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

Project Name	SR-87 - Bridge over Branch (TMA)								
PIN	134860.00								
Route Information	**Route**	**NHS (Y/N)**	**Functional Class**		**City**		**County**		
	SR-87	Yes	Urban Major Collector		Henning		Lauderdale		
Project Information	**Begin Log Mile**	**End Log Mile**	**AADT[1]**	**Design Hour Vol. (DHV)[1]**	**Truck %[1]**	**Design Speed (MPH)**	**Posted Speed (MPH)**	**Base Year**	**Design Year**
	19.11		2,100	231	1.00	55	55	2029	2049
Project Description & Standard Drawings Used	The proposed bridge is to be a 60' single span bridge using 33" box beam. The typical section for the approach and bridge will be 2-11' foot travel lanes with 4' shoulders (Design Exception Required). The out-to-out width based on the above recommendations will be 31'3". The proposed grade and vertical clearance will be raised 2'. A detour is recommended but is a strong ABC candidate. There is no viable state route detour; the local route detour is 6 minutes (3.9 miles). Superstructure depth is 42.55" = 28.8" (beam) + 10" (deck) + 3.75" (width (in inches) x0.02/2). RD11-TS-2								Project Details
Important Project History or Related Projects	The existing structure, built in 1925, is a 2 span timber bridge, 38' long with an out-to-out width of 32.7'. The existing structure has 2-11' travel lanes with no shoulders. The listed weight limit on the inspection report is 40 tons 11/16/2023. The discharges for the drainage basin (StreamStats Version 4.19.4) for drainage area of 2.63 square miles: Q10 is 675 cfs, Q50 is 1700 cfs, and Q100 is 1880 cfs. This project is NOT expected to utilize federal funding.								
Project Purpose/Need	The need to replace this bridge is due to the present condition of the existing bridge: -Timber bridges are being phased out and is near the end of it's service life -The bridge is in FAIR condition								
Major Environmental Considerations	To be determined								

Multi-Modal Considerations	This project is in a urban area with a proposed 2-lane bridge width of less than 44 ft where the cost of dedicated multimodal accommodations are excessively disproportionate to the need and probable use. Excessively disproportionate is defined as exceeding 20 percent of the cost of the project.	
Major Project Risks	Approximately 0.64 acres of right of way are expected to be acquired. Overhead electric/communication lines are present. Existing bridge has significant drift issues and channel stability/scour issues. ETSA and proposed ROW extend 75 ft up and downstream. This document is covered by 23 USC § 407 and its production pursuant to fulfilling public planning requirements does not waive the provisions of § 407.	

[1] Traffic numbers reflect identified design year

Approvals

Executed for approval of this Concept Report

Project Management Division Director — Date: Jul 11, 2024

The following individuals to execute if a bridge concept report:

Structures Director — Date: Jul 9, 2024

Brandon Akins (Jul 11, 2024 10:48 CDT)

Regional Project Management Division Director — Date: Jul 11, 2024

Action Checklist			
0SD1 Initiate Concept Report and Request Funding			
Complete	**NA**		**Date Completed**
✓		Request and Finalize Safety Data	04/05/2024
✓		Request Project Number, PIN, and Task Profile Numbers	01/22/2024
	✓	Coordinate with Long Range Planning	
✓		Request and Finalize Traffic Data	02/21/2024
	✓	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	05/22/2024
0MM1 Conduct Multimodal Review			
Complete	**NA**		**Date Completed**
	✓	Confirm Multimodal Review is Complete	
	✓	Review Multimodal Considerations & Recommendations	
0TO1 Conduct Initial Traffic Ops/TSMO Review *(include HQ Traffic Ops and Regional Traffic Office)*			
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	04/14/2024
✓		Confirm Hydraulic Recommendations for Concept Report is Complete	04/14/2024
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			
0SD2 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	
0TO2 Develop TSMO Scope Items *(include HQ Traffic Ops and Regional Traffic Office)*			
Complete	**NA**		**Date Completed**
	✓	Confirm Signal Warrants Analysis is Complete	
	✓	Confirm Lighting Warrants Analysis is Complete	
	✓	Review and Confirm TSMO & ITS Scope and Budget	
0RW1 Complete Preliminary Right-of-Way Estimates			
Complete	**NA**		**Date Completed**
	✓	Review and Confirm Preliminary Right-of-Way Cost Estimates	
0UT1 Complete Utility Preliminary Estimates			
Complete	**NA**		**Date Completed**
		Review and Confirm Preliminary Utility Estimate	
		Review and Confirm Preliminary Railroad Cost Estimate	
0SD3 Finalize Concept Report			
Complete	**NA**		**Date Completed**
	✓	Compile and Review Initial Risk Assessment	
		Finalize Conceptual Layouts	
		Develop Environmental Technical Study Area (ETSA)	
✓		Address Comments and Finalize Concept Report	06/17/2024
	✓	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 0SD3 for additional information)	
		Finalize Document and Upload All Needed Electronic Files	
		Notify the Project Management Director or Assigned Project Manager to Set Up Project (1PM1)	

NA Justification

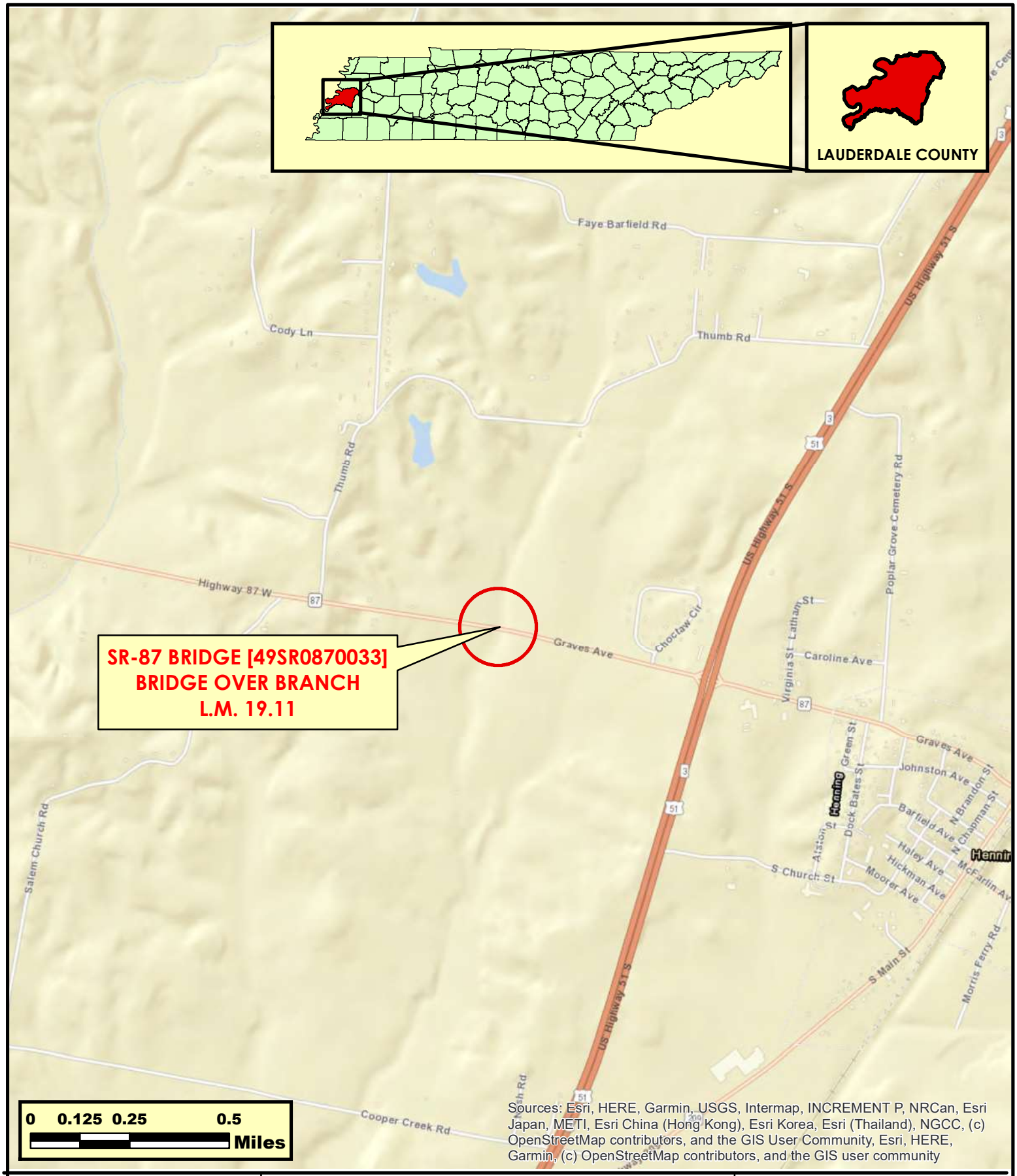
Coordinate with Long Range Planning-Long Range Planning coordination not needed for STID BCR document
Request Preliminary Survey Data- survey data not needed for STID BCR document
Schedule a site visit-site visit not required
0MM1 Conduct Multimodal Review- multimodal coordination not required
0SY1 Provide 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[1]		✓
ROW Form 44-A[1]		✓
Crash Packet[1]	✓	
Crash Prediction Analysis[1]		✓
Site Visit Attendee List		✓
Environmental Desktop Review Form[1]		
Multimodal Considerations & Recommendations[1]		✓
Existing Structure Summary[1]	✓	
Email or memo containing Structure Type Recommendations[1]	✓	
Email or memo containing Hydraulic Recommendations[1]	✓	
Hydraulic Data	✓	
Intersection and Interchange Evaluation (IIE) Analysis and Summary Form		✓
Traffic Analysis Summary/Tables	✓	
Forecasted Traffic Sheets[1]	✓	
Traffic Modeling (e.g., Synchro, VISSIM, Highway Capacity Software (HCS) Output)[1]		✓
Signal Warrant[1]		✓
Lighting Warrant[1]		✓
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[1]		✓

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

[1] External document to STID



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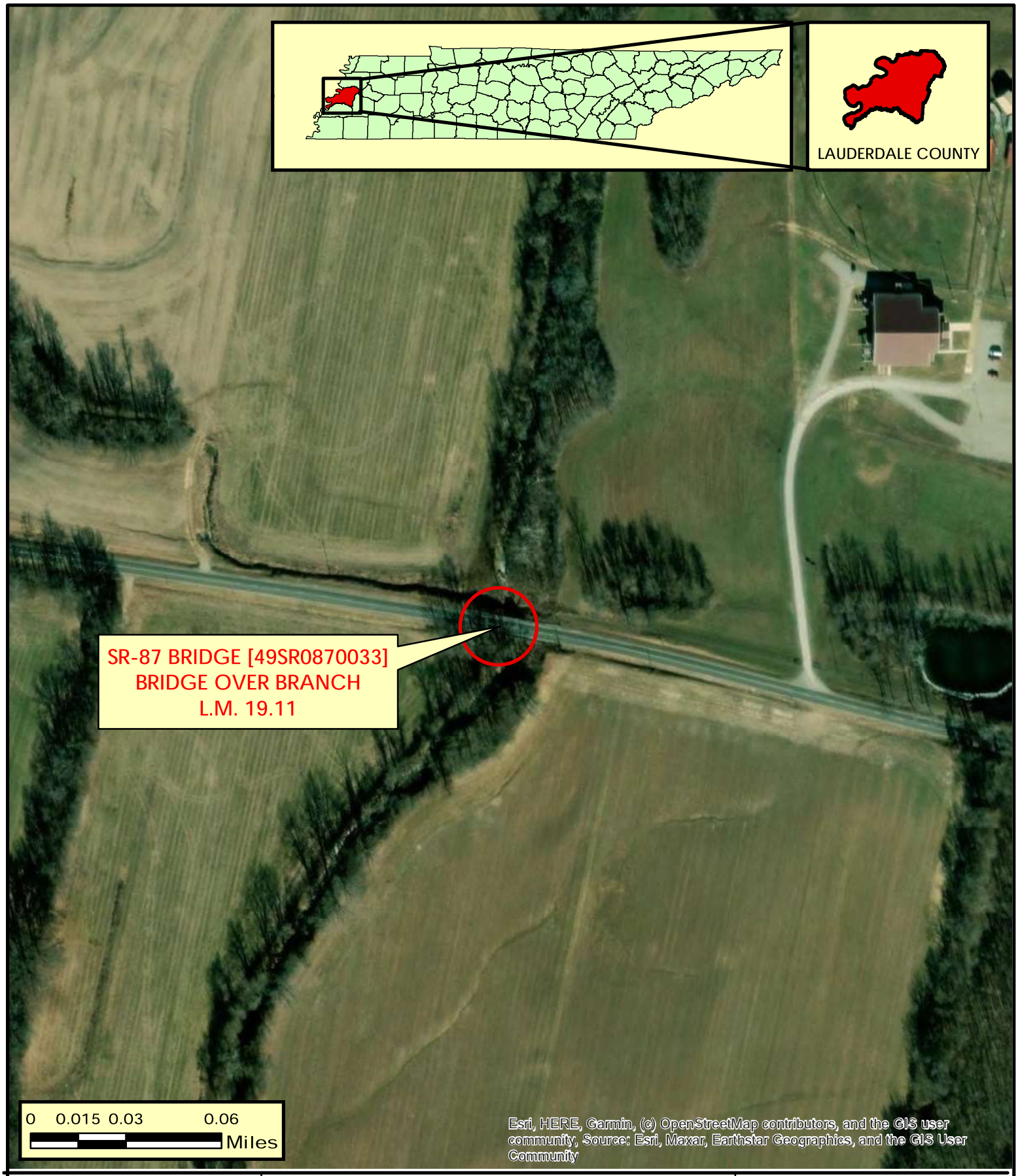
AREA MAP
SR-87 BRIDGE [49SR0870033]
BRIDGE OVER BRANCH
L.M. 19.11
LAUDERDALE COUNTY

TN TDOT Department of Transportation

PIN 134860.00



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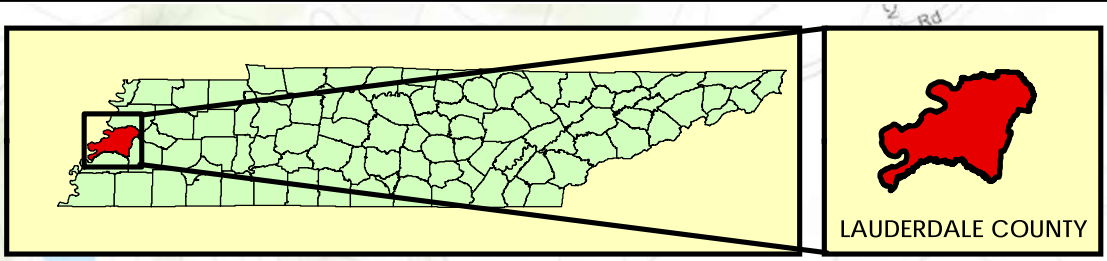
LOCATION MAP

SR-87 BRIDGE [49SR0870033]
BRIDGE OVER BRANCH
L.M. 19.11
LAUDERDALE COUNTY

TN TDOT Department of Transportation

PIN 134860.00



SR-87 BRIDGE [49SR0870033]
BRIDGE OVER BRANCH
L.M. 19.11

Highway 87 W 87
Graves Ave 87
Choctaw Cir
Thumb Rd
349 ft
US Highway 51 S
51
3

0 0.05 0.1 0.2
Miles

N

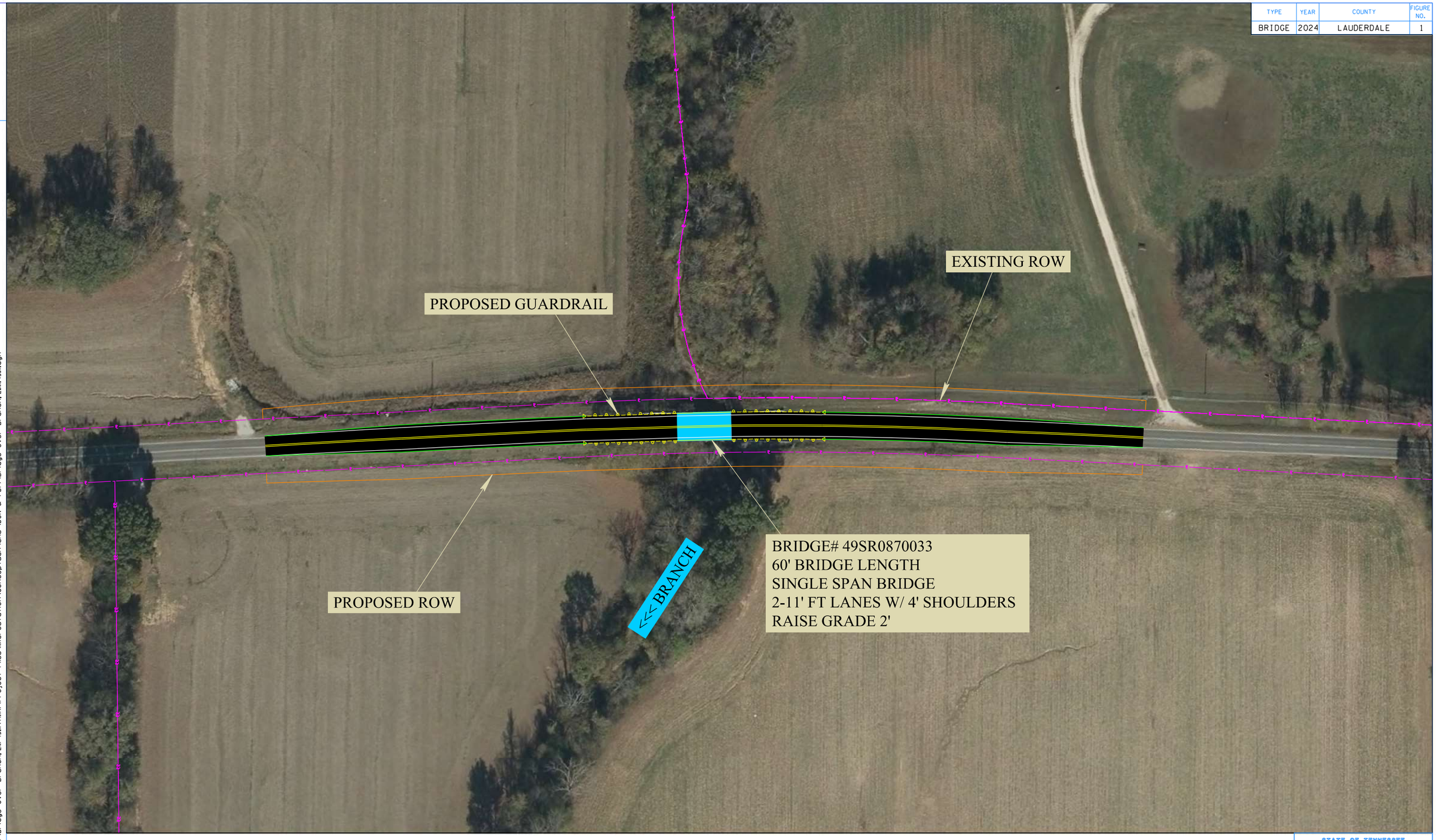
TOPOGRAPHIC MAP
SR-87 BRIDGE [49SR0870033]
BRIDGE OVER BRANCH
L.M. 19.11
LAUDERDALE COUNTY

TN TDOT Department of Transportation

PIN 134860.00

TENNESSEE D.O.T.
S.T.I.D.
FILE NO. ____

TYPE	YEAR	COUNTY	FIGURE NO.
BRIDGE	2024	LAUDERDALE	1



0' 100' 200' 300'

N

R4 TIMBER BRIDGE PROGRAM

STATE ROUTE 87
BRIDGE OVER BRANCH, L.M. 19.11
LAUDERDALE COUNTY

CAUTION ! PRELIMINARY PLANS SUBJECT TO CHANGE

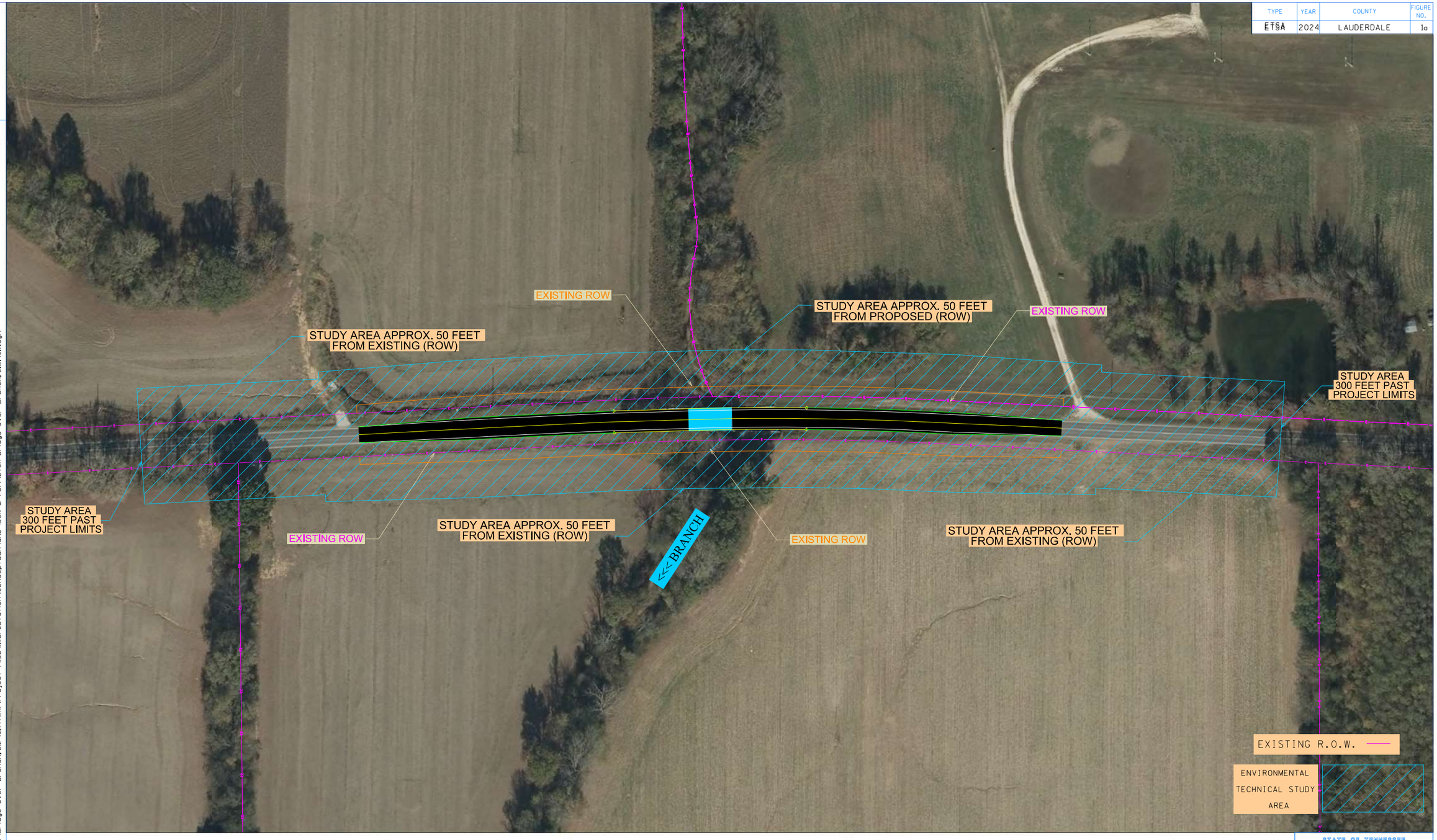
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
S.T.I.D.

FIGURE 1
S.R. 87
L.M. 19.11

4/17/2024 4:17:25 PM
X:\Projects\Lauderdale\SR 87\Bridge over Branch, LM 19.11 (TMA)\Project Files\Microstation\Conceptual Plans (DGN & PDF)\Bridge over Branch, L.M. 19.11.dgn

TENNESSEE D.O.T.
S.T.I.D.
FILE NO. ——

TYPE	YEAR	COUNTY	FIGURE NO.
ETSA	2024	LAUDERDALE	1a



0′ 125′ 250′ 375′

N

ENVIRONMENTAL TECHNICAL STUDY AREA

STATE ROUTE 87
BRIDGE OVER BRANCH, L.M. 19.11
LAUDERDALE COUNTY

CAUTION !
PRELIMINARY PLANS SUBJECT TO CHANGE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
S.T.I.D.

FIGURE 1a
S.R. 87
L.M. 19.11

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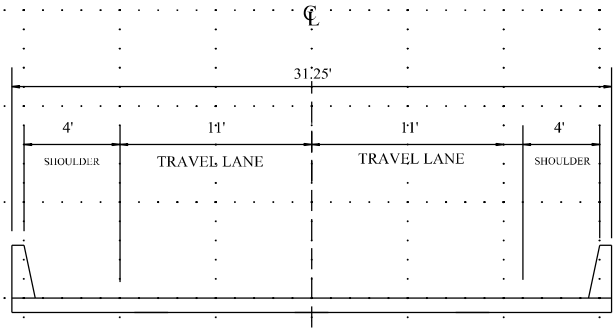
PROPOSED COMPLETED



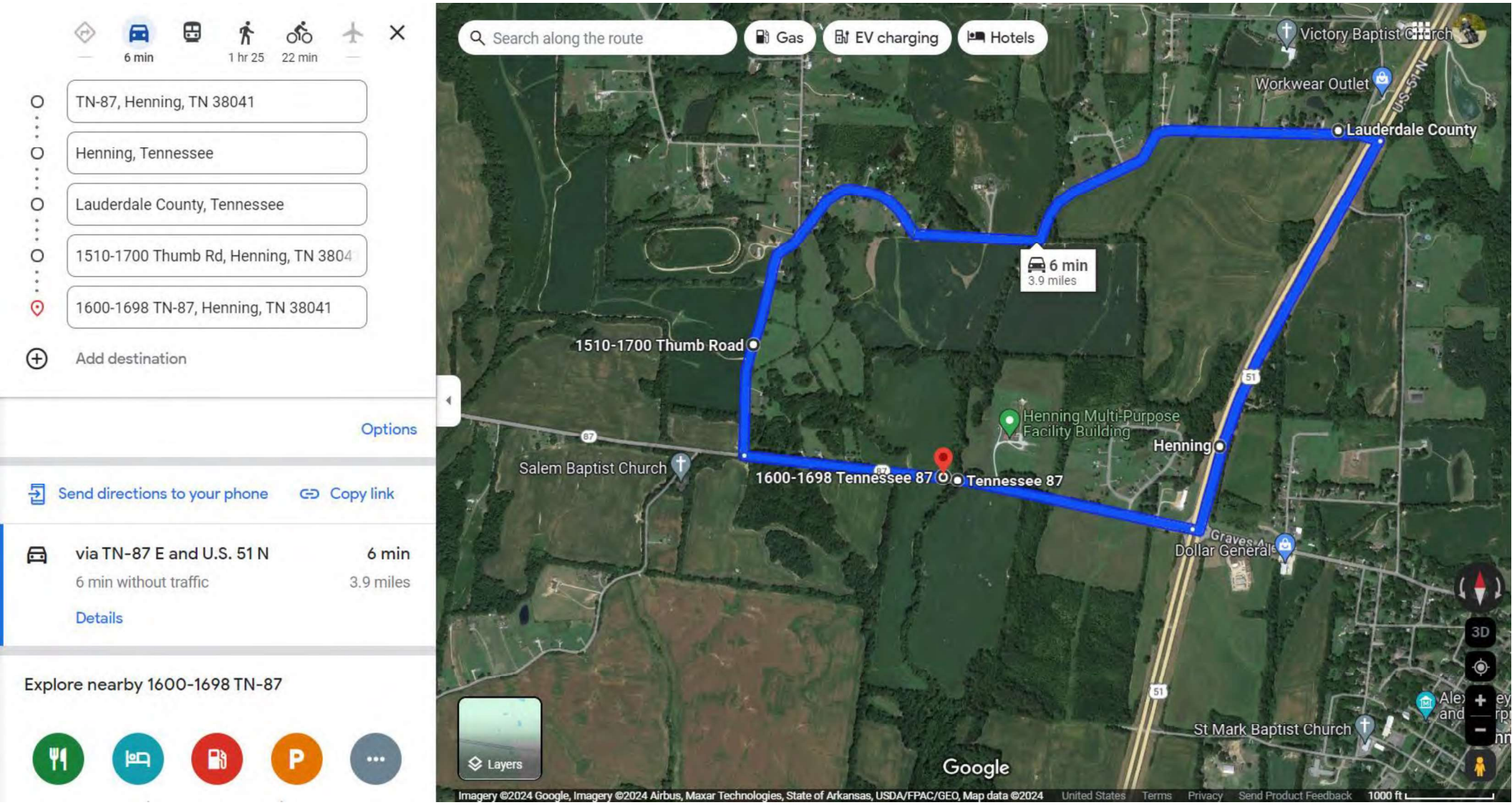
0' 5' 10' 15'

CROSS-SECTION DETAIL

REGION 4 TIMBER BRIDGE PROGRAM
TRANSPORTATION MODERNIZATION ACT (TMA)

CAUTION !
PRELIMINARY
PLANS
SUBJECT TO
CHANGE

DETOUR MAP


6 min
1 hr 25
22 min
TN-87, Henning, TN 38041
Henning, Tennessee
Lauderdale County, Tennessee
1510-1700 Thumb Rd, Henning, TN 3804
1600-1698 TN-87, Henning, TN 38041
Add destination
Options
Send directions to your phone
Copy link
via TN-87 E and U.S. 51 N
6 min
6 min without traffic
3.9 miles
Details
Explore nearby 1600-1698 TN-87
Search along the route
Gas
EV charging
Hotels
Victory Baptist Church
Workwear Outlet
Lauderdale County
6 min
3.9 miles
1510-1700 Thumb Road
Henning Multi-Purpose Facility Building
Henning
Salem Baptist Church
1600-1698 Tennessee 87
Tennessee 87
Dollar General
St Mark Baptist Church
Layers
Google
Imagery ©2024 Google, Imagery ©2024 Airbus, Maxar Technologies, State of Arkansas, USDA/FPAC/GEO, Map data ©2024
United States
Terms
Privacy
Send Product Feedback
1000 ft

CRASH SUMMARY REPORT

Lauderdale Co SR087 - Bridge over Branch (LM 19.11)

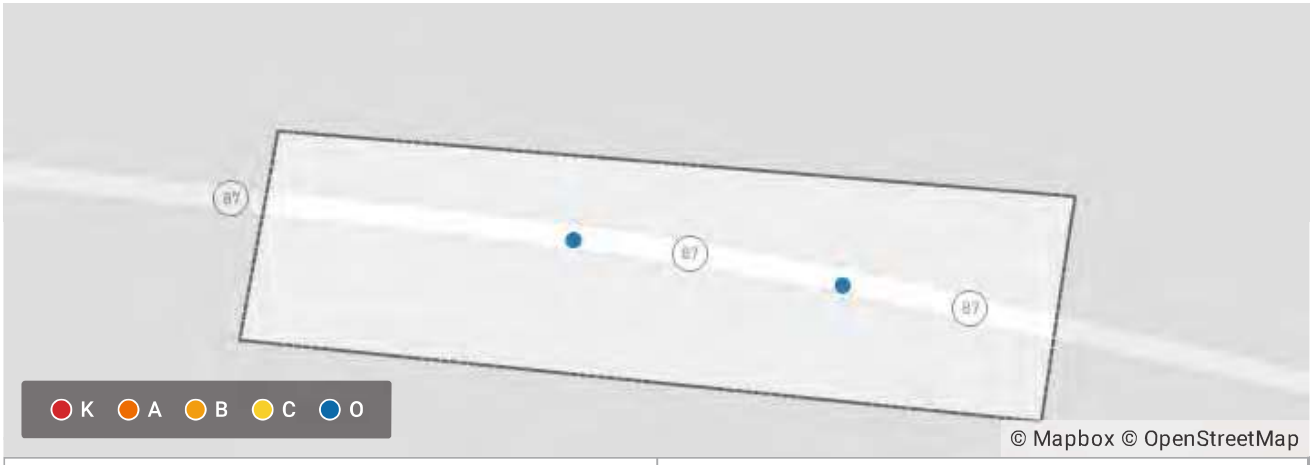
Created on April 4, 2024

Created by JOSHUA CLOUD

Data extents: March 28, 2021 to March 28, 2024

Applied Filters

County = Lauderdale | Shape: Polygon



Total Crashes	2	Fatal Crashes	0

Summary		Crash
Total Crashes	2	100.00%
+ 5 more	0	0%

Type of Crash		Crash
(O) Property-Damage Only	2	100.00%
+ 4 more	0	0%

Date of Crash (Year)		Crash
2022	1	50.00%
2021	1	50.00%
+ 9 more	0	0%

Manner of First Collision		Crash
No Collision W/ Vehicle	1	50.00%
Sideswipe, Opp Dir	1	50.00%

+ 8 more	0	0%

First Harmful Event		Crash
Other Animal	1	50.00%
Vehicle in Transport	1	50.00%
+ 63 more	0	0%

Crash Location		Crash
Along Roadway	2	100.00%
+ 6 more	0	0%

Light Conditions		Crash
Dark-Not Lighted	1	50.00%
Daylight	1	50.00%
+ 6 more	0	0%

Weather Conditions		Crash
Clear	2	100.00%
+ 11 more	0	0%

Bent 1 front

Abutment 1

Left elevation

Right elevation

Approach 2 weight limit sign

Approach 1 weight limit sign

Downstream

Upstream

Opposite direction of route

Approach 2 pavement

View across deck

Approach 1 pavement

Bridge number

Direction of route

Abutment 2 right embankment

Abutment 2

Heavy decay on abutment 2 breast wall

Heavy decay on abutment 2 breast wall

Abutment 2

Span 2 bottom deck

Span 2 PCCS ‘A’ spalling to steel with section loss

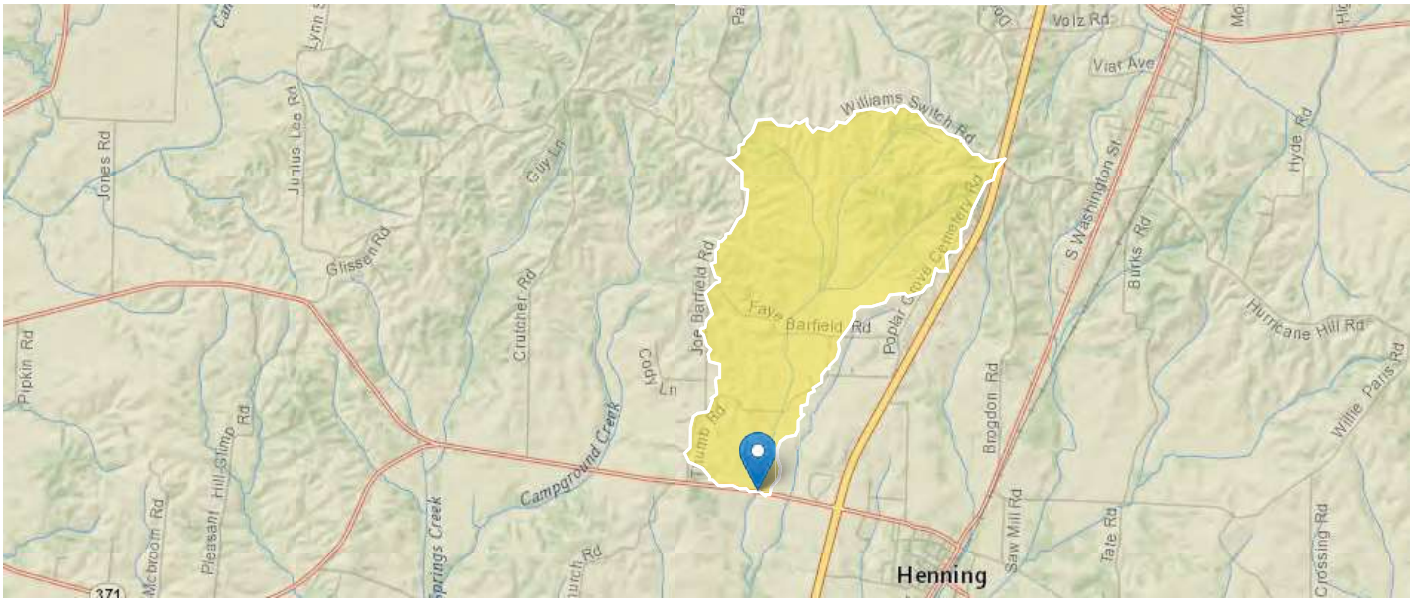
Span 1 bottom deck

Span 1 PCCS ‘H’ spalling to steel with section loss

Span 1 PCCS ‘I’ spalling to steel with section loss

StreamStats

Region ID: TN
Workspace ID: TN20240404153224414000
Clicked Point (Latitude, Longitude): 35.68100, -89.59486
Time: 2024-04-04 10:32:48 -0500



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CLIMFAC2YR	Two-year climate factor from Lichy and Karlinger (1990)	2.393	dimensionless
CONTDA	Area that contributes flow to a point on a stream	2.63	square miles
DRNAREA	Area that drains to a point on a stream	2.63	square miles
PERMGTE2IN	Percent of area underlain by soils with permeability greater than or equal to 2 inches per hour	85.613	percent
RECESS	Number of days required for streamflow to recede one order of magnitude when hydrograph is plotted on logarithmic scale	32	days per log cycle
SOILPERM	Average Soil Permeability	1.237	inches per hour

Peak-Flow Statistics

Peak-Flow Statistics Parameters [DAOnly Area 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CONTDA	Contributing Drainage Area	2.63	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	726	ft^3/s	385	1370	38.7	38.7	1.8
20-percent AEP flood	1050	ft^3/s	568	1940	37.2	37.2	2.4
10-percent AEP flood	1260	ft^3/s	675	2350	38	38	3.1
4-percent AEP flood	1510	ft^3/s	783	2910	40.1	40.1	3.8
2-percent AEP flood	1700	ft^3/s	853	3390	42.2	42.2	4.2
1-percent AEP flood	1880	ft^3/s	909	3890	44.7	44.7	4.4
0.2-percent AEP flood	2310	ft^3/s	1020	5250	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/)

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow West Region 2009 5159]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.63	square miles	2	2405
RECESS	Recession Index	32	days per log cycle	32	350
PERMGTE2IN	Percent permeability gte 2 in per hr	85.613	percent	2	98

Low-Flow Statistics Flow Report [Low Flow West Region 2009 5159]

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	ASEp
7 Day 10 Year Low Flow	0.0232	ft^3/s	123
30 Day 5 Year Low Flow	0.038	ft^3/s	93.5

Low-Flow Statistics Citations

Law, G.S., Tasker, G.D., and Ladd, D.E.,2009, Streamflow-characteristic estimation methods for unregulated streams of Tennessee: U.S. Geological Survey Scientific Investigations Report 2009–5159, 212 p., 1 pl. (http://pubs.usgs.gov/sir/2009/5159/)

Flow-Duration Statistics

Flow-Duration Statistics Parameters [Low Flow West Region 2009 5159]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.63	square miles	2	2405
RECESS	Recession Index	32	days per log cycle	32	350
PERMGTE2IN	Percent permeability gte 2 in per hr	85.613	percent	2	98
CLIMFAC2YR	Tennessee Climate Factor 2 Year	2.393	dimensionless	2.307	2.455
SOILPERM	Average Soil Permeability	1.237	inches per hour	0.97	2.44

Flow-Duration Statistics Flow Report [Low Flow West Region 2009 5159]

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	ASEp
99.5 Percent Duration	0.0213	ft^3/s	122
99 Percent Duration	0.0263	ft^3/s	105
98 Percent Duration	0.0309	ft^3/s	96.4
95 Percent Duration	0.0387	ft^3/s	90.5
90 Percent Duration	0.0463	ft^3/s	85.8
80 Percent Duration	0.0672	ft^3/s	79.6
70 Percent Duration	0.0895	ft^3/s	75
60 Percent Duration	0.0948	ft^3/s	69.2
50 Percent Duration	0.162	ft^3/s	57
40 Percent Duration	0.326	ft^3/s	46.9
30 Percent Duration	0.821	ft^3/s	36.6
20 Percent Duration	2.69	ft^3/s	27.4
10 Percent Duration	5.99	ft^3/s	17.7

Flow-Duration Statistics Citations

Law, G.S., Tasker, G.D., and Ladd, D.E.,2009, Streamflow-characteristic estimation methods for unregulated streams of Tennessee: U.S. Geological Survey Scientific Investigations Report 2009–5159, 212 p., 1 pl. (http://pubs.usgs.gov/sir/2009/5159/)

Annual Flow Statistics

Annual Flow Statistics Parameters [Low Flow West Region 2009 5159]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.63	square miles	2	2405
RECESS	Recession Index	32	days per log cycle	32	350
CLIMFAC2YR	Tennessee Climate Factor 2 Year	2.393	dimensionless	2.307	2.455
PERMGTE2IN	Percent permeability gte 2 in per hr	85.613	percent	2	98

Annual Flow Statistics Flow Report [Low Flow West Region 2009 5159]

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	ASEp
Mean Annual Flow	3.48	ft^3/s	13.1

Annual Flow Statistics Citations

Law, G.S., Tasker, G.D., and Ladd, D.E.,2009, Streamflow-characteristic estimation methods for unregulated streams of Tennessee: U.S. Geological Survey Scientific Investigations Report 2009–5159, 212 p., 1 pl. (http://pubs.usgs.gov/sir/2009/5159/)

Seasonal Flow Statistics

Seasonal Flow Statistics Parameters [Low Flow West Region 2009 5159]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.63	square miles	2	2405
RECESS	Recession Index	32	days per log cycle	32	350
PERMGTE2IN	Percent permeability gte 2 in per hr	85.613	percent	2	98

Seasonal Flow Statistics Flow Report [Low Flow West Region 2009 5159]

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	ASEp
Summer Mean Flow	0.966	ft^3/s	38.3

Seasonal Flow Statistics Citations

Law, G.S., Tasker, G.D., and Ladd, D.E.,2009, Streamflow-characteristic estimation methods for unregulated streams of Tennessee: U.S. Geological Survey Scientific Investigations Report 2009–5159, 212 p., 1 pl. (http://pubs.usgs.gov/sir/2009/5159/)

Application Version: 4.19.4
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

TENNESSEE DEPARTMENT OF TRANSPORTATION
STRATEGIC TRANSPORTATION INVESTMENTS DIVISION

PROJECT NO.: 49S087-S1-007 ROUTE: S.R. 87
COUNTY: LAUDERDALE CITY:
PROJECT PIN NUMBER: 134860.00
PROJECT DESCRIPTION: BRIDGE OVER BRANCH @ L.M. 19.11

DIVISION REQUESTING:

		PAVEMENT DESIGN	☐
MAINTENANCE	☐	STRUCTURES	☐
S.T.I.D.	☒	SURVEY & ROADWAY DESIGN	☐
PROG. DEVELOPMENT & ADM.	☐	TRAFFIC SIGNAL DESIGN	☐
PUBLIC TRANS. & AERO.	☐	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
1,910	2029	2,100	231	11	2049	65-35	1	2		

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 2023 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)

TN TDOT Department of Transportation

Environmental Division

0EN1 Environmental Desktop Review Form

Part 1 – Project Information

PIN	134860.00
Project Number (if available)	
County	Lauderdale
Route	SR87
Termini	Bridge over Branch, LM 19.11 (TMA)
Type of Document	
Date ENV DIV Comments are Due	5/22/24 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

Archaeology: There are 2 previously recorded sites and 2 surveyed areas within one mile of the ETSA. A survey will not be required, since this area was already surveyed. There is a low probability of intact archaeological deposits in this location, since there are disturbances from road construction.

Historic Preservation

There are no previously documented historic resources within .1 miles of the ETSA. However, the bridge is older than 50 years, so a survey is required.

Ecology

Water resource features are likely to occur within the project area. Additionally, species records in the area will likely results in surveys and or sweeps.

HazMat

No known hazardous materials sites. The asbestos bridge survey has been completed.

An Asbestos Containing Material (ACM) survey was completed on Bridge No. 49SR0870033, SR-87 over Branch, LM 19.11 (49-SR087-19.11). No asbestos was detected. Please see the report for further details and photographs. 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 (per TDOT Standard Specifications for Road and Bridge Construction (January 1, 2021) Sections 107.08.D and 202.03).

NEPA

This project was evaluated for the following:

- Detour: The only detour provided is 3.4 miles, however it is utilizing local roads. Please provide a detour map utilizing state routes or similar classification of roads.

- ROW Acquisition: ROW acquisition is less than 1.5 acres, coordination with FHWA is not required.
- Section 4(f): No Section 4(f) resources were identified in the proposed project area.
- Section 6(f): No Section 6(f) resources were identified in the proposed project area.
- Recreation and Wildlife Management Areas: No Recreation or Wildlife Management areas were identified in the proposed project area.
- Local/State Parks and Greenways: No parks or greenways were identified in the proposed project area.
- Floodplain Management: The project is located within the Statewide Flood Hazard Area Zone A.

PIN	County	Project	Utilities on Project	At Risk	Mitigation (if applicable)	Items	Footage	
134860.00	Lauderdale	SR-87 Bridge over Branch L.M. 19.11	Telecommunications (AT&T or Frontier assumed)	Aerial Fiber	Not sure if this can be avoided with how close the poles are to the bridge deck.	6M Strand 144 fiber (assumed) (2) storage loop, (2) splice case) (2) splice. (2) dig pit, (2) storage loop, (2) splice case) (2) splice (1) 24 fiber assumed buried, (2) 24x36" handholes. (1) remove anchor, (2) remove pole, (1) 35-4, (2) 1" anchor, (1) 30-4, (1) Overhead guy	375'	***OH Electric close to work zone but can be avoided***