironmental.com



POLARIZED LIGHT MICROSCOPY (PLM) LABORATORY ANALYSIS REPORT (EPA/600/R-93/116 (JUNE 1993))

CLIENT: TTL

Date Received: 4/21/2025

PROJECT: TDOT Bridge#57I00400011 Project#250800975.00

Date Analyzed: 4/23/2025

LOCATION: Madison County

Date Reported: 4/23/2025

ANALYST: Codi Maddox

Codi Maddox

Sample Number	Location	Material Description	Binder (Non-Fibrous) Material	Non-Asbestos Fiber	Asbestos Type & Percent
11-H-24	Felt Padding	Black Fibrous Material	25	75 Cellulose	None Detected
11-I-25	Parapet	Tan & Grey Cementitious Material	100	None Detected	None Detected
11-I-26	Parapet	Tan & Grey Cementitious Material	100	None Detected	None Detected
11-I-27	Parapet	Offwhite Coating	100	None Detected	None Detected
		Tan & Grey Cementitious Material	100	None Detected	None Detected
11-J-28	Wearing Surface	Tan & Grey Cementitious Material	100	None Detected	None Detected
11-J-29	Wearing Surface	Tan & Grey Cementitious Material	100	None Detected	None Detected
11-J-30	Wearing Surface	Tan & Grey Cementitious Material	100	None Detected	None Detected

Asbestos Containing Material (ACM) is defined as any material containing more than one percent asbestos.

Analysis was performed using EPA/600/R-93/116 (June 1993)), Test Method for the Determination of Asebstos in Bulk Building Materials.



CHAIN OF CUSTODY

PROJECT: ^{Bridge} ~~TDOT~~ Tract # 57I0040001 Report To: Mike Andrews
 TTL Project Number # 250800975.00 Company: TTL, Inc.
 PROJECT LOCATION: Madison ~~Shannon~~ County Address: 624 Grassmere Park Suite 14
 Nashville, TN 37211
 Phone: (931) 308-6528
 Email: mike.andrews@ttlusa.com

Turnaround Time Requested: ☐ 2-3 Hour ☐ Same Day ☐ 24 Hour ☒ 2-3 Day

Sample Number	Date Collected	Location	Analysis Requested	Volume
11-A-01	4-17-25	Bent	PLM	
11-A-02		↓		
11-A-03		↓		
11-B-04		Slope Wall		
11-B-05		↓		
11-B-06		↓		
11-C-07		Beams		
11-C-08		↓		
11-C-09		↓		
11-D-10		Bottom of Bridge Deck		
11-D-11		↓		
11-D-12		↓		
11-E-13		Abutment		
11-E-14		↓		
11-E-15		↓		

RELINQUISHED BY: Mike Andrews RECEIVED AT LAB BY: Costi Moulton
 DATE: 4/18/25 DATE: 4-21-25



CHAIN OF CUSTODY

Report To: _____

PROJECT: _____

Company: _____

Address: _____

PROJECT LOCATION: _____

Phone: _____

Email: _____

Turnaround Time Requested: ____ 2-3 Hour ____ Same Day ____ 24 Hour ____ 2-3 Day

Sample Number	Date Collected	Location	Analysis Requested	Volume
11-F-16	4-17-25	End wall	PLM	
11-F-17		↓		
11-F-18				
11-G-19		Bearing Padding		
11-G-20		↓		
11-G-21				
11-H-22		Felt Padding		
11-H-23		↓		
11-H-24				
11-I-25		Parapet		
11-I-26		↓		
11-I-27				
11-J-28		Wearing Surface		
11-J-29		↓		
11-J-30				

RELINQUISHED BY _____

RECEIVED AT LAB BY: Codi Mosley

DATE: _____

DATE: 4-21-25