

## Concept Report Form

The Concept Report Form develops an initial project vision, basis of design and report (e.g., the Concept Report) to transition into the subsequent design stages (Stages 1 through 4 in the Project Delivery Network [PDN]). This form summarizes all project components using information to complete the Concept Report.

### General Project Information

<b>Project Name</b>	SR 87 - Bridge over Drainage Ditch (TMA)									
<b>PIN</b>	134856.00									
<b>Route Information</b>	<b>Route</b>	<b>NHS (Y/N)</b>	<b>Functional Class</b>			<b>City</b>		<b>County</b>		
	SR 87	No	Urban Major Collector					Lauderdale		
<b>Project Information</b>	<b>Begin Log Mile</b>	<b>End Log Mile</b>	<b>AADT<sup>1</sup></b>	<b>Design Hour Vol. (DHV)<sup>1</sup></b>	<b>Truck %<sup>1</sup></b>	<b>Design Speed (MPH)</b>	<b>Posted Speed (MPH)</b>	<b>Base Year</b>	<b>Design Year</b>	
	20.76		720	86	2.00	30	30	2029	2049	
<b>Project Description &amp; Standard Drawings Used</b>	<p>The proposed bridge is to be a single span 50' long bridge using 24" box beams. The typical section for the approach and bridge will be 2-11' foot travel lanes with 4' shoulders and a 5' sidewalk. The out-to-out width based on the above recommendations will be 36' 3". The proposed grade and vertical clearance will be raised 1'. It is recommended to detour during construction. The state route detour is 46 minutes (39.6 miles) the local route detour is 2 minutes (0.8 miles). Superstructure depth is 38.5" = 24" (beam) + 10" (deck) + 4.5" (width (in inches) x0.02/2).</p> <p>RD11-TS-2</p>									
<b>Important Project History or Related Projects</b>	<p>The existing structure is a single span timber bridge, 28' long with an out-to-out width of 28.8'. The existing structure has 2-11' travel lanes with minimal to no shoulders. The listed weight limit on the inspection report is 40 tons 2023. The discharges for the drainage basin (StreamStats Version 4.19.4) for drainage area of 1.42 square miles: Q10 is 893 cfs, Q50 is 1200 cfs, and Q100 is 1320 cfs.</p> <p>This project is not expected to utilize federal funding.</p>									
<b>Project Purpose/Need</b>	<p>The need to replace this bridge is due to the present condition of the existing bridge:</p> <ul style="list-style-type: none"> <li>-Built in 1992</li> <li>-Timber bridges are being phased out</li> <li>-The bridge is in FAIR condition.</li> </ul>									
<b>Major Environmental Considerations</b>	<p>Historic Preservation- Studies may be required.</p> <p>Archaeology- A survey will be required.</p> <p>Ecology- Species records in the vicinity may require surveys as well as sweeps / time of year restrictions.</p>									

Project Details

<p><b>Multi-Modal Considerations</b></p>	<p>Due to the presence of the existing sidewalk, the proposed bridge design includes a 5' sidewalk, to connect into existing sidewalk at the bridge approaches.</p>	
<p><b>Major Project Risks</b></p>	<p>Approx. 0.08 acres of ROW to be acquired. Overhead Power, Water Lines, and Telecom Utilities are present. This bridge replacement should be coordinated with the replacements at L.M. 5.18, L.M. 6.42, and L.M. 11.75 along SR 87. This document is covered by 23 USC § 407 and its production pursuant to fulfilling public planning requirements does not waive the provisions of § 407.</p>	

<sup>1</sup> Traffic numbers reflect identified design year

**Approvals**

*Executed for approval of this Concept Report*

David Duncan  
David Duncan (Oct 24, 2024 10:49 CDT)  
 Engineering Concepts and Statewide Programs Director

10/24/2024  
 Date

*The following individuals to execute if a bridge concept report:*

Deed A. Krugewicz  
 Structures Director

10/25/2024  
 Date

BLAZ  
 Regional Project Management Director

10/28/2024  
 Date

## Action Checklist

OSD1 Initiate Concept Report and Request Funding		
Complete	NA	Date Completed
✓		Request and Finalize Safety Data
✓		Request Project Number, PIN, and Task Profile Numbers
	✓	Coordinate with Long Range Planning
✓		Request and Finalize Traffic Data
	✓	Request Preliminary Survey Data
	✓	Initiate Division Reviews
	✓	Schedule Site Review (with appropriate Divisions)
0EN1 Conduct Environmental Desktop Review		
Complete	NA	Date Completed
✓		Confirm Environmental Desktop Review is Complete
0MM1 Conduct Multimodal Review		
Complete	NA	Date Completed
	✓	Confirm Multimodal Review is Complete
	✓	Review Multimodal Considerations & Recommendations
0TO1 Conduct Initial Traffic Ops/TSMO Review <i>(include HQ Traffic Ops and Regional Traffic Office)</i>		
Complete	NA	Date Completed
		Confirm Transportation Systems Management & Operations (TSMO) Alignment & Operations Review is Complete
		Request Concept Report Review
0ST1 Develop Structures Recommendations		
Complete	NA	Date Completed
✓		Confirm Recommended Structure Type for Concept Report is Complete
✓		Confirm Hydraulic Recommendations for Concept Report is Complete
0SY1 Provide Preliminary Survey Data		
Complete	NA	Date Completed
	✓	Confirm Control Ground Survey Set
	✓	Review Preliminary Survey Data
	✓	Determine Time to Complete the Aerial Survey
0GT1 Conduct Preliminary Geotechnical Assessment		
Complete	NA	Date Completed
	✓	Confirm Geotechnical Division Review is Complete
0RD1 Provide Roadway Desktop Review		
Complete	NA	Date Completed
✓		Confirm Roadway Division Review is Complete

## Action Checklist

OSD2 Develop Draft Concept Report			
Complete	NA		Date Completed
	✓	Conduct Intersection and Interchange Evaluation (IIE)	
	✓	Complete Conceptual Signal Warrants	
	✓	Develop Draft Conceptual Layouts/Crash Figures for Site Visit	
	✓	Compile Initial Divisional Reviews for Site Visit	
	✓	Prepare & Send Site Visit Packet	
	✓	Lead Site Visit	
	✓	Initiate Interstate Access Requests (IAR) Concept Coordination with FHWA (if applicable)	
✓		Develop, Compile, and Distribute the Draft Concept Report	09/02/2024
OTO2 Develop TSMO Scope Items <i>(include HQ Traffic Ops and Regional Traffic Office)</i>			
Complete	NA		Date Completed
	✓	Confirm Signal Warrants Analysis is Complete	
	✓	Confirm Lighting Warrants Analysis is Complete	
	✓	Review and Confirm TSMO & ITS Scope and Budget	
ORW1 Complete Preliminary Right-of-Way Estimates			
Complete	NA		Date Completed
	✓	Review and Confirm Preliminary Right-of-Way Cost Estimates	
OUT1 Complete Utility Preliminary Estimates			
Complete	NA		Date Completed
✓		Review and Confirm Preliminary Utility Estimate	09/20/2024
		Review and Confirm Preliminary Railroad Cost Estimate	
OSD3 Finalize Concept Report			
Complete	NA		Date Completed
	✓	Compile and Review Initial Risk Assessment	
✓		Finalize Conceptual Layouts	08/31/2024
✓		Develop Environmental Technical Study Area (ETSA)	08/31/2024
✓		Address Comments and Finalize Concept Report	10/21/2024
	✓	Address Comments and Finalize Interstate Access Requests (IAR) Document and Memo (if applicable)	
	✓	Develop Roadway Safety Audit (RSA) No Plans Document	
✓		Submit the final Concept Report for Review and Signatures (as needed; see OSD3 for additional information)	10/23/2024
		Finalize Document and Upload All Needed Electronic Files	
		Notify the Project Management Director or Assigned Project Manager to Set Up Project (1PM1)	

## NA Justification

Coordinate with Long Range Planning-Long Range Planning coordination not needed for STID BCR document  
Request Preliminary Survey Data- survey data not needed for STID BCR document  
Schedule a site visit-site visit not required  
0MM1 Conduct Multimodal Review- multimodal coordination not required  
0SY1 Provide Preliminary Survey Data- survey data not needed for STID BCR document  
0GT1 Conduct Preliminary Geotechnical Assessment- geotechnical data not received for STID BCR document  
0SD2 Develop Draft Concept Report-no site visit was held for this bridge and no interchange or signal warrants were required  
0TO2 Develop TSMO Scope Items-no signals or lighting needed within project limits  
0RW1 Complete Preliminary Right-of-Way Estimates-ROW estimate calculated in cost estimate  
0UT1 Complete Utility Preliminary Estimates-utility cost calculated in cost estimate  
Compile and Review Initial Risk Assessment-Risk Assessment not needed for STID BCR document  
Address Comments and Finalize Interstate Access Requests (IAR) Document and Memo (if applicable)-no interstate within project limits  
Develop Roadway Safety Audit (RSA) No Plans Document- no plans document not needed for STID BCR document

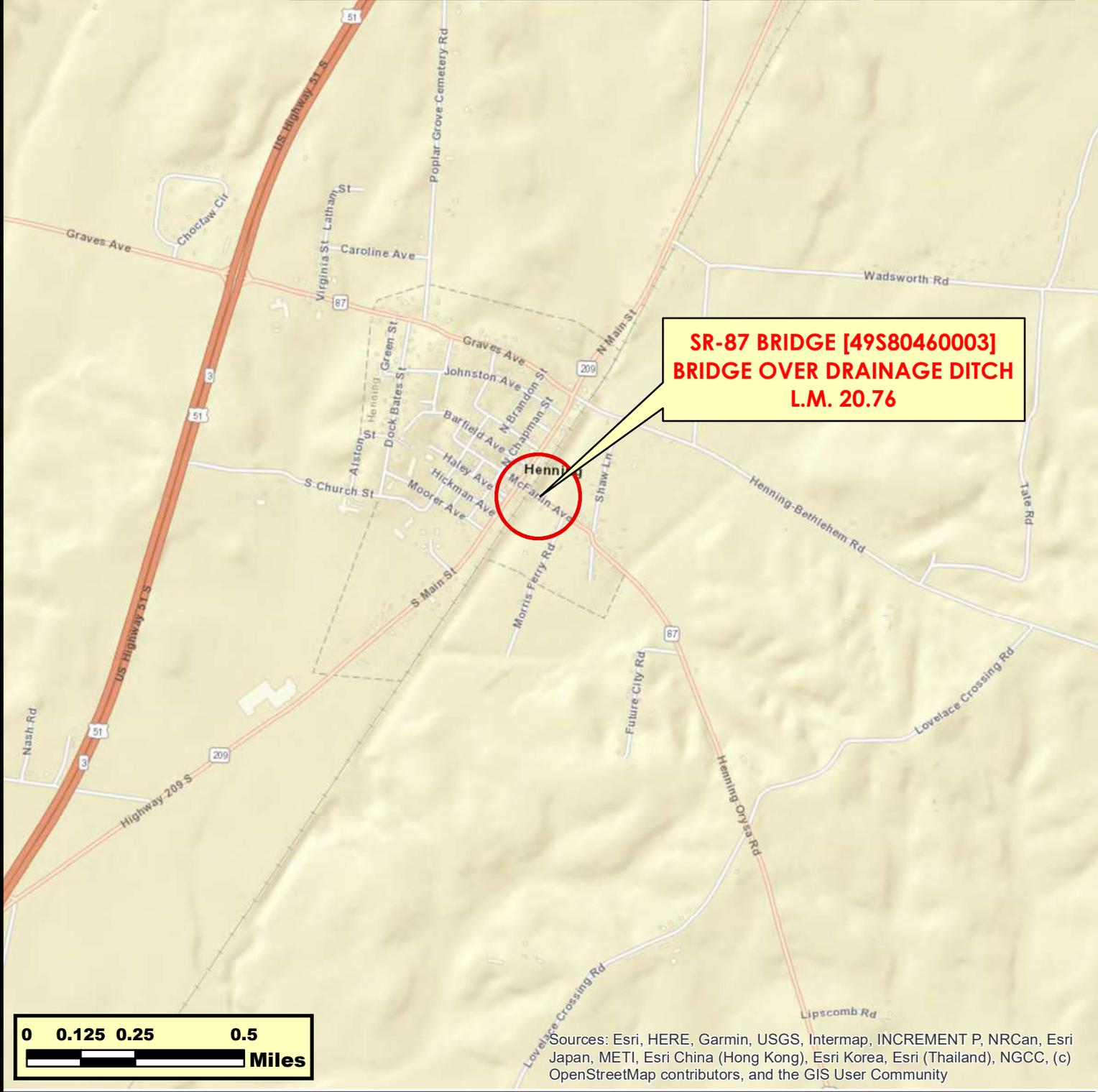
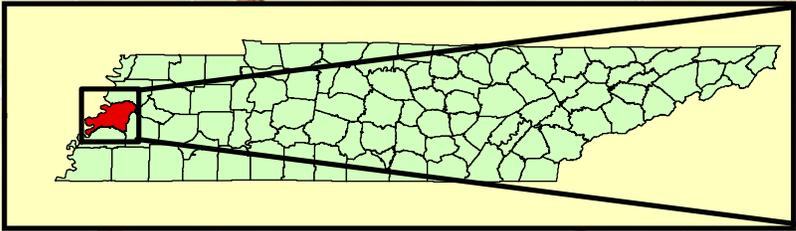
**Concept Report  
Table of Contents/Attachments**

	Included	NA
One-Page Summary (with project location map)	✓	
Conceptual Layout(s) and Cross Section	✓	
Environmental Technical Study Area (ETSA) Layout	✓	
Concept Cost Estimate (Construction Year Estimate)	✓	
TSMO & ITS Scope and Budget <sup>1</sup>		✓
ROW Form 44-A <sup>1</sup>		✓
Crash Packet <sup>1</sup>	✓	
Crash Prediction Analysis <sup>1</sup>		✓
Site Visit Attendee List		✓
Environmental Desktop Review Form <sup>1</sup>		
Multimodal Considerations & Recommendations <sup>1</sup>		✓
Existing Structure Summary <sup>1</sup>	✓	
Email or memo containing Structure Type Recommendations <sup>1</sup>	✓	
Email or memo containing Hydraulic Recommendations <sup>1</sup>	✓	
Hydraulic Data	✓	
Intersection and Interchange Evaluation (IIE) Analysis and Summary Form		✓
Traffic Analysis Summary/Tables	✓	
Forecasted Traffic Sheets <sup>1</sup>	✓	
Traffic Modeling (e.g., Synchro, VISSIM, Highway Capacity Software (HCS) Output) <sup>1</sup>		✓
Signal Warrant <sup>1</sup>		✓
Lighting Warrant <sup>1</sup>		✓
Initial Risk Assessment using the Risk Assessment Form		✓
Final Interstate Access Request (IAR) Document and Memo with Letter from STID Director		✓
Road Safety Audit (RSA) No Plans <sup>1</sup>		✓

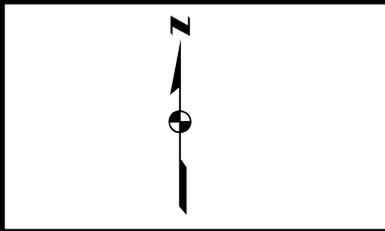
**NA Justification**

TSMO & ITS Scope and Budget-no ITS within project limits; ROW Form 44-A-form not needed for STID BCR document; Crash Prediction Analysis- 2 crashes occurred within the project limits, crash prediction analysis not needed; Site Visit Attendee List-no site visit was held; Multimodal Considerations & Recommendation-no multimodal coordination; Intersection and Interchange Evaluation (IIE) Analysis and Summary Form- AADT is too low for IIE Analysis Traffic Modeling (e.g., Synchro, VISSIM, Highway Capacity Software (HCS) Output)- AADT too low to model Signal Warrant-no signals warranted within project limits; Lighting Warrant-no lighting warranted within project limits Initial Risk Assessment using the Risk Assessment Form-Risk Assessment not needed for STID BCR document Final IAR Document and Memo with Letter from STID Director-no interstate access within project limits Road Safety Audit (RSA) No Plans-RSA no plans document not needed for STID BTIR document

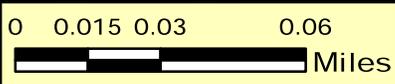
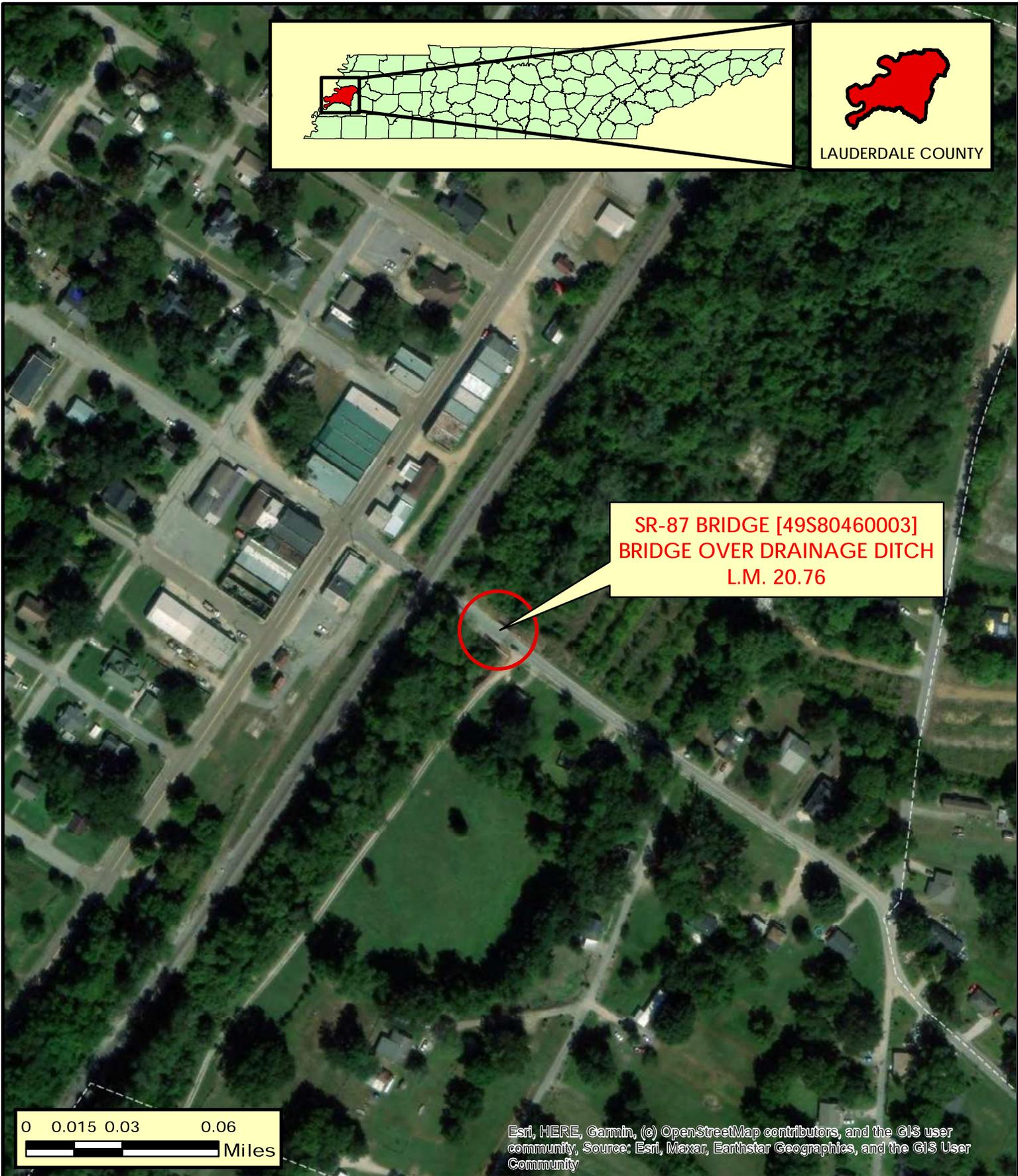
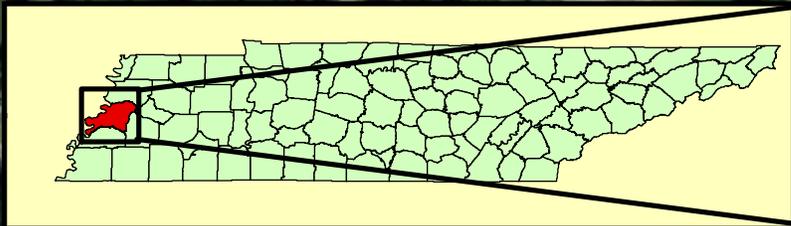
<sup>1</sup> External document to STID



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



**AREA MAP**  
**SR-87 BRIDGE [49S80460003]**  
**BRIDGE OVER DRAINAGE DITCH**  
**L.M. 20.76**  
**LAUDERDALE COUNTY**



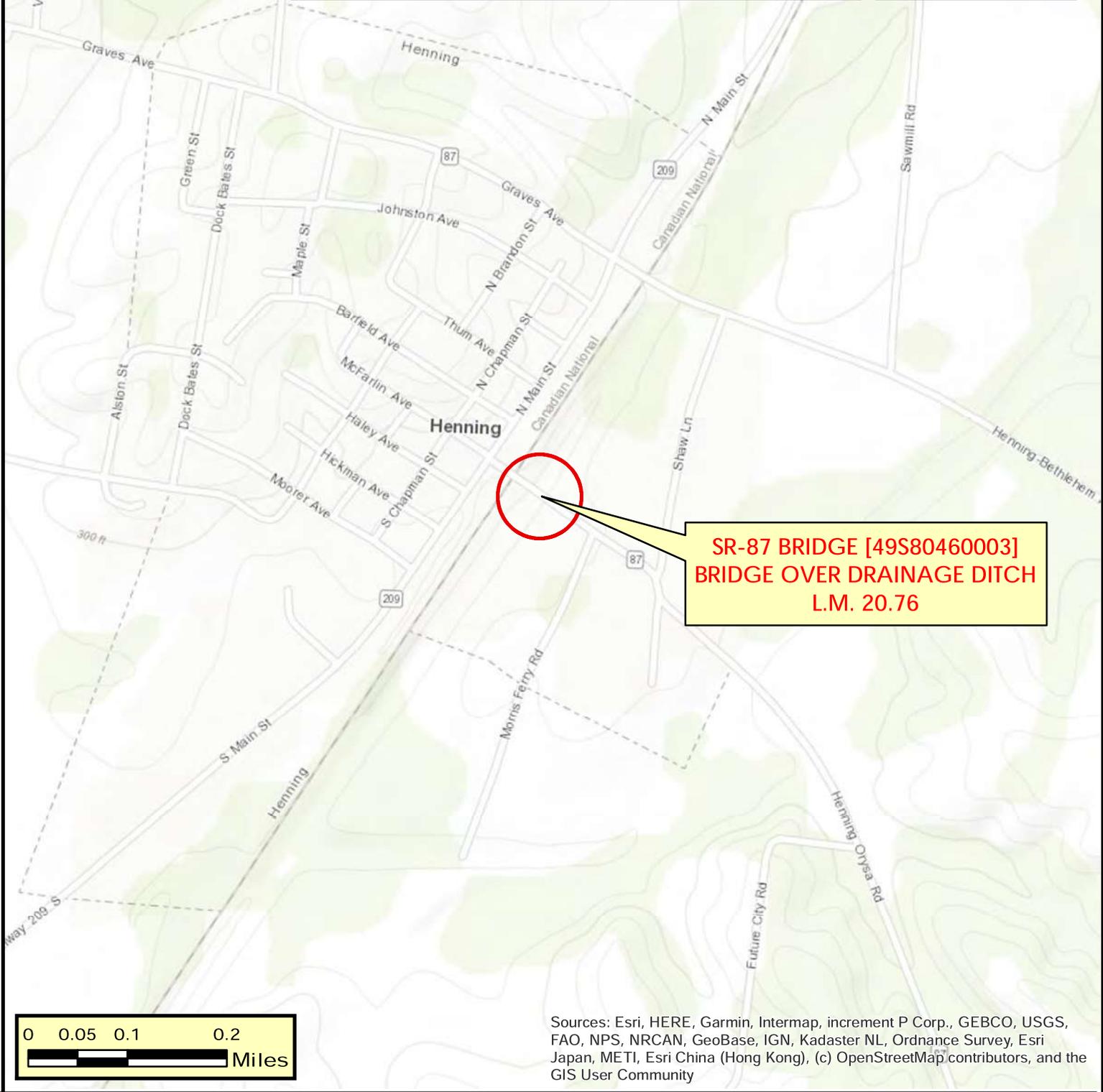
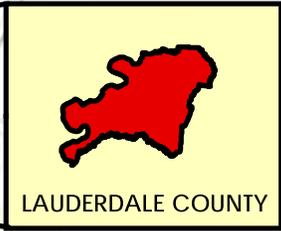
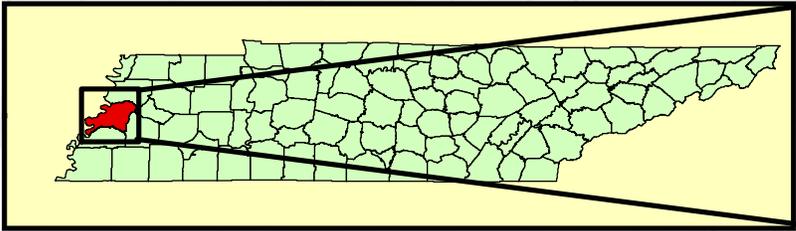
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



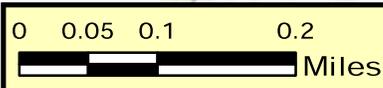
**LOCATION MAP**  
**SR-87 BRIDGE [49S80460003]**  
**BRIDGE OVER DRAINAGE DITCH**  
**L.M. 20.76**  
**LAUDERDALE COUNTY**



**PIN 134856.00**



**SR-87 BRIDGE [49S80460003]  
BRIDGE OVER DRAINAGE DITCH  
L.M. 20.76**



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



**TOPOGRAPHIC MAP  
SR-87 BRIDGE [49S80460003]  
BRIDGE OVER DRAINAGE DITCH  
L.M. 20.76  
LAUDERDALE COUNTY**



**PIN 134856.00**

10/8/2024 10:00:24 AM  
 X:\Projects\Lauderdale\SR 87\Bridge over Drainage Ditch, L.M. 20.76 (TMA)\Project Files\Microstation\ConceptualPlans (DGN & PDF)\Bridge over Branch, L.M. 20.76.dgn



**BRIDGE# 49S80460003**  
 PROPOSED SINGLE SPAN, 24" BOX BEAM,  
 50 FT LONG. RAISE GRADE 1.0 FT. GRADE SHOULD  
 BE RAISED AS MUCH AS CLOSE TO 1 FT AS FEASIBLE  
 WHILE MAINTAINING CLEARANCE REQUIREMENTS  
 AT RR UNDERPASS IMMEDIATELY TO NORTH.

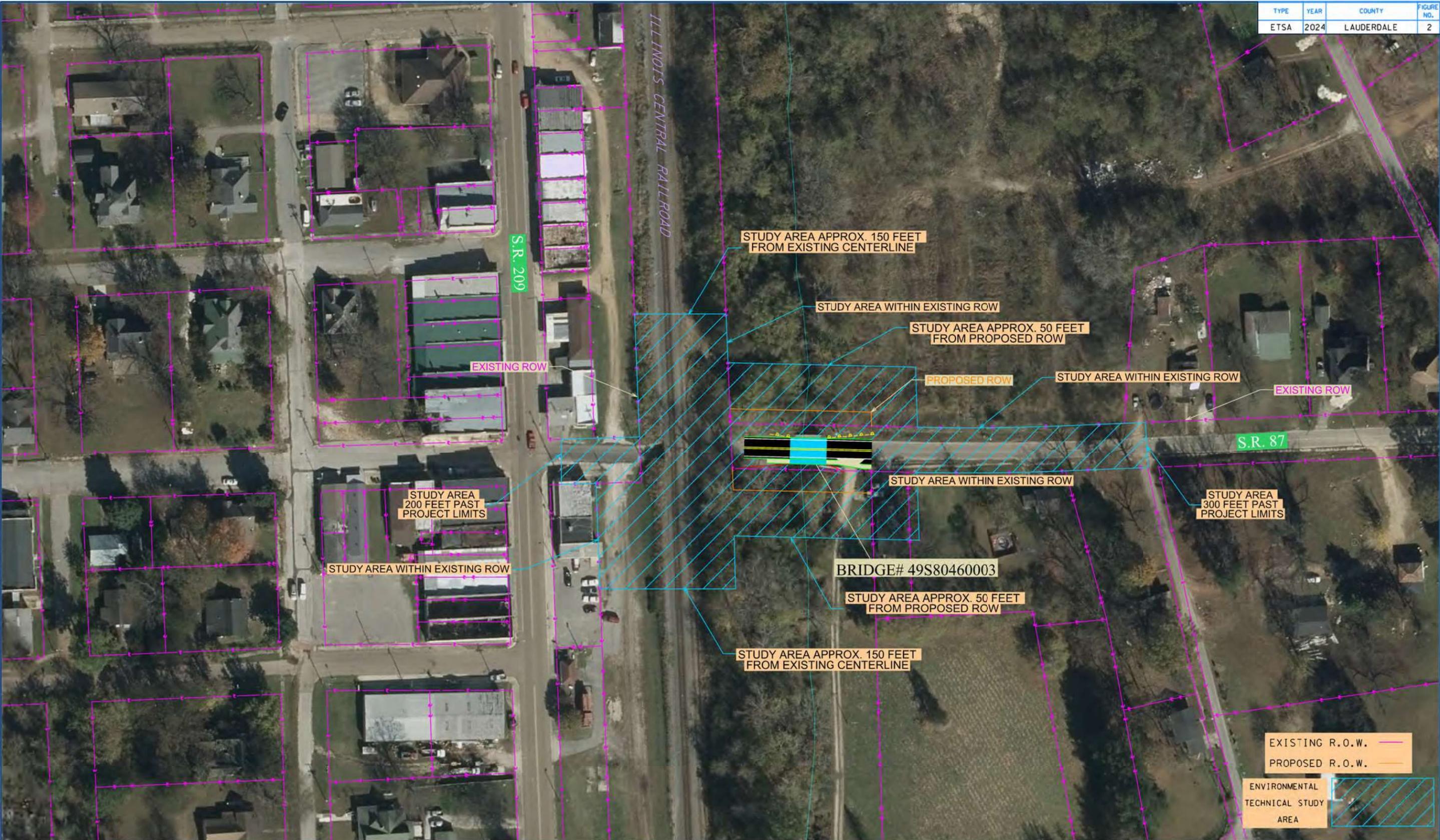


## R4 TIMBER BRIDGE PROGRAM

STATE ROUTE 87  
 BRIDGE OVER BRANCH, L.M. 20.76  
 LAUDERDALE COUNTY

**CAUTION!**  
 PRELIMINARY  
 PLANS  
 SUBJECT TO  
 CHANGE

10/8/2024 10:25:56 AM X:\Projects\Lauderdale\SR 87\Bridge over Drainage Ditch, LM 20.76 (TMA)\Project Files\Microstation\ConceptualPlans (DGN & PIF)\ETSA\_Bridge over Branch, L.M. 20.76.dgn

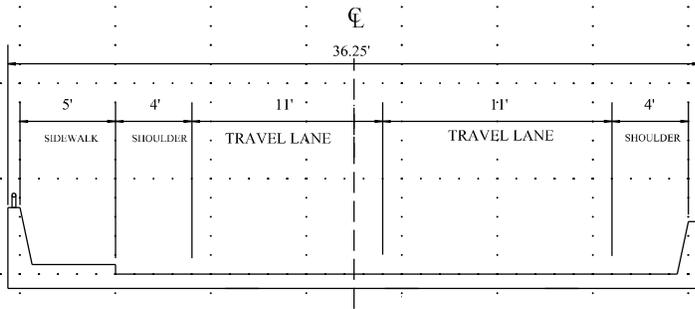


## ENVIRONMENTAL TECHNICAL STUDY AREA

STATE ROUTE 87  
BRIDGE OVER BRANCH, L.M. 20.76  
LAUDERDALE COUNTY

CAUTION!  
PRELIMINARY  
PLANS  
SUBJECT TO  
CHANGE

**PROPOSED COMPLETED**



**CROSS-SECTION DETAIL**

**REGION 4 TIMBER BRIDGE PROGRAM  
TRANSPORTATION MODERNIZATION ACT (TMA)**

**CAUTION!  
PRELIMINARY  
PLANS  
SUBJECT TO  
CHANGE**



# DETOUR MAP - STATE ROUTE

The image displays a Google Maps interface with a blue detour route. The route starts at 105 S Main St, Henning, TN 38041 and ends at Haywood County School District. The detour path is shown in blue, passing through Ripley, Tennessee, and then heading south towards the destination. The map includes various UI elements such as a search bar, navigation icons (car, bus, walking, cycling, airplane), and a sidebar with route details. The sidebar shows the route via TN-87 E, with a total time of 46 minutes and a distance of 39.6 miles. The map also features a 'Terrain' layer and a 'Layers' panel.

**Search along the route** Gas EV charging Hotels

46 min 14 hr 3 hr 30

- 105-165 Mc Farlin E Ave, Henning, TN 38041
- Haywood County School District, Tennessee
- Ripley, Tennessee 38063
- Lauderdale County, Tennessee
- 105 S Main St, Henning, TN 38041

Add destination

Options

Send directions to your phone Copy link

via TN-87 E 46 min  
46 min without traffic 39.6 miles

Details

Explore nearby 105 S Main St

Layers Terrain View topography and elevation

Map data ©2024 Google United States Terms Privacy Send Product Feedback 2 mi



Abutment 2



Abutment 1



Abutment 2 pile "F" 1/2" check



Abutment 2 pile "C" splintering



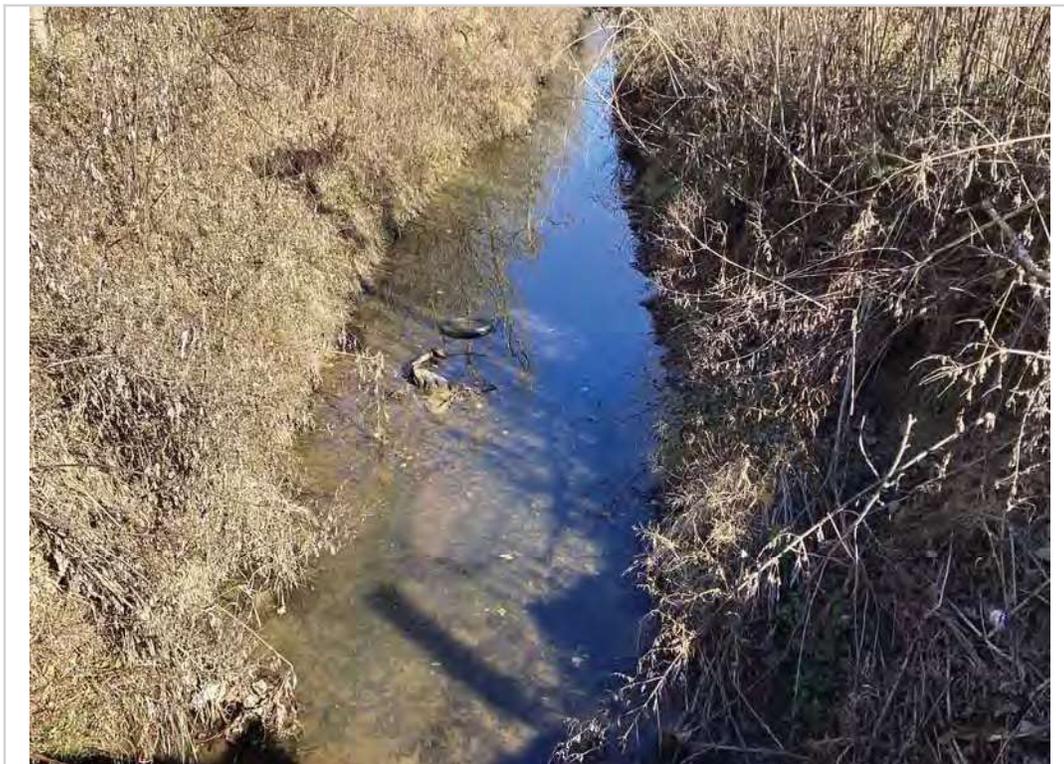
Right elevation



Approach 2 weight limit sign



Approach 2 pavement



Upstream



Downstream



View across deck



Approach 1 pavement



Bridge number



Direction of route



Span 1 bottom deck



Abutment 1 cap splintered areas and grain checks up to 1/16"



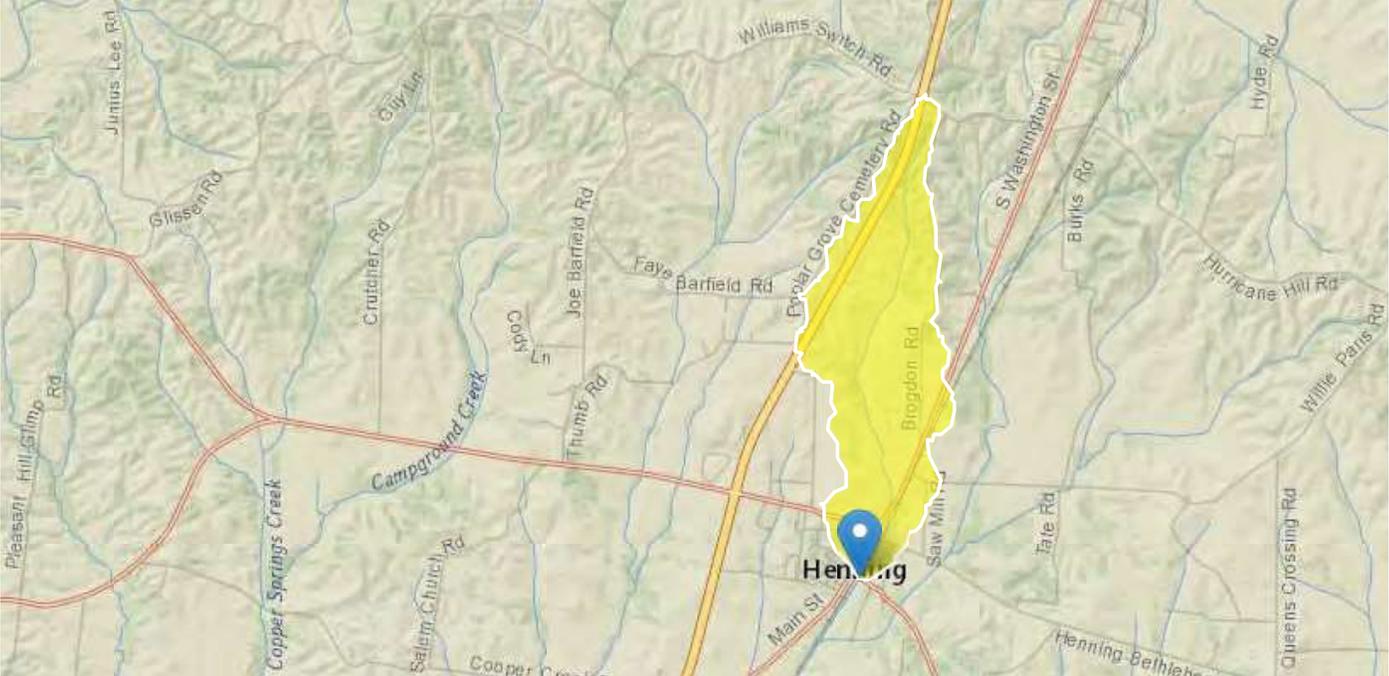
Abutment 1 cap splintered areas and grain checks up to 1/32"



Abutment cap 1 left end decay

# Lauderdale Co SR087 - Bridge over Drainage Ditch

**Region ID:** TN  
**Workspace ID:** TN20240409144532652000  
**Clicked Point (Latitude, Longitude):** 35.67231, -89.57278  
**Time:** 2024-04-09 09:46:00 -0500



Adjacent to downtown Henning, TN and Railroad Bridge

[+ Collapse All](#)

➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CONTDA	Area that contributes flow to a point on a stream	1.42	square miles
DRNAREA	Area that drains to a point on a stream	1.42	square miles

➤ Peak-Flow Statistics

Peak-Flow Statistics Parameters [DAOnly Area 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CONTDA	Contributing Drainage Area	1.42	square miles	0.76	2308

## Peak-Flow Statistics Flow Report [DAOnly Area 4]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	PIL	PIU	SE	ASEp	Equiv. Yrs.
50-percent AEP flood	524	ft <sup>3</sup> /s	276	995	38.7	38.7	1.8
20-percent AEP flood	748	ft <sup>3</sup> /s	402	1390	37.2	37.2	2.4
10-percent AEP flood	893	ft <sup>3</sup> /s	475	1680	38	38	3.1
4-percent AEP flood	1070	ft <sup>3</sup> /s	551	2080	40.1	40.1	3.8
2-percent AEP flood	1200	ft <sup>3</sup> /s	597	2410	42.2	42.2	4.2
1-percent AEP flood	1320	ft <sup>3</sup> /s	633	2750	44.7	44.7	4.4
0.2-percent AEP flood	1610	ft <sup>3</sup> /s	702	3690	51.1	51.1	4.7

### Peak-Flow Statistics Citations

**Law, G.S., and Tasker G.D., 2003, Flood-Frequency Prediction Methods for Unregulated Streams of Tennessee, 2000: U.S. Geological Survey Water-Resources Investigations Report 03-4176, 79p. (<http://pubs.usgs.gov/wri/wri034176/>)**

## ➤ Maximum Probable Flood Statistics

### Maximum Probable Flood Statistics Parameters [Crippen Bue Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	1.42	square miles	0.1	10000

### Maximum Probable Flood Statistics Flow Report [Crippen Bue Region 3]

Statistic	Value	Unit
Maximum Flood Crippen Bue Regional	6150	ft <sup>3</sup> /s

### Maximum Probable Flood Statistics Citations

**Crippen, J.R. and Bue, Conrad D. 1977, Maximum Floodflows in the Conterminous United States, Geological Survey Water-Supply Paper 1887, 52p. (<https://pubs.usgs.gov/wsp/1887/report.pdf>)**

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

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**TENNESSEE DEPARTMENT OF TRANSPORTATION  
STRATEGIC TRANSPORTATION INVESTMENTS DIVISION**

PROJECT NO.: 49S087-S1-003 ROUTE: S.R. 87  
 COUNTY: LAUDERDALE CITY: \_\_\_\_\_  
 PROJECT PIN NUMBER: 134856.00  
 PROJECT DESCRIPTION: BRIDGE OVER DRAINAGE DITCH @ L.M. 20.76  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**DIVISION REQUESTING:**

MAINTENANCE  PAVEMENT DESIGN   
 S.T.I.D.  STRUCTURES   
 PROG. DEVELOPMENT & ADM.  SURVEY & ROADWAY DESIGN   
 PUBLIC TRANS. & AERO.  TRAFFIC SIGNAL DESIGN   
 OTHER \_\_\_\_\_   
 YEAR PROJECT PROGRAMMED FOR CONSTRUCTION: 2029  
 PROJECTED LETTING DATE: 2029

**TRAFFIC ASSIGNMENT:**

BASE YEAR		DESIGN YEAR					DESIGN ROADWAY % TRUCKS		DESIGN AVERAGE DAILY LOADS	
AADT	YEAR	AADT	DHV	%	YEAR	DIR.DIST.	DHV	AADT	FLEX	RIGID
480	2029	720	86	12	2049	65-35	2	3		

REQUESTED BY: NAME CALEB SMITH DATE 2/15/24  
 DIVISION S.T.I.D.  
 ADDRESS 1000 J. K. POLK BUILDING  
NASHVILLE TN 37243

REVIEWED BY: RANDY BOGUSKIE Randy Boguskie DATE 2/21/2024  
 TRANSPORTATION MANAGER 1  
 SUITE 1000, JAMES K. POLK BUILDING

APPROVED BY: TONY ARMSTRONG Tony Armstrong DATE 2/21/2024  
 TRANSPORTATION MANAGER 2  
 SUITE 1000, JAMES K. POLK BUILDING

**COMMENTS:**

FURNISH THE 2029-2049 TRAFFIC DATA.

THIS TRAFFIC IS BASED ON A 2022 CYCLE COUNT. THE DESIGN YEAR TRAFFIC IS BASED ON GROWTH RATE FROM THE TN-TIMES LINEAR REGRESSION TOOL.

**DHV'S ARE NOT REQUIRED FOR SIDE ROADS LESS THAN 1000 AADT.**

**NOTE:** FOR BRIDGE REPLACEMENT PROJECTS, ADLs ARE NOT REQUIRED FOR ADTs OF 1000 OR LESS AND PERCENTAGE OF TRUCKS OF 7% OR LESS.

SEE ATTACHMENTS FOR TURNING MOVEMENTS AND/OR OTHER DETAILS.

(REV. 6/9/21)

## 0SD2 Environmental Desktop Review Form

### Part 1 – Project Information

<b>PIN</b>	134856.00
<b>Project Number (if available)</b>	
<b>County</b>	Lauderdale
<b>Route</b>	SR87
<b>Termini</b>	Bridge over Drainage Ditch (TMA)
<b>Type of Document</b>	
<b>Date ENV DIV Comments are Due</b>	10.10.24 by noon

**Part 2: Provide information identifying known Environmental Resources within the proposed project area using the attached information. If no known resources are identified, each study area should note that none were identified.**

### Air & Noise

#### AIR QUALITY

##### ***Transportation Conformity***

This project is in Lauderdale County which is in attainment for all regulated criteria pollutants. Therefore, conformity does not apply to this project.

##### ***Mobile Source Air Toxics (MSATs)***

This project qualifies as a categorical exclusion under 23 CFR 771.117 and, therefore, does not require an evaluation of MSATs per FHWA's "Interim Guidance Update on Air Toxic Analysis in NEPA Documents" dated January 2023.

#### **NOISE**

This project is Type III in accordance with the FHWA noise regulation in 23 CFR 772 and TDOT's noise policy; therefore, a noise study is not needed.

## Cultural Resources

**Historic Preservation-** The bridge does not meet the age required for survey and evaluation; however, resources within the project's study area are older than 50 years. Additional studies may be required.

Archaeology - No previously recorded sites, but a survey will be required.

## Ecology

Water resources are present in the project area. Species records in the vicinity may require surveys as well as sweeps / time of year restrictions.

## HazMat

No known hazardous materials sites affect the area around this bridge replacement. No additional hazardous material studies are recommended at this time. The asbestos bridge survey has been completed and the following project commitment EDHZ001 has been submitted in PPRM. In the event hazardous materials or wastes are encountered within the right-of-way, notification shall be made per TDOT Standard Specifications for Road and Bridge Construction (January 1, 2021) Section 107.08.C. Disposition of hazardous materials or wastes shall be subject to all applicable Federal, State, and local regulations, including the applicable sections of the Federal Resource Conservation and Recovery Act, as amended; the Comprehensive Environmental Response, Compensation, and Liability Act, as amended; and the Tennessee Hazardous Waste Management Act of 1983, as amended. Databases reviewed include Google Earth imagery, EPA National Priorities List, EPA EnviroMapper (Envirofacts), TDEC Registered Underground Storage Tanks Public Data Viewer and Data and Reports, TDEC Division of Water Resources Public Data Viewer and Oil and Gas Wells database, TDEC Division of Remediation Sites Public Data Viewer, TDOT Integrated Bridge Information System, and others, as necessary.

EDHZ001. An Asbestos Containing Material (ACM) survey was completed on Bridge No. 49S80460003 SR-87 over Drainage Ditch LM 20.76 (49-SR087-20.76). No ACM was detected. No special accommodations for demolition and waste disposal are anticipated for these structures and the material can be deposited in a C&D landfill. Prior to the demolition or rehabilitation of any structure (bridge or building), the contractor is required to submit the National Emission Standards for Hazardous Air Pollutants standard 10-day notice of demolition to the TDEC Division of Air

Pollution Control (Standard Specifications for Road and Bridge Construction (January 1, 2021) Sections 107.08 D and 202.03).

## NEPA

### 1. Purpose & Need

Need: The subject bridge is a timber bridge, which is a build type that is being phased out.

I will need some additional information about the need for this project, because the current NBI Report (dated 3/11/2024) shows a high sufficiency rating (87.5) and high condition ratings (deck – 7; superstructure – 7, substructure – 6) that do not support the bridge having insufficient structural elements.

Purpose: The purpose of the proposed project is to bring the bridge up to current TDOT design standards.

I will need some additional information about the purpose for this project, because the current NBI Report (dated 3/11/2024) shows a high sufficiency rating (87.5) and high condition ratings (deck – 7; superstructure – 7, substructure – 6) that do not support the bridge having insufficient structural elements. I think the initiative to replace the timber bridge would suffice, but I don't know much about this program and the Concept Report does not explain why timber bridges are being phased out.

### 2. Logical termini

The termini was provided as follows: SR-87, Bridge over Drainage Ditch, LM 20.76

No range of log miles establishing the project limits was provided in the Concept Report.

### 3. Funding source?

The Concept Report states that the project is not expected to utilize federal funding. Therefore, a TEER is anticipated to be the environmental document type.

### 4. ROW/easement Acquisition

The Concept Reports states that 0-acres of ROW would be acquired for the proposed project.

I am not sure that there is enough space in the existing ROW to construct the project without easements. In addition, a railroad crossing in adjacent to the project, so I would anticipate permanent railroad easements could be needed if an agreement is not already in place.

## 5. Relocations?

The ETSA boundary encroaches on a structure (Henning City Hall) on the west end of the project. The structure appears to be encroaching into state ROW on the north side of the building and the railroad's ROW on the east side of the building, based on the property lines.

I'm not sure why the boundary is so expanded on the railroad track? What is the purpose of the large boundary around the railroad? It doesn't seem close to the subject bridge and I wouldn't expect this kind of project to result in relocations, but I'm uncertain what activities might be needed on the west side of the project.



## 6. Traffic Control measures

Two detour options were provided. The local detour would be 0.8-miles (2 minutes travel time). The state route detour would be 39.6-miles (46 minutes travel time). Because the project is solely state-funded, detour length is not a concern for the environmental document.

## 7. Floodplains

The proposed project is located on FEMA FIRM Map #47097C0362D, Panel 362 of 500. A portion of the location is in Zone AE (shaded gray), an area determined to be within the 1% annual chance floodplain with base elevations determined.

## 8. Section 4(f)

If the project is solely state-funded, Section 4(f) is not applicable.

Section 4(f) is not applicable because the project is solely state-funded. No Section 4(f) resources were identified.

## 9. Section 6(f)

No Section 6(f) resources were identified near the project location.

## 10. Farmland

This project is solely state-funded, so the Farmland Protection Policy Act does not apply to this project. There does not appear to be any agricultural property within the project area.

## 11. Environmental Justice

Two minority EJ populations and one low-income EJ population was identified within the project area. Based on the information known about this project, it is not anticipated that the project would have adverse or disproportionate impacts on any EJ populations. . As this project is solely state-funded, no further NEPA investigation is required.

<b>Environmental Justice Analysis Tables</b>			
<b>Minority Populations</b>			
Census Tract (CT)/ Block Group (BG)	CT 506 BG 1	CT 506 BG 2	Lauderdale Co.
% Minority/Non-White	73.3%	69.0%	41.2%
Exceeds County Average by 10% or More	Yes	Yes	
Is BG Population Avg. >50%	Yes	Yes	
Meet EJ Criteria?	<b>Yes</b>	<b>Yes</b>	
<b>Low-Income Populations</b>			
Census Tract (CT)/ Block Group (BG)	CT 506 BG 1	CT 506 BG 2	Lauderdale Co.
% Low-Income/Below Poverty Line	32.0%	26.7%	18.0%
Exceeds County Average by 10% or More	Yes	No	
Is BG Population Avg. >50%	Yes	No	
Meet EJ Criteria?	<b>Yes</b>	<b>No</b>	

Source: U.S. Census Bureau, 2018-2022 American Community Survey (ACS) 5-Year Estimates.  
ACS data was accessed and reviewed on 10/08/2024 via the U.S. Census Bureau website.