

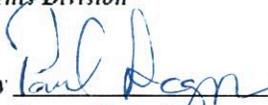
**TENNESSEE**  
**DEPARTMENT OF TRANSPORTATION**

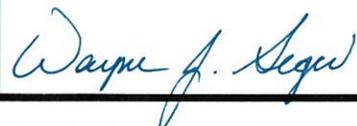


**TRANSPORTATION INVESTMENT REPORT**  
**Special Bridge Replacement Program**  
*Local Route 0A308 – County Line Road*  
*Bridge over Branch,*  
*Log Mile 0.24 Crockett County*  
*PIN 106005.00*

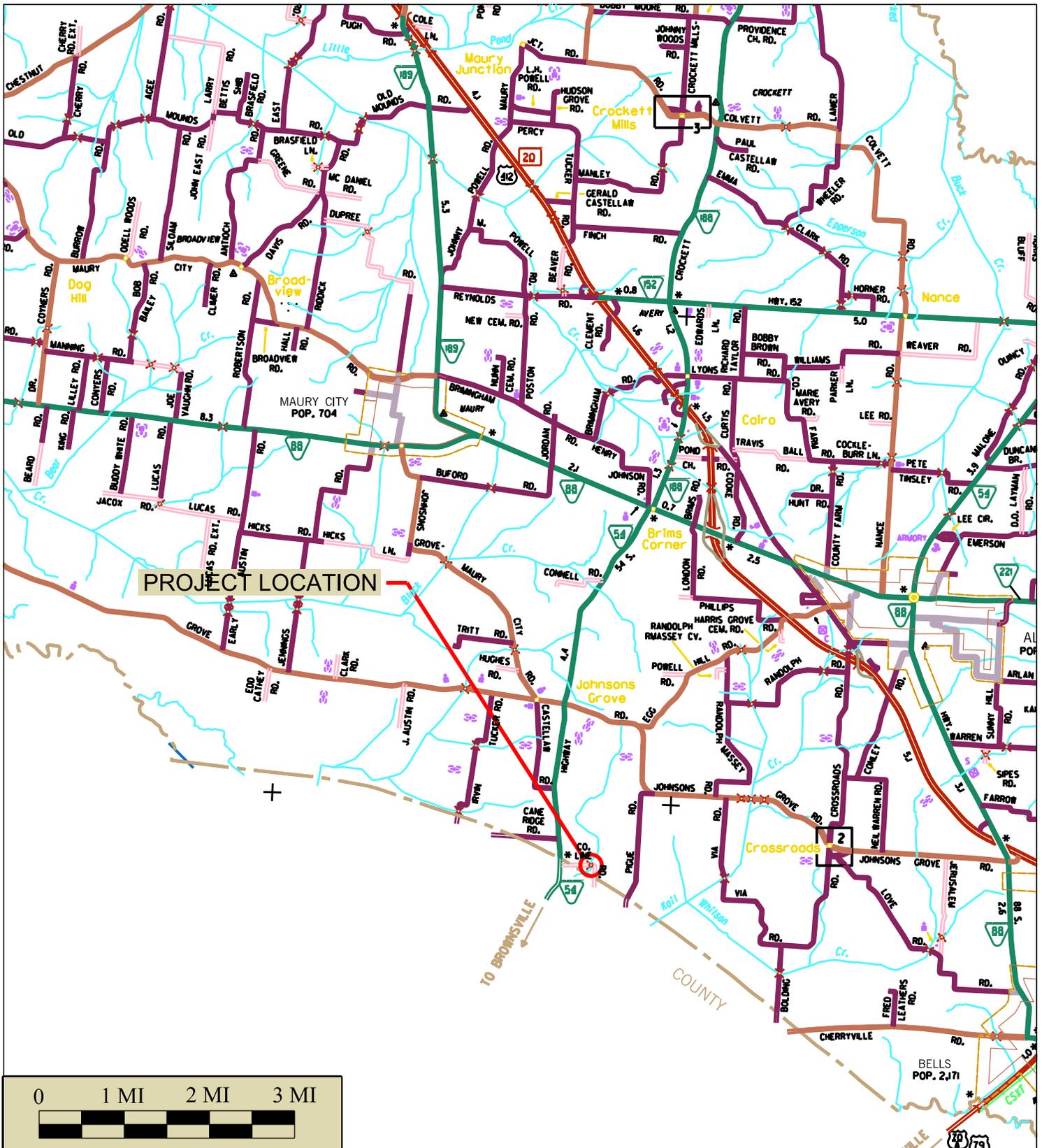
PREPARED BY TENNESSEE DEPARTMENT OF TRANSPORTATION  
 Strategic Transportation Investments Division

Approved by  Date 7/31/14  
 Chief of Environment and Planning

Approved by  Date 8/5/14  
 Deputy Commissioner and Chief Engineer

Approved by:	Signature	DATE
TRANSPORTATION DIRECTOR STRATEGIC TRANSPORTATION INVESTMENTS DIVISION		5-29-14
ENGINEERING DIRECTOR DESIGN DIVISION		7-08-14
ENGINEERING DIRECTOR STRUCTURES DIVISION		7-17-14

*This document is covered by 23 USC § 409 and its production pursuant to fulfilling public  
 planning requirements does not waive the provisions of § 409.*

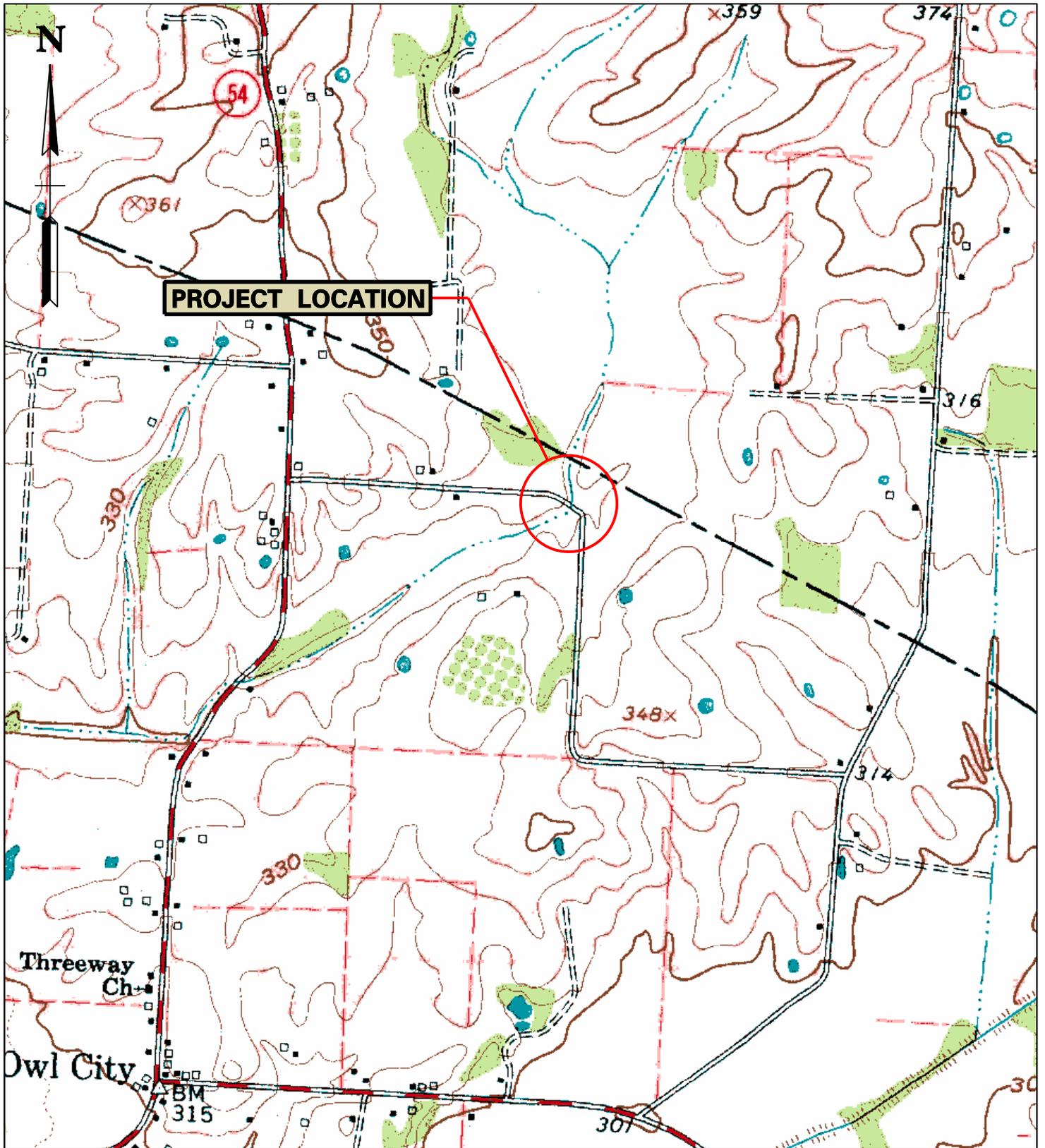


PROJECT LOCATION

AREA MAP

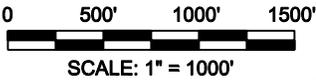
COUNTY LINE ROAD (0A308) CROCKETT COUNTY  
 BRIDGE OVER BRANCH @ L.M. 0.24  
 BRIDGE ID 170A3080001





**PROJECT LOCATION**

Threeway Ch  
Owl City



**PROJECT MAP**  
**COUNTY LINE ROAD (0A308) CROCKETT COUNTY**  
**BRIDGE OVER BRANCH @ L.M. 0.24**  
**BRIDGE ID 170A3080001**



N



PROJECT LOCATION

0' 100' 200' 300'



SCALE: 1" = 200'

AERIAL MAP

COUNTY LINE ROAD (0A308) CROCKETT COUNTY  
BRIDGE OVER BRANCH @ L.M. 0.24  
BRIDGE ID 170A3080001

**BRIDGE REPLACEMENT ANALYSIS, NEEDS, AND COSTS**

County: Crockett Route: County Line Road Log Mile: 0.24  
Feature Crossed: Branch System: Local Road  
Functional Class: Rural Local Bridge ID: 170A3080001

**EXISTING CONDITIONS**

2018 AADT: 20 App. Cross Section: 12' / 16' / 36' No. Lanes: 1  
Approach Alignment: Curved sections on each approach Year Built: 1950 Load Limit: 5 tons  
Width (out to out): 20' Sidewalks: Right -- Left -- Length: 33'  
No. Spans: Approach: -- Main: 2  
Substructure: Timber Piers Vertical Clearance: 11.9' Sufficiency Rating: 33.0  
Other: \_\_\_\_\_

**PROPOSED IMPROVEMENTS**

STANDARDS FROM RD01-TS-1A Type of Work: Replacement  
Design Year: 2038 Design AADT: 30 Terrain Rolling ADL (F): -- (R): --  
Project Length: 138 ft Bridge Length: 38 ft Approach Length: 2 at 100 ft  
Design Speed (MPH): 20 Posted Speed (MPH): N/A  
Approach Width: 18 / 20' / As Required Bridge Width (O to O): 22 ft No. Lanes: 2  
Right-of-Way Required: 0.1 Ac Tract(s) 2 Structure Type: Box Bridge

**MAINTENANCE OF TRAFFIC**

Temporary Detour:  Temporary Runaround:  Stage Construct:   
Alternate Route: Traffic to use the following 3.3 mile detour during construction of the proposed bridge. County Line Rd. to SR-54 to Cherryville Rd. to Windman Rd back to County Line Rd. Will require coordination between TDOT and Crockett and Haywood Counties.  
Remarks: \_\_\_\_\_

**ESTIMATED COST**

Right-of-Way: \$5,000 Approaches: \$75,900 Structure: \$97,700  
Preliminary Engineering: \$23,600 Utilities: \$0 Misc./Cont.: \$47,500  
Mobilization: \$10,200 Total: \$259,900

Remarks: The grade is to remain the same as well as the current alignment. The existing structure has a curb-to-curb width of 19' which is greater than the minimum of 18' from TDOT Standard RD01-TS-1A (Design Standards ADT less than 400). The total pavement width on the approaches and over the proposed structure will have an approach width of twenty (20) feet. A small amount of ROW will be required to widen the bridge approaches and adjust the slopes.

Field Investigation by: Ryan Philpott, Jason Moody (Region 4 Traffic), Burt Hutchins (Region 4 Design), Blake Mayo (HQ Hydraulics), Herman Odle (TDOT R.O.W.), Ben Bradberry (NWTDD RPO), Amy Rauch (S.T.I.D), Paige Harris (S.T.I.D), David Duncan (S.T.I.D), Mike Gilbert (S.T.I.D)

Route:	County Line Road (0A308)
Description:	Replace Bridge over Branch @ L.M. 0.24
County:	Crockett
Length:	138 Feet
Date:	April 24, 2014

<u>DESCRIPTION</u>	<u>STATE</u>	<u>LOCAL</u>	<u>FEDERAL</u>	<u>TOTAL</u>
Right-of-Way	\$ -	\$ 1,000	\$ 4,000	\$ 5,000
Clearing and Grubbing	\$ -	\$ 100	\$ 500	\$ 600
Earthwork	\$ -	\$ 300	\$ 1,200	\$ 1,500
Railroad Crossing or Separation	\$ -	\$ -	\$ -	\$ -
Drainage	\$ -	\$ 260	\$ 1,040	\$ 1,300
Utilities	\$ -	\$ -	\$ -	\$ -
Structures	\$ -	\$ 19,500	\$ 78,200	\$ 97,700
Pavement Removal	\$ -	\$ -	\$ -	\$ -
Paving	\$ -	\$ 10,700	\$ 42,800	\$ 53,500
Roadway and Pavement Appurtenances	\$ -	\$ -	\$ -	\$ -
Retaining Walls	\$ -	\$ -	\$ -	\$ -
Topsoil	\$ -	\$ -	\$ -	\$ -
Seeding	\$ -	\$ 40	\$ 240	\$ 300
Sodding	\$ -	\$ -	\$ -	\$ -
Rip-Rap or Slope Protection	\$ -	\$ 900	\$ 3,600	\$ 4,500
Fencing	\$ -	\$ -	\$ -	\$ -
Signing	\$ -	\$ 400	\$ 1,600	\$ 2,000
Pavement Markings	\$ -	\$ -	\$ 100	\$ 100
Lighting	\$ -	\$ -	\$ -	\$ -
Signalization	\$ -	\$ -	\$ -	\$ -
Guardrail	\$ -	\$ 1,400	\$ 5,700	\$ 7,100
Pay Item Quantity Adjustment (15%) <sup>1</sup>	\$ -	\$ 5,200	\$ 20,800	\$ 26,000
Maintenance of Traffic	\$ -	\$ 1,000	\$ 4,000	\$ 5,000
Mobilization (5%)	\$ -	\$ 2,000	\$ 8,200	\$ 10,200
<b>CONSTRUCTION COST (rounded)</b>	\$ -	\$ 42,800	\$ 172,000	\$ 214,800
Engineering and Contingency (10%)	\$ -	\$ 4,300	\$ 17,200	\$ 21,500
<b>TOTAL CONSTRUCTION COST (rounded)</b>	\$ -	\$ 47,100	\$ 189,200	\$ 236,300
Preliminary Engineering (10%)	\$ -	\$ 4,700	\$ 18,900	\$ 23,600
<b>PROJECT COST <sup>2</sup>(rounded)</b>	\$ -	\$ 51,800	\$ 208,100	\$ 259,900

<sup>1</sup> For estimating purposes pay items are adjusted for fluxuation of cost based on quantity.

<sup>2</sup> For estimating future project costs, a compounded inflation rate of 7 % should be applied from the date of this estimate.

TDOT PAY ITEM	TDOT DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
-	Right-of-Way	LS	LS	\$ 5,000.00	\$ 5,000
<b>RIGHT-OF-WAY TOTAL (ROUNDED)</b>					<b>\$ 5,000</b>
201-01	Clearing and Grubbing	AC	1	\$ 600.00	\$ 600
<b>CLEAR AND GRUBBING TOTAL (ROUNDED)</b>					<b>\$ 600</b>
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	CY	366	\$ 3.75	\$ 1,372.50
203-03	Borrow Excavation (Unclassified)	CY	37	\$ 2.97	\$ 109.89
<b>EARTHWORK TOTAL (ROUNDED)</b>					<b>\$ 1,500</b>
202-03.01	Removal of Asphalt Pavement	SY		\$ 5.00	\$ -
415-01.02	Cold Planning Bituminous Pavement	SY		\$ 3.50	\$ -
<b>PAVEMENT REMOVAL TOTAL (ROUNDED)</b>					<b>\$ -</b>
209-08.02	Temporary Silt Fence (w/ backing)	LF	400	\$ 3.25	\$ 1,300
<b>DRAINAGE TOTAL (ROUNDED)</b>					<b>\$ 1,300</b>
	Removal of Existing Bridge	SF	660	\$ 15.00	\$ 9,900
	2 @ 18' X 12' Concrete Box Bridge	SF	836	\$ 105.00	\$ 87,780
<b>STRUCTURES TOTAL (ROUNDED)</b>					<b>\$ 97,700</b>
<b>Asphalt</b>					
411-03.10	ACS Mix (PG76-22) Grading D	TON	27.0	\$ 89.00	\$ 2,403
403-01	Bituminous Material for Tack Coat (TC)	TON	0.1	\$ 535.08	\$ 54
411-01.07	ACS Mix (PG64-22) Grading E Shoulder	TON		\$ 82.94	\$ -
402-01	Bituminous Material for Prime Coat (PC)	TON	0.6	\$ 365.52	\$ 219
402-02	Aggregate for Cover Material	TON	2.0	\$ 24.91	\$ 50
307-02.08	Asphalt Conc. Mix (PG70-22) Grading B-M2	TON	46	\$ 63.81	\$ 2,935
307-02.01	Asphalt Conc. Mix (PG70-22) Grading A	TON	70.2	\$ 60.63	\$ 4,256
307-02.02	Asphalt Conc. Mix (PG70-22) Grading A-S	TON		\$ 888.11	\$ -
303-01	Mineral Aggregate, TY A Base, Grading D	TON	2754.0	\$ 15.82	\$ 43,569
<b>PAVING TOTAL (ROUNDED)</b>					<b>\$ 53,500</b>
712-01	Traffic Control	LS		\$ 5,000.00	\$ 5,000
<b>MAINTENANCE OF TRAFFIC TOTAL (ROUNDED)</b>					<b>\$ 5,000</b>
203-07	Furnishing & Spreading Topsoil	CY		\$ 10.00	\$ -
<b>TOPSOIL TOTAL (ROUNDED)</b>					<b>\$ -</b>
801-01	Seeding (With Mulch)	UNIT	10	\$ 25.00	\$ 238
801-03	Water	MG	1	\$ 12.24	\$ 12
<b>SEEDING TOTAL (ROUNDED)</b>					<b>\$ 300</b>
	Signs	LS	2,000.0	\$ 2,000.00	\$ 2,000
<b>SIGNING TOTAL (ROUNDED)</b>					<b>\$ 2,000</b>
716-11.01	Spray Thermo Pvmt Mrkng (4" Line)	LM	0.10	\$ 1,100.00	\$ 110
<b>PAVEMENT MARKINGS TOTAL (ROUNDED)</b>					<b>\$ 100</b>
705-04.04	Type 21 End Treatment	EACH	4	\$ 1,763.00	\$ 7,052
<b>GUARDRAIL TOTAL (ROUNDED)</b>					<b>\$ 7,100</b>
709-05.06	Machined Rip-Rap (Class A-1)	TON	150	\$ 30.00	\$ 4,500
<b>RIP-RAP OR SLOPE PROTECTION TOTAL (ROUNDED)</b>					<b>\$ 4,500</b>



**STATE OF TENNESSEE**  
**DEPARTMENT OF TRANSPORTATION**  
**STRATEGIC TRANSPORTATION INVESTMENTS DIVISION**  
SUITE 1000, JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TN 37243  
(615) 741-2208

**JOHN C. SCHROER**  
COMMISSIONER

**BILL HASLAM**  
GOVERNOR

**MEMORANDUM**

**TO:** Steve Allen, Transportation Director  
Strategic Transportation Investments Division

**FROM:** David Duncan, Transportation Project Specialist  
Project Coordination and Investigation Office

**DATE:** April 30, 2014

**SUBJECT:** TPR Field Review (Special Bridge Replacement Program)  
County Line Road (0A308), Bridge over Branch  
Log Mile 0.24  
Crockett County  
PIN: 106005.00

A field review was held for the above-mentioned project on July 18, 2013.

The existing structure is a 2-span wooden bridge with an out-to-out width of 20.0 feet. The overall bridge length is 33 feet with approximately 11.9 feet for the vertical clearance. The sufficiency rating for this bridge is 33.0. The 10-year and 100-year discharges and depths of flow for the drainage basin were determined using the appropriate regression equations. It was determined that the 100-year flow depth is 7.7 feet and the 10-year flow depth is 5.6 feet.

The proposed alignment for this structure will remain on the existing centerline and profile. There is no posted speed limit on County Line Road; however, it will be designed to meet TDOT design standard RD01-TS-1A for a design speed of 20 mph. The proposed structure will be concrete box bridge with a total clearance of 12 feet. It is estimated that a small amount of ROW will be required to widen the bridge approaches and adjust the side slopes.

The route has a base year 2018 AADT of 20 and a design year 2038 AADT of 30. TDOT standard drawing RD01-TS-1A requires that the total traveled-way over the structure be 18 feet; however, the existing bridge's curb-to-curb width is nineteen (19) feet. It is recommended that

the proposed structure have curb-to-curb width of twenty (20) feet and an out-to-out width of twenty-two (22) feet.

Region 4 Traffic Operations recommends closing County Line Road during construction since detour time will be minimal (See Detour Map); it will also expedite the construction process. The recommended detour for County Line Road crosses into Haywood County shortly after the proposed bridge project; therefore, TDOT will need to coordinate with both counties for detouring traffic.

The required approach work, estimated replacement, and preliminary engineering costs for this bridge replacement are approximately \$259,900.

DD

cc: File

## CHECK LIST OF DETERMINANTS FOR LOCATION STUDY

If any of the following facilities or ESE categories are located within the project area or corridor, place an "x" in the blank opposite the item. Where more than one alternate is to be considered, place its letter designation in the blank.

1.	Agricultural land usage	X
2.	Airport (existing or proposed)	
3.	Commercial area, shopping center	
4.	Floodplains	
5.	Forested land	X
6.	Historical, cultural, or natural landmark	
7.	Industrial park, factory	
8.	Institutional usages	
	a. School or other educational institution	
	b. Church or other religious institution (Cemetery)	
	c. Hospital or other medical facility	
	d. Public building, e.g., fire station	
	e. Defense installation	
9.	Recreation usages	
	a. Park or recreational area	
	b. Game preserve or wildlife area	
10.	Residential establishment	
11.	Urban area, town, city, or community	
12.	Waterway, lake, pond, river, stream, spring	X
	Permit required:	
	Coast Guard	
	Section 404	X
	TVA Section 26a review	
	NPDES	X
	Aquatic Resource Alteration	X
13.	Other	
14.	Location coordinated with local officials	X
15.	Railroad crossings	
16.	Hazardous materials site	

**TENNESSEE DEPARTMENT OF TRANSPORTATION  
PROJECT PLANNING DIVISION**

PROJECT NO.: 99109-1453-04 ROUTE: County Line Road (0A308)  
 COUNTY: Crockett CITY: Alamo  
 PROJECT PIN NUMBER: 106005.00  
 PROJECT DESCRIPTION: Special Bridge Replacement Program  
Bridge over Branch  
L.M. 0.24

**DIVISION REQUESTING:**

MAINTENANCE  PAVEMENT DESIGN   
 PLANNING  STRUCTURES   
 PROG. DEVELOPMENT & ADM.  SURVEY & DESIGN   
 PUBLIC TRANS. & AERO.  TRAFFIC SIGNAL DESIGN   
 OTHER   
 YEAR PROJECT PROGRAMMED FOR CONSTRUCTION: \_\_\_\_\_  
 PROJECTED LETTING DATE: \_\_\_\_\_

**TRAFFIC ASSIGNMENT:**

BASE YEAR		DESIGN YEAR					DESIGN ROADWAY % TRUCKS		DESIGN AVERAGE DAILY LOADS	
AADT	YEAR	AADT	DHV	%	YEAR	DIR.DIST.	DHV	AADT	FLEX	RIGID
20	2018	30	6	20	2038	65-35	4	7		

REQUESTED BY: NAME Michael Gilbert DATE 5/21/13  
 DIVISION Planning  
 ADDRESS 10<sup>th</sup> Floor  
J.K. Polk Building

REVIEWED BY: TONY ARMSTRONG *Tony Armstrong* DATE 5-23-13  
 TRANSPORTATION MANAGER 1  
 SUITE 1000, JAMES K. POLK BUILDING

APPROVED BY: BILL HART *Bill Hart* DATE 5/23/13  
 TRANSPORTATION MANAGER 2  
 SUITE 1000, JAMES K. POLK BUILDING

**COMMENTS:**

This Traffic is based on 2005 Structure Count. The Future Traffic is based on ADAM Computer Program.

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

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

SEE ATTACHMENTS FOR TURNING MOVEMENTS AND/OR OTHER DETAILS.

(REV. 9/20/07)

TYPE	YEAR	COUNTY	FIGURE NO.
BRIDGE	2013	CROCKETT	1

**A) RIGHT-OF-WAY**  
 EXISTING R.O.W. ————  
 APPROX. REQUIRED R.O.W. ————

**B) REPLACEMENT STRUCTURE**  
 BOX BRIDGE: 2 @ 18' x 12'  
 BRIDGE LENGTH: 38 FT

**C) BRIDGE APPROACHES**  
 TWO (2) 9.5 FT TRAVEL LANES



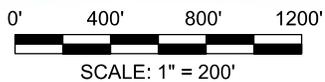
2/13/2014 10:03:24 AM X:\Projects\Crockett\County Line Road OA308\Bridge over Branch\Microstation\Proposed Alignment OA308.dgn



**BRIDGE REPLACEMENT**  
 COUNTY LINE RD. (OA308)  
 BRIDGE I.D. 107A3080001 (L.M. 0.24)  
 CROCKETT COUNTY

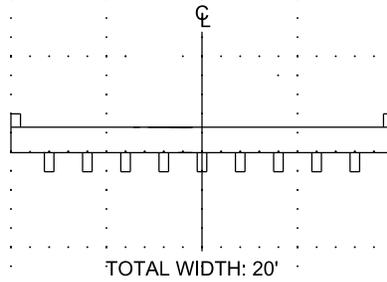
STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 PROJECT PLANNING DIVISION

FIGURE 1 OF 1  
 CO. LINE RD.  
 OA308  
 L.M. 0.24

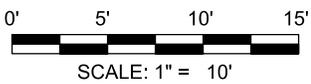
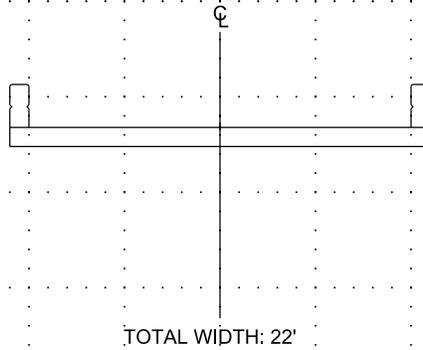


**DETOUR MAP**  
COUNTY LINE ROAD (0A308)  
BRIDGE OVER BRANCH @ L.M. 0.24  
CROCKETT COUNTY

EXISTING STRUCTURE



COMPLETED PROPOSED STRUCTURE



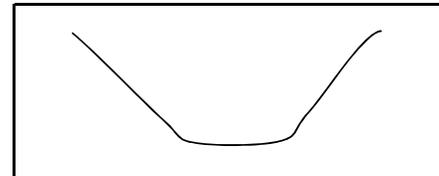
**STAGE CONSTRUCTION DETAIL**  
**COUNTY LINE ROAD (0A308) CROCKETT COUNTY**  
**BRIDGE OVER BRANCH L.M. 0.24**  
**BRIDGE ID 170A3080001**

## SITE INSPECTION

INSPECTION MADE BY: David Duncan BRIDGE ID: 170A3080001 COUNTY: Crockett  
 Date: 4/24/14 Route Name: County Line Road Stream Name: Branch

### CHANNEL

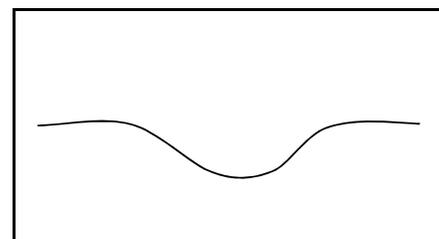
Approx depth and width of channel: Horizontal: 16' Vertical: 2.4'  
 Depth of normal flow: 2.5 In Reservoir:  Yes  No  
 Depth of Ordinary High Water: --  
 Type of material in stream bed: Silt  
 Type of vegetation on banks: Large Timber  
 "N" factor of the channel: 0.03  
 Are channel banks stable: Yes  No   
 Skew of the channel with the roadway: 90 °



Channel Shape Sketch

### FLOODPLAIN

Is the skew same as the channel?  Yes  No  
 Is it symmetrical about the channel?  Yes  No  
 Type of vegetation in the floodplain and "N" factors  
 Left U.S.: 0.15 Right U.S.: 0.15  
 Left D.S.: 0.15 Right D.S.: 0.15  
 Are roadway approaches lower than the structure?  Yes  No  
 Are there any buildings in the floodplain?  Yes  No  
 Approx. floor elevations: --  
 Flood information from local residents:  
 (elevations & dates) --



Floodplain Sketch

### EXISTING STRUCTURE

Length: 36' No. of spans: 2 Structure type: Wood Girder No. of lanes: 1 Skew: 90 °  
 Width (out to out): 20' Width (curb to curb): 19' Approach:  paved  graveled  
 Sidewalks on Structure:  Yes  No Bridgerail type: Timber Wheelguards Bridgerail height = 0.7'  
 Superstructure depth: 1.7' Finished Grade to low girder = 1' Girder depth = .7'  
 Are any substructures in the channel?  Yes  No Vertical Clearance = 12 ft  
 Indications of overtopping: None  
 High water marks: None  
 Local scour:  Yes, \_\_\_\_\_  No  
 Any signs of stream  aggradation or  degradation? \_\_\_\_\_  
 Any drift or drift potential?  Yes, \_\_\_\_\_  No  
 Any obstructions (pipes,stock fences,etc.)? \_\_\_\_\_

### PROPOSED STRUCTURE

Replacement  Rehabilitate  Widening  New Location  
 Bridge length: 38 ft Bridge type: Box Bridge Span arrangement: 2 @ 18' Skew: 90 °  
 Bridge width: 22 ft Sidewalks: None Design Speed (MPH): 20 ADT ( 2038 ) = 30  
 Proposed grade: Existing, will not change Proposed alignment: Existing, will not change  
 Method of maintaining traffic:  Stage construction  On site detour  Close road  Shift Centerline  
 Cost of proposed Structure: \$105 per ft<sup>2</sup> X 38 / 22.0 length (ft) / width (ft) Cost = \$87,800  
 Cost of bridge removal: \$15 per ft<sup>2</sup> X 33 / 20.0 length (ft) / width (ft) Cost = \$9,900  
 Detour structure: Type and size = \_\_\_\_\_ Cost = \_\_\_\_\_  
**Total Structure Cost = \$97,700**

**Bridge TPR Flow Calculations  
For Hydrologic Area 2  
Area > 300 Acres**

County: Crockett  
 Bridge ID: 170A3080001  
 Route: County Line Road (0A308)  
 Feature Crossed: Branch  
 Log Mile: 0.24

By: MG  
 Date: 2/4/14  
 PIN: 106005.00

**DRAINAGE BASIN**

Measurement from quad = 800 acres  
 Contributing Drainage Area, CDA = acres/640 = 1.25 sq. mi.

**USGS REGRESSION EQUATIONS FOR FLOW**

$Q_2 = 207(CDA)^{0.725} =$  243 cfs  
 $Q_5 = 344(CDA)^{0.715} =$  404 cfs  
 $Q_{10} = 444(CDA)^{0.711} =$  520 cfs  
 $Q_{25} = 578(CDA)^{0.708} =$  677 cfs  
 $Q_{50} = 682(CDA)^{0.706} =$  798 cfs  
 $Q_{100} = 788(CDA)^{0.705} =$  922 cfs

**DEPTH OF FLOW EQUATIONS**

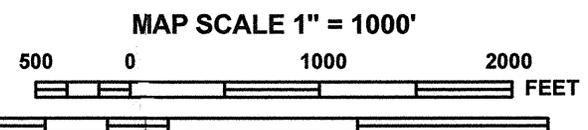
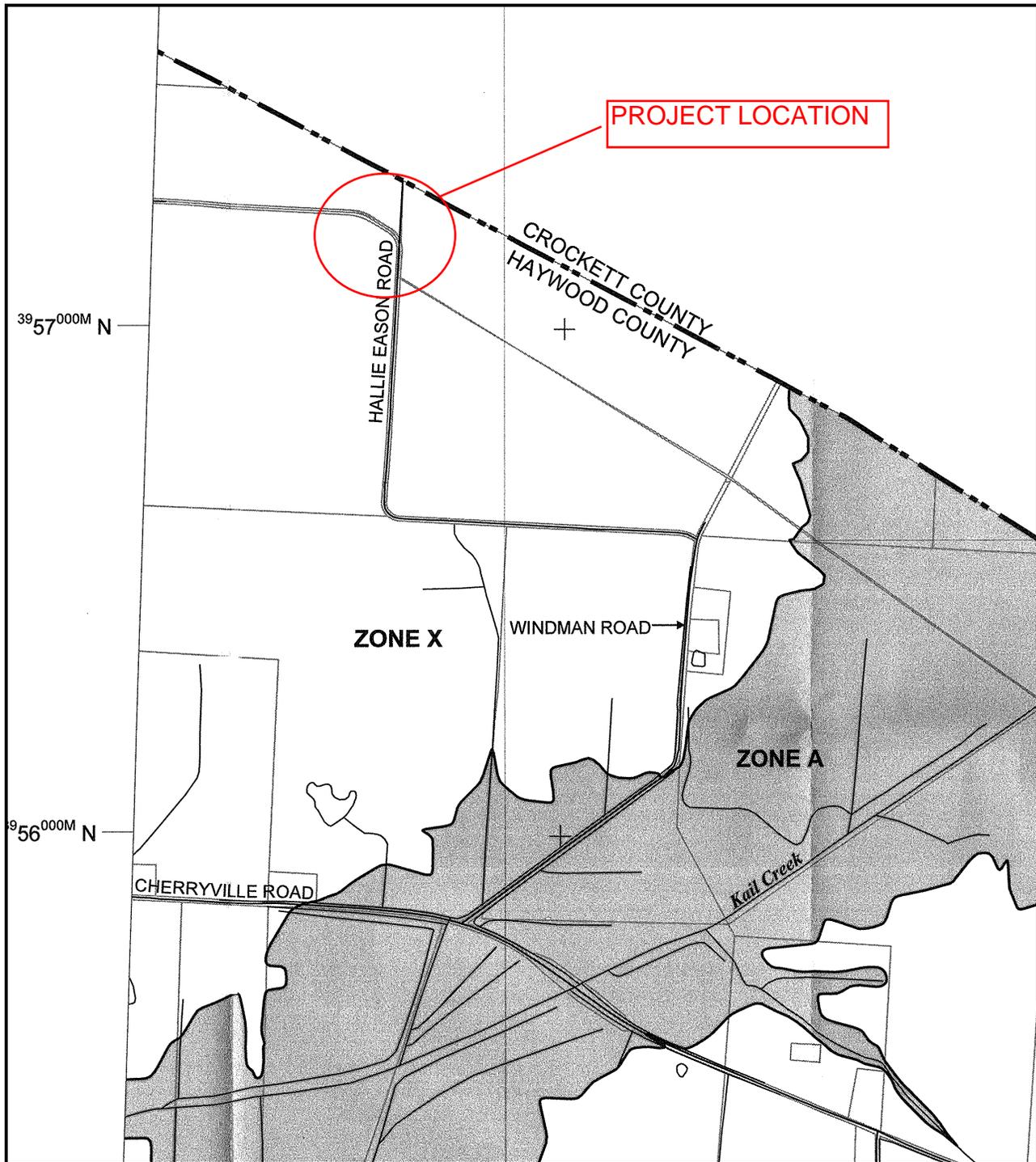
10-Year Flood Depth =  $5.33(CDA)^{0.197} =$  5.6 ft  
 100-Year Flood Depth =  $7.43(CDA)^{0.181} =$  7.7 ft

**AREAS**

Existing Area Below Low Chord = 566 ft<sup>2</sup>  
 Proposed Area Below Low Chord = 570 ft<sup>2</sup>  
 Proposed 10-Year Flood Area,  $A_{10} =$  183 ft<sup>2</sup>  
 Proposed 100-Year Flood Area,  $A_{100} =$  303 ft<sup>2</sup>

**VELOCITIES**

Proposed 10-Year Flood Velocity,  $V_{10} = Q_{10}/A_{10} =$  2.8 fps  
 Proposed 100-Year Flood Velocity,  $V_{100} = Q_{100}/A_{100} =$  3.0 fps



PANEL 0135D

**FIRM**  
**FLOOD INSURANCE RATE MAP**

**HAYWOOD COUNTY,  
 TENNESSEE  
 AND INCORPORATED AREAS**

**PANEL 135 OF 400**  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
HAYWOOD COUNTY	470227	0135	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

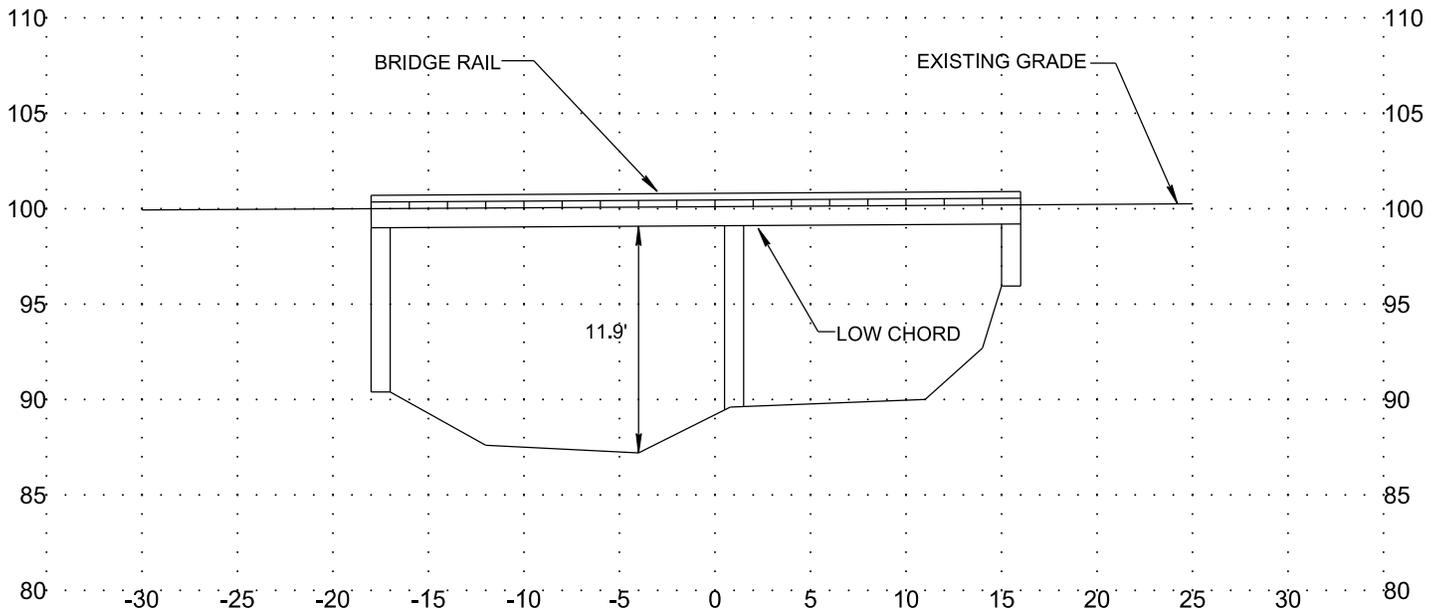


**MAP NUMBER**  
**47075C0135D**  
**EFFECTIVE DATE**  
**APRIL 16, 2008**

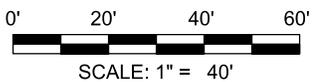
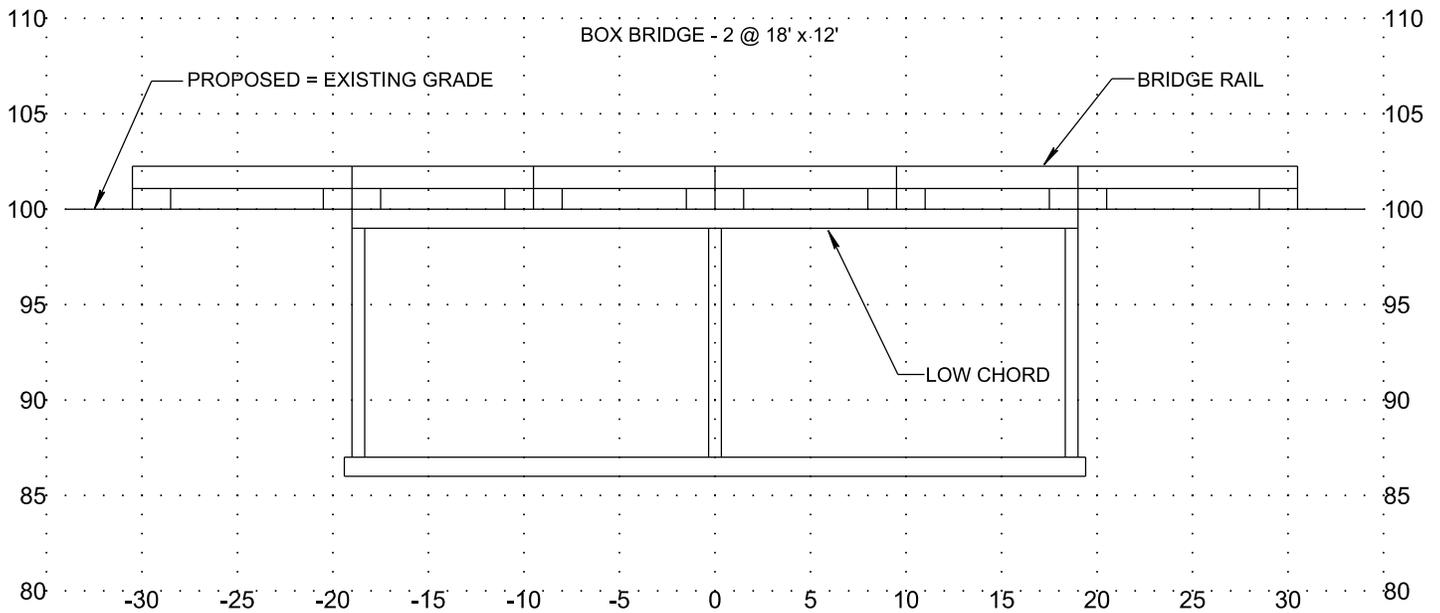
**Federal Emergency Management Agency**

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

### EXISTING STRUCTURE (INLET)



### PROPOSED STRUCTURE (INLET)



**BRIDGE SECTIONS**  
**COUNTY LINE ROAD (0A308) CROCKETT COUNTY**  
**BRIDGE OVER BRANCH @ L.M. 0.27**  
**BRIDGE ID: 170A3080001**

Crockett County, County Line Road (0A308), L.M. 0.24  
Bridge ID: 170A3080001



LEFT



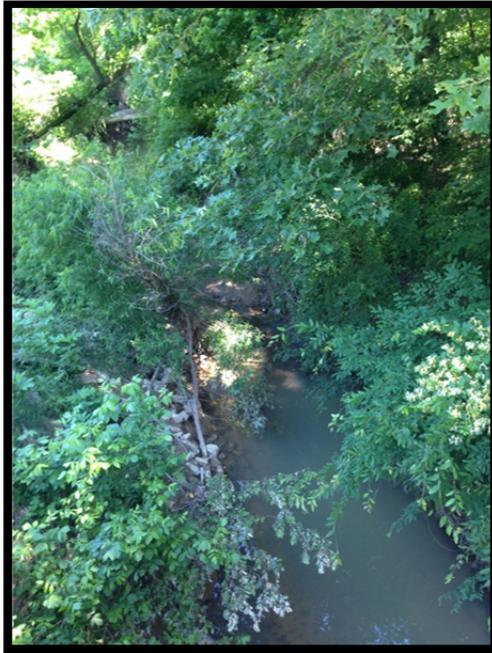
DOWNSTREAM



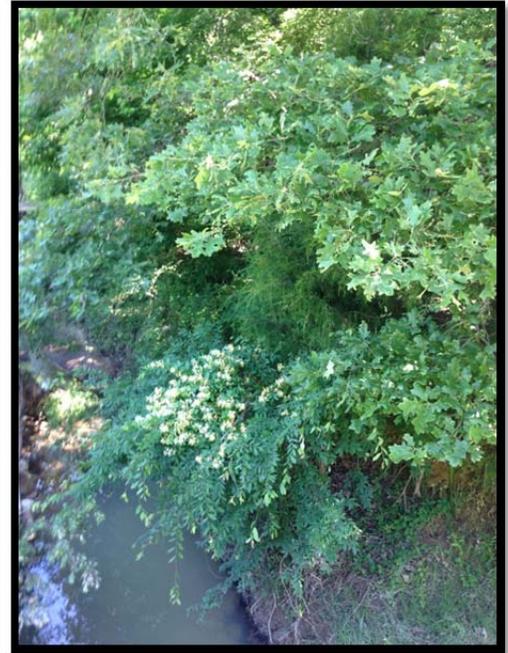
RIGHT



LEFT



UPSTREAM



RIGHT



Eastbound Approach

Looking East



Eastbound Approach

Looking West



Westbound Approach

Looking West



Westbound Approach

Looking East

Crockett County, County Line Road (0A308), L.M. 0.24  
Bridge ID: 170A3080001



INLET



OUTLET



COUNTY/ROUTE/LOG MILE



RIGHT SIDE VIEW



ABUTMENT 1



ABUTMENT 2



BENT 1



BOTTOM OF DECK SPAN 1