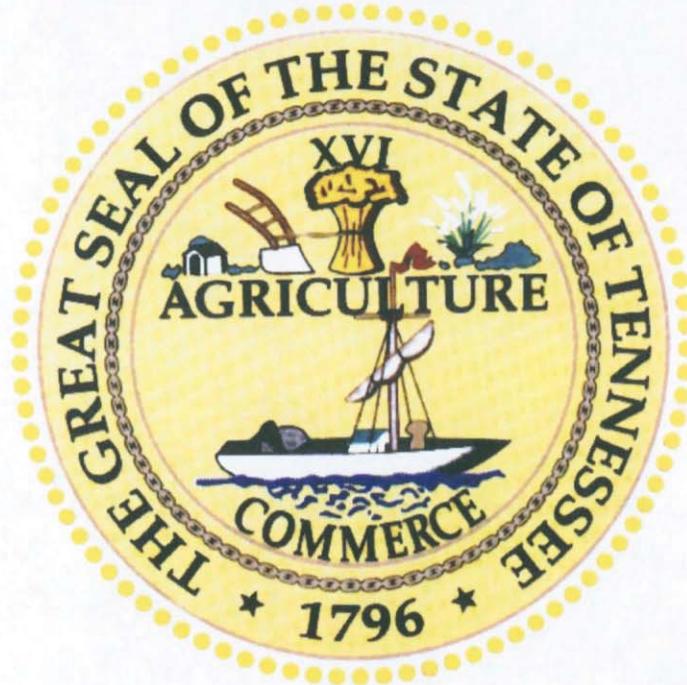
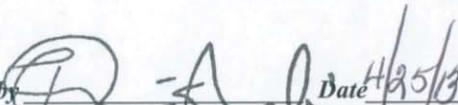


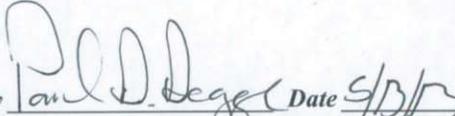
# TRANSPORTATION PLANNING REPORT

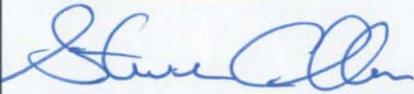
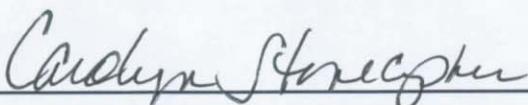
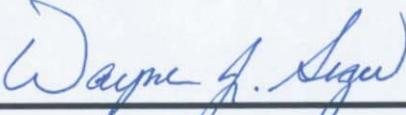
*Special Bridge Replacement Program*  
LOCAL ROUTE 0A593 – BRIMSTONE CREEK RD.  
BRIDGE OVER BRIMSTONE CREEK @ L.M. 1.31  
CLAY COUNTY  
PIN: 010685.00



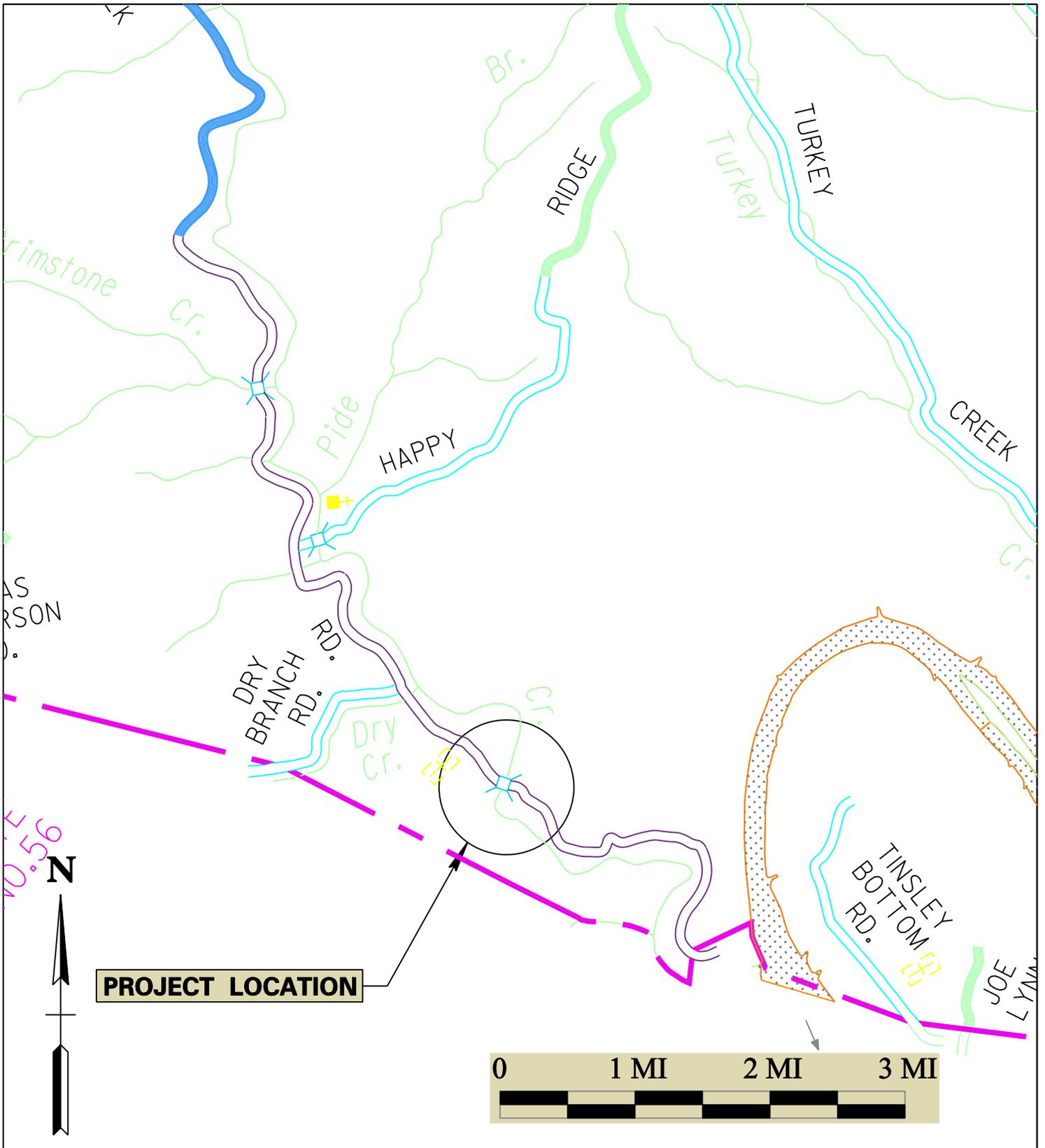
PREPARED BY  
TENNESSEE DEPARTMENT OF TRANSPORTATION  
PROJECT PLANNING DIVISION

Approved by:  Date 4/25/13  
Chief of Environment and Planning

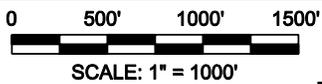
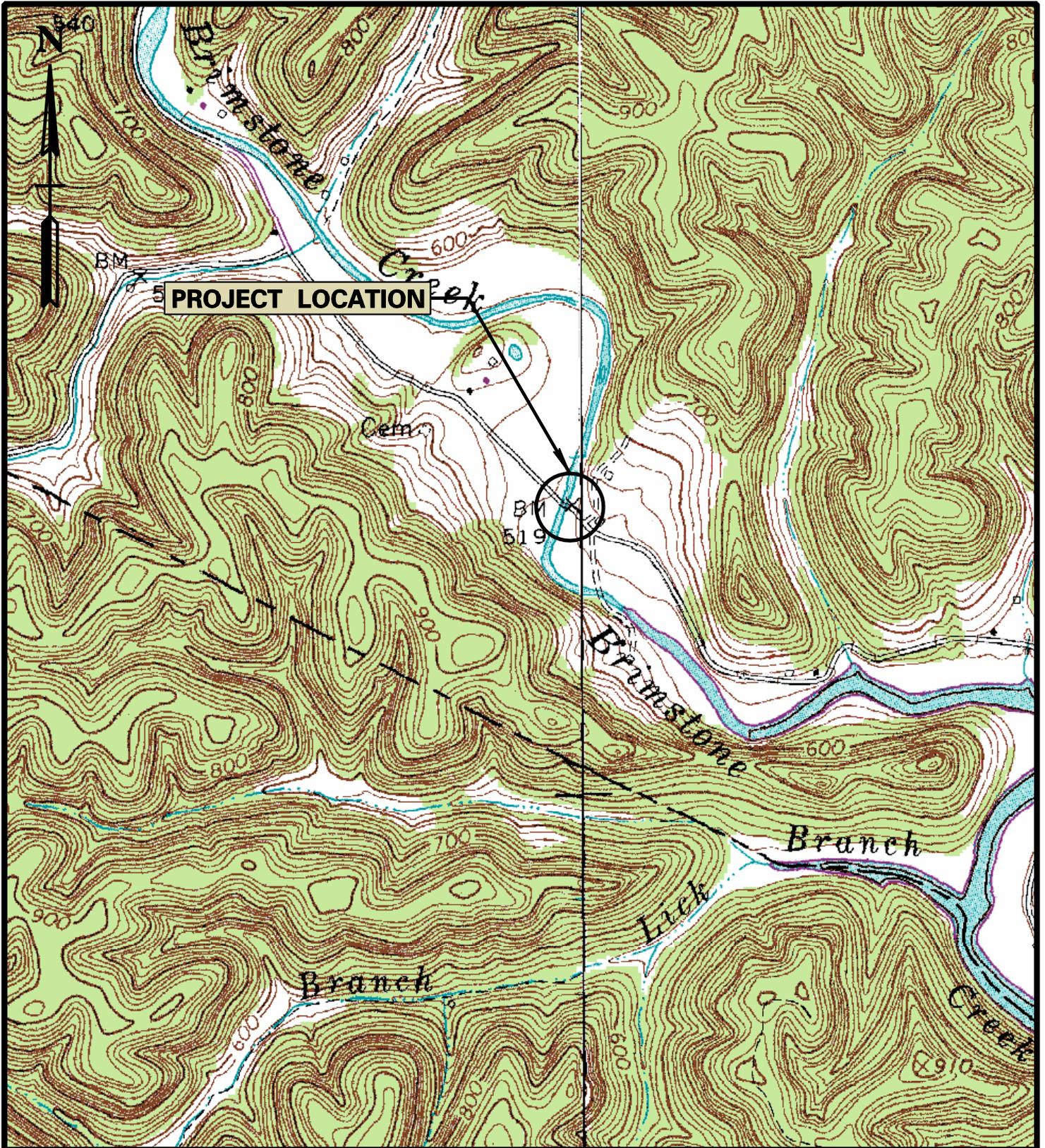
Approved by:  Date 5/13/13  
Deputy Commissioner and Chief Engineer

Approved by:	Signature	DATE
Transportation Director Project Planning Division		4-11-13
Engineering Director Design Division		4-18-13
Engineering Director Structures Division		4-22-13

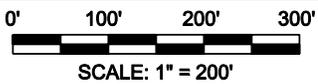
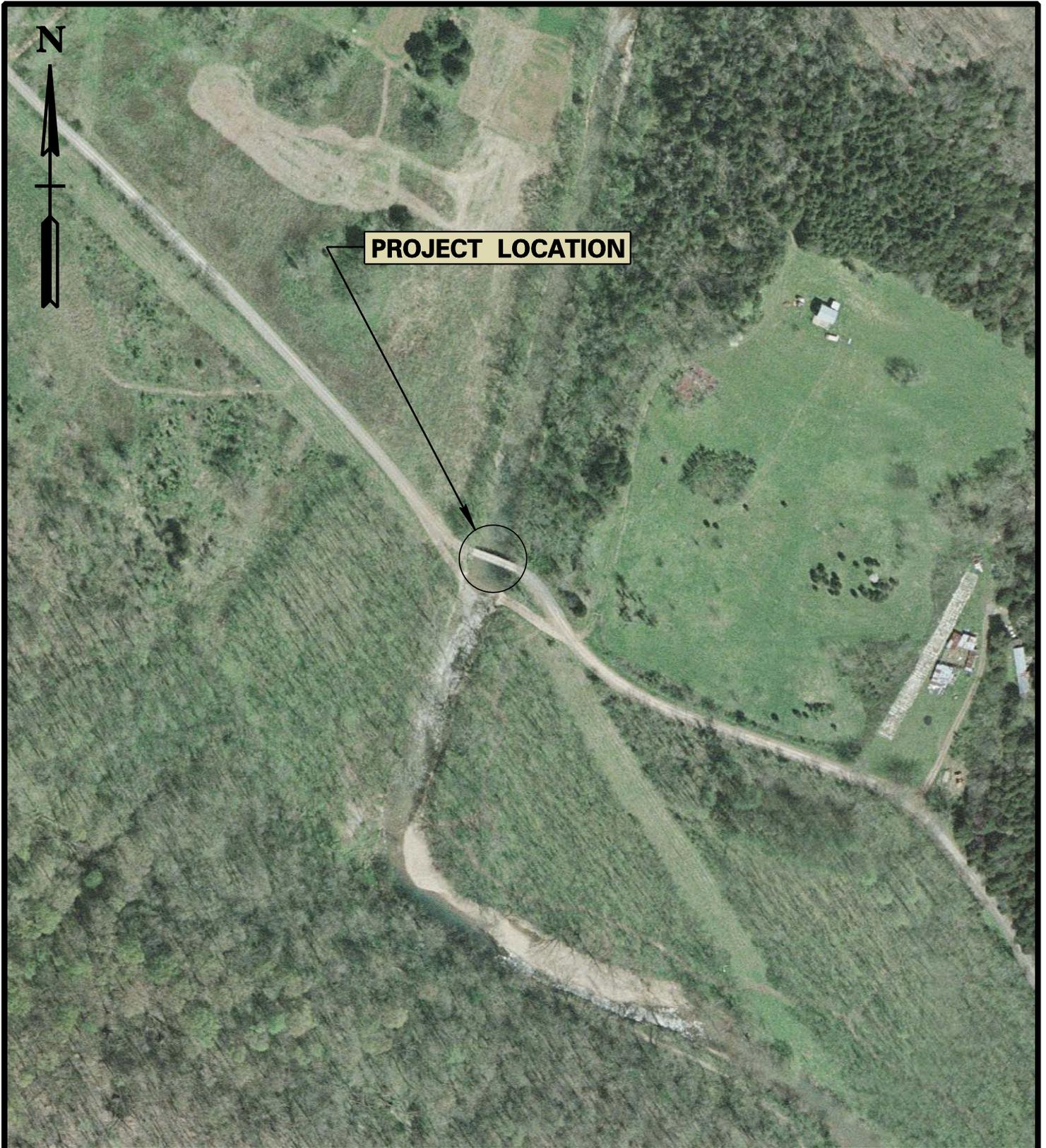
*This document is covered by 23 USC § 409 and its production pursuant to fulfilling public planning requirements does not waive the provisions of § 409.*



**AREA MAP**  
**BRIMSTONE RD. (0A593) CLAY COUNTY**  
**BRIDGE OVER BRIMSTONE CREEK @ L.M. 1.31**  
**BRIDGE ID 14022520001**



**PROJECT MAP**  
**BRIMSTONE CREEK RD. (0A593) CLAY COUNTY**  
**BRIDGE OVER BRIMSTONE CREEK @ L.M. 1.31**  
**BRIDGE ID 14022520001**



**AERIAL MAP**  
**BRIMSTONE CREEK RD. (0A593) CLAY COUNTY**  
**BRIDGE OVER BRIMSTONE CREEK @ L.M. 1.31**  
**BRIDGE ID 14022520001**

**TRANSPORTATION PLANNING WORKSHEET  
BRIDGE REPLACEMENT ANALYSIS, NEEDS, AND COSTS**

County: Clay Route: Brimstone Creek Rd. (0A593) Log Mile: 1.31  
 Feature Crossed: Brimstone Creek Rd. System: Local  
 Functional Class: Rural / LOCAL Bridge ID: 14022520001

**EXISTING CONDITIONS**

2017 AADT: 310 App. Cross Section: 14' / 18' / 40' No. Lanes: 1  
 Approach Alignment: Curve on both approaches Year Built: 1940 Load Limit: H0  
 Width (out to out): 12.1' Sidewalks: Right -- Left -- Length: 69  
 No. Spans: Approach: -- Main: 1  
 Substructure: Concrete Abutments/Piers Vertical Clearance: 14' Sufficiency Rating: 4.3  
 Other: Superstructure was destroyed in 2010 May flood. Temporary superstr. was built on existing substructure.

**PROPOSED IMPROVEMENTS**

STANDARDS FROM RD01-TS- 1A Type of Work: Replace  
 Design Year: 2037 Design AADT: 370 Terrain Rolling ADL (F): -- (R): --  
 Project Length: 625' Bridge Length: 125 ft Approach Length: 2 @ 250'  
 Design Speed (MPH): 20 Posted Speed (MPH): N/A  
 Approach Width: 18' / 18'/ As Req'd Bridge Width (O to O): 23 ft No. Lanes: 2  
 Right-of-Way Required: 4 (0.9 acres) Tract(s) Structure Type: Prestressed Concrete

**MAINTENANCE OF TRAFFIC**

Temporary Detour:  Temporary Runaround:  Stage Construct:   
 Alternate Route: none

Remarks: Shift centerline approximately 30 feet. The existing structure is to remain open and serve as a temporary runaround until proposed structure is completed. When the new bridge opens, the existing structure will be demolished.

**ESTIMATED COST**

Right-of-Way: \$35,000 Approaches: \$206,000 Structure: \$443,800  
 Preliminary Engineering: \$96,500 Utilities: \$44,000 Misc./Cont.: \$194,000  
 Mobilization: \$41,800 Total: \$1,061,100

Remarks: Pavement width to be increased to 20 ft over the structure and 18 ft on the approaches to meet design standard RD01-TS-1A. The current grade is to be raised approx. 3.9' in order to improve the clearance. Utilities will require relocation and R.O.W. will also be acquired (1.3 acres).

Field Investigation by: Robert Hamilton Jr. (Reg. 2 Survey), Barry McClendon (Reg. 2 Survey), Gary Chapman (Reg. 2 Survey), Landon Castelberry (Reg. 2 Traffic), Alan Wolfe (Reg. 2 Traffic), Ernest Garrison (Clay Cnty Hwy. Dept.), Lori Krauss (Center Hill / Dale Hollow RPO), David D. Duncan (TDOT Planning), Mike Gilbert (TDOT Planning)

Route:	Brimstone Creek Rd. (0A593)
Description:	Bridge over Brimstone Creek (14022520001)
	L.M. 1.31
County:	CLAY
Length:	625 FT
Date:	August 27, 2012

<u>DESCRIPTION</u>	<u>LOCAL</u>	<u>STATE</u>	<u>FEDERAL</u>	<u>TOTAL</u>
Right-of-Way	\$ 7,000	\$ -	\$ 28,000	\$ 35,000
Clearing and Grubbing	\$ 6,000	\$ -	\$ 24,000	\$ 30,000
Earthwork	\$ 7,500	\$ -	\$ 30,000	\$ 37,500
Railroad Crossing or Separation	\$ -	\$ -	\$ -	\$ -
Drainage	\$ 920	\$ -	\$ 3,680	\$ 4,600
Utilities	\$ 8,800	\$ -	\$ 35,200	\$ 44,000
Structures	\$ 88,800	\$ -	\$ 355,000	\$ 443,800
Pavement Removal	\$ -	\$ -	\$ -	\$ -
Paving	\$ 11,800	\$ -	\$ 47,100	\$ 58,900
Roadway and Pavement Appurtenances	\$ -	\$ -	\$ -	\$ -
Retaining Walls	\$ -	\$ -	\$ -	\$ -
Topsoil	\$ 700	\$ -	\$ 2,800	\$ 3,500
Seeding	\$ 1,220	\$ -	\$ 4,880	\$ 6,100
Sodding	\$ 800	\$ -	\$ 3,200	\$ 4,000
Rip-Rap or Slope Protection	\$ 6,000	\$ -	\$ 24,000	\$ 30,000
Fencing	\$ -	\$ -	\$ -	\$ -
Signing	\$ -	\$ -	\$ -	\$ -
Pavement Markings	\$ -	\$ -	\$ -	\$ -
Lighting	\$ -	\$ -	\$ -	\$ -
Signalization	\$ -	\$ -	\$ -	\$ -
Guardrail	\$ 2,300	\$ -	\$ 9,100	\$ 11,400
Other Construction Items (15%)	\$ 21,300	\$ -	\$ 85,000	\$ 106,300
Maintenance of Traffic	\$ 4,000	\$ -	\$ 16,000	\$ 20,000
Mobilization (5%)	\$ 8,400	\$ -	\$ 33,400	\$ 41,800
CONSTRUCTION COST (rounded)	\$ 175,500	\$ -	\$ 701,400	\$ 876,900
Engineering and Contingency (10%)	\$ 17,600	\$ -	\$ 70,100	\$ 87,700
TOTAL CONSTRUCTION COST (rounded)	\$ 193,100	\$ -	\$ 771,500	\$ 964,600
Preliminary Engineering (10%)	\$ 19,300	\$ -	\$ 77,200	\$ 96,500
<b>PROJECT COST <sup>1</sup>(rounded)</b>	<b>\$212,400</b>	<b>\$ -</b>	<b>\$ 848,700</b>	<b>\$1,061,100</b>

<sup>1</sup> For estimating future project costs, a compounded inflation rate of 10 % should be applied from the date of this estimate.

TDOT PAY ITEM	TDOT DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
-	Right-of-Way (0.9 Acres)	LS	LS	\$ 35,000.00	\$ 35,000
<b>RIGHT-OF-WAY TOTAL (ROUNDED)</b>					<b>\$ 35,000</b>
201-01	Clearing and Grubbing	LS	LS	\$ 30,000.00	\$ 30,000
<b>CLEAR AND GRUBBING TOTAL (ROUNDED)</b>					<b>\$ 30,000</b>
203-03	Borrow Excavation (Unclassified)	CY	2500	\$ 15.00	\$ 37,500
<b>EARTHWORK TOTAL (ROUNDED)</b>					<b>\$ 37,500</b>
<b>PAVEMENT REMOVAL TOTAL (ROUNDED)</b>					<b>\$ -</b>
209-08.02	Temporary Silt Fence (w/ backing)		1400	\$ 3.25	\$ 4,550
<b>DRAINAGE TOTAL (ROUNDED)</b>					<b>\$ 4,600</b>
---	Above Ground Utilities	LF	2400	\$ 10.00	\$ 24,000
770-18.10	35FT Wood Pole	EA	4	\$ 5,000.00	\$ 20,000
<b>UTILITIES TOTAL (ROUNDED)</b>					<b>\$ 44,000</b>
---	Removal of Existing Bridge	SF	835	\$ 15.00	\$ 12,525
---	125' (3 Span) Prestressed Concrete Bridge	SF	2,875	\$ 150.00	\$ 431,250
<b>STRUCTURES TOTAL (ROUNDED)</b>					<b>\$ 443,800</b>
<b>Asphalt</b>					
--	Full Depth Paving	SY	1100	\$ 40.00	\$ 44,000
403-01	Bituminous Material for Tack Coat (TC)	TON	0.5	\$ 480.00	\$ 240
303-01	Mineral Aggregate, TY A Base, Grading D	TON	977.4	\$ 14.93	\$ 14,593
<b>PAVING TOTAL (ROUNDED)</b>					<b>\$ 58,900</b>
<b>RETAINING WALLS TOTAL (ROUNDED)</b>					<b>\$ -</b>
712-01	Traffic Control	LS		\$ 20,000.00	\$ 20,000
<b>MAINTENANCE OF TRAFFIC TOTAL (ROUNDED)</b>					<b>\$ 20,000</b>
203-07	Furnishing & Spreading Topsoil	CY	350	\$ 10.00	\$ 3,500
<b>TOPSOIL TOTAL (ROUNDED)</b>					<b>\$ 3,500</b>
801-01	Seeding (With Mulch)	UNIT	150	\$ 40.00	\$ 6,000
801-03	Water	MG	5	\$ 7.00	\$ 35
<b>SEEDING TOTAL (ROUNDED)</b>					<b>\$ 6,100</b>
803-01	Sodding (New Sod)	SY	1,000	\$ 4.00	\$ 4,000
<b>SODDING TOTAL (ROUNDED)</b>					<b>\$ 4,000</b>
<b>SIGNING TOTAL (ROUNDED)</b>					<b>\$ -</b>
<b>PAVEMENT MARKINGS TOTAL (ROUNDED)</b>					<b>\$ -</b>
<b>LIGHTING TOTAL (ROUNDED)</b>					<b>\$ -</b>
<b>SIGNALIZATION TOTAL (ROUNDED)</b>					<b>\$ -</b>
<b>FENCE TOTAL (ROUNDED)</b>					<b>\$ -</b>
705-02.02	Single Guardrail (Type 2)	LF	275	\$ 15.55	\$ 4,276
705-04.04	Guardrail Terminal (Type 21)	EACH	4	\$ 1,773.47	\$ 7,094
<b>GUARDRAIL TOTAL (ROUNDED)</b>					<b>\$ 11,400</b>
709-05.06	Machined Rip-Rap (Class A-1)	TON	1,000	\$ 30.00	\$ 30,000
<b>RIP-RAP OR SLOPE PROTECTION TOTAL (ROUNDED)</b>					<b>\$ 30,000</b>



STATE OF TENNESSEE  
**DEPARTMENT OF TRANSPORTATION**  
NASHVILLE, TENNESSEE 37243-0350

**MEMORANDUM**

**TO:** Project Planning Office

**FROM:** Mike Gilbert, Roadway Specialist II  
Conceptual Planning Office

**DATE:** March 5, 2013

**SUBJECT:** TPR Field Review (Special Bridge Replacement Program)  
Brimstone Creek Rd. (0A593) over Brimstone Creek  
Log Mile 1.31  
Clay County  
Pin #: 010685.00

A field review was held for the above-mentioned project on July 31, 2012.

The existing bridge consists of a three (3) span, steel I-beam structure with an out-to-out width of 12.1 feet. The overall bridge length is 69 feet and the sufficiency rating for this bridge is 4.3. 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 13.3 feet and the 10-year flow depth is 10 feet.

The proposed alignment is to be shifted approximately thirty (30) feet to the south and the grade for this structure is to be raised 3.9 feet. The increase in grade will increase the clearance from fourteen (14) feet to fifteen (15) feet. The existing superstructure is temporary due to the old superstructure being destroyed during the May 2010 flood. As a result of shifting the centerline, the existing structure will remain open during construction, the alignment will improve, and the approaches will be on more of a tangent section as opposed to the existing curves on each approach. All other options for maintaining traffic during construction were eliminated due to the current alignment of the structure and the shifting of the centerline improving the current alignment of each approach. Approximately 1.3 acres of right-of-way will be acquired due to shifting the centerline and overhead utilities will also to be relocated as well. There are no existing utilities attached to the structure.

The route has a base year (2017) AADT of 310 and a design year (2037) AADT of 370. The bridge over Brimstone Creek will be designed to meet Road Design Standard RD01-

TS-1A (ADT  $\leq$ 400). The structure is to consist of a three (3) span prestressed concrete structure with one (1) span measuring seventy-five (75) feet and the two (2) others measuring twenty-five (25) feet each. The total length of the structure will be one-hundred and twenty-five (125) feet. The structure is also to contain two (2) ten (10) foot lanes for a total out-to-out width of twenty-three (23) feet. The approaches to the structure will each be eighteen (18) feet wide.

The required approach work, utility relocations, estimated replacement cost, and preliminary engineering for this bridge are approximately \$1,061,100. (Local match required is approximately \$212,400).

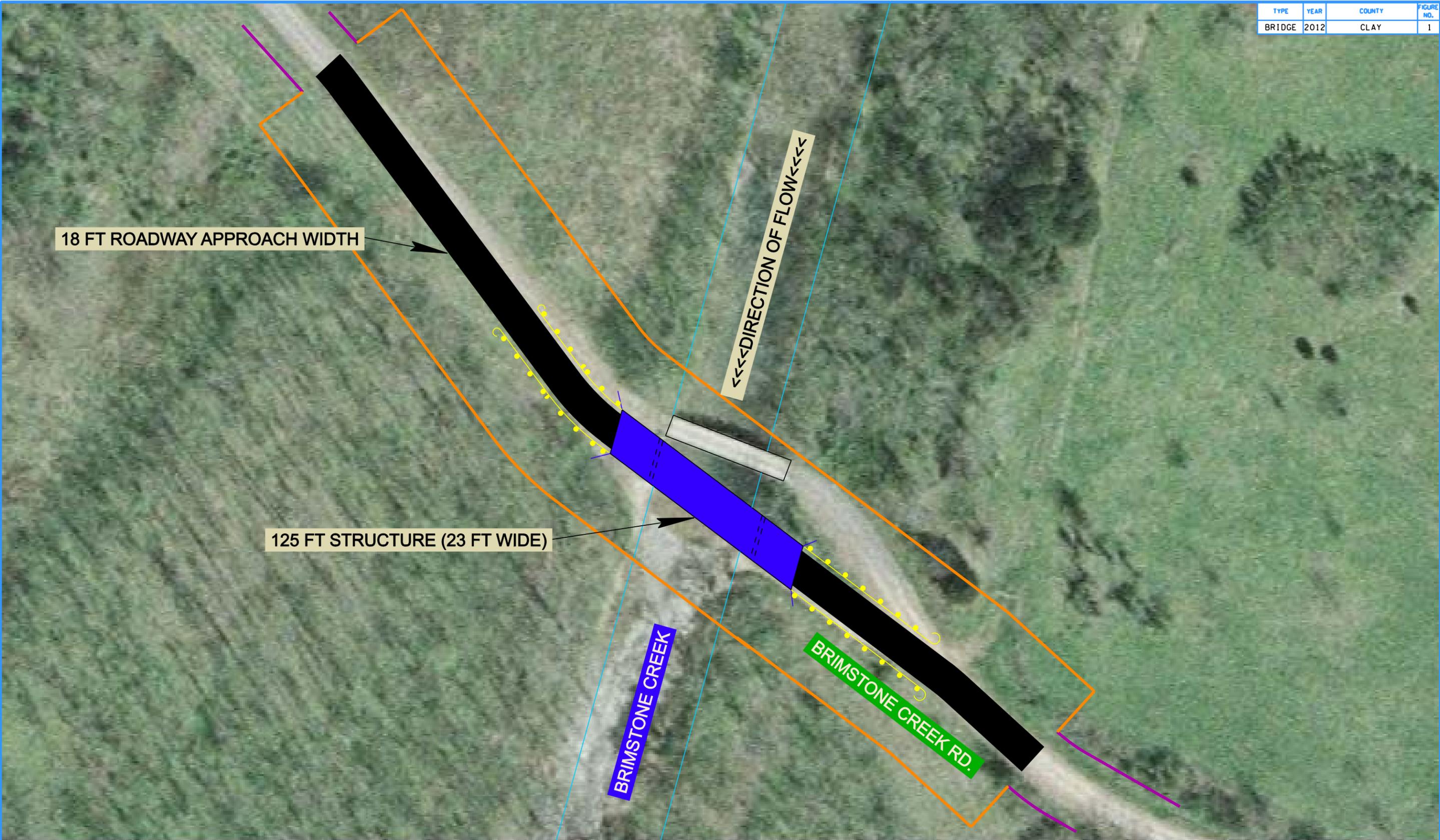
MG

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	<b>X</b>
2.	Airport (existing or proposed)	
3.	Commercial area, shopping center	
4.	Floodplains	<b>X</b>
5.	Forested land	
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	<b>X</b>
	Permit required: Coast Guard	
	Section 404	<b>X</b>
	TVA Section 26a review	
	NPDES	<b>X</b>
	Aquatic Resource Alteration	<b>X</b>
13.	Other	
14.	Location coordinated with local officials	<b>X</b>
15.	Railroad crossings	
16.	Hazardous materials site	



18 FT ROADWAY APPROACH WIDTH

125 FT STRUCTURE (23 FT WIDE)

←←←DIRECTION OF FLOW←←←

BRIMSTONE CREEK

BRIMSTONE CREEK RD.

8/9/2012 11:36:38 AM  
X:\Projects\Clay\Brimstone Rd (0A593)\Bridge over Brimstone Creek (L.M. 1.31)\Microstation\Proposed Alignment.dgn



### BRIDGE REPLACEMENT

BRIMSTONE CREEK RD. (0A593)  
BRIDGE I.D. 14022520001 (L.M. 1.31)  
CLAY COUNTY

**TENNESSEE DEPARTMENT OF TRANSPORTATION  
PROJECT PLANNING DIVISION**

PROJECT NO.: \_\_\_\_\_ ROUTE: Brimstone Rd. (0A593)  
 COUNTY: Clay CITY: Celina  
 PROJECT PIN NUMBER: 010685.00  
 PROJECT DESCRIPTION: Special Bridge Replacement Program  
Bridge over Brimstone Creek  
L.M. 1.31

**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			DIR. DIST.	DESIGN ROADWAY % TRUCKS		DESIGN AVERAGE DAILY LOADS	
	AADT	DHV	%		DHV	AADT	FLEX	RIGID
310	370	52	14	2037	65-35	2	3	

REQUESTED BY: NAME Michael Gilbert DATE 4/12/12  
 DIVISION Planning  
 ADDRESS 10<sup>th</sup> Floor  
J.K. Polk Bldg

REVIEWED BY: Tony Armstrong DATE 4-20-12  
 TONY ARMSTRONG  
 TRANSPORTATION MANAGER 1  
 SUITE 1000, JAMES K. POLK BUILDING

APPROVED BY: Dudley Daniel DATE 20 Apr 12  
 DUDLEY DANIEL  
 TRANSPORTATION MANAGER 2  
 SUITE 1000, JAMES K. POLK BUILDING

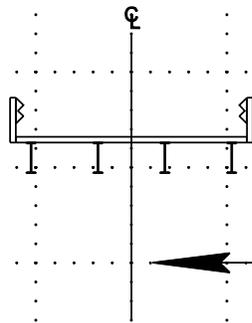
**COMMENTS:**

This Traffic Based on 2011 Cycle Count. The Future Traffic is based on Growth Rate from the ADAM Computer Program.

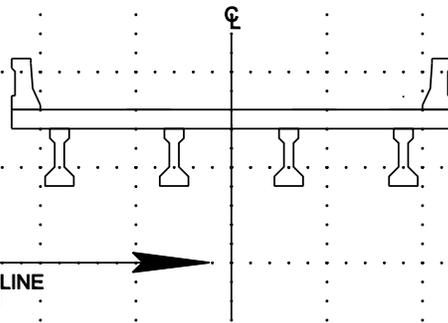
**DHV'S ARE NOT REQUIRED FOR SIDE ROADS LESS THAN 1000 AADT.**

NOTE: FOR BRIDGE REPLACEMENT PROJECTS, ADLs ARE NOT REQUIRED FOR ADTs OF 1000 OR LESS AND PERCENTAGE OF TRUCKS OF 7% OR LESS.  
 SEE ATTACHMENTS FOR TURNING MOVEMENTS AND/OR OTHER DETAILS.

EXISTING  
STRUCTURE

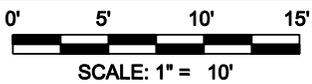


COMPLETED PROPOSED  
STRUCTURE



SHIFT CENTERLINE  
30' SOUTH

TOTAL WIDTH: 23.0'



**STAGE CONSTRUCTION DETAIL**  
**BRIMSTONE RD. (0A593) CLAY COUNTY**  
**BRIDGE OVER BRIMSTONE CREEK @ L.M. 1.31**  
**BRIDGE ID 14022520001**

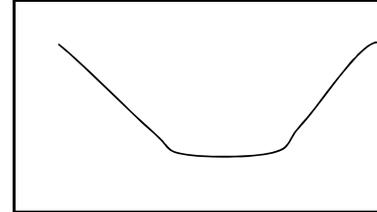


## SITE INSPECTION

INSPECTION MADE BY: Mike Gilbert BRIDGE ID: 14022520001 COUNTY: Clay  
 Date: 8/9/12 Route Name: Brimstone Creek Rd. (0A593) Stream Name: Brimstone Creek Rd. @ L.M. 1.31

### CHANNEL

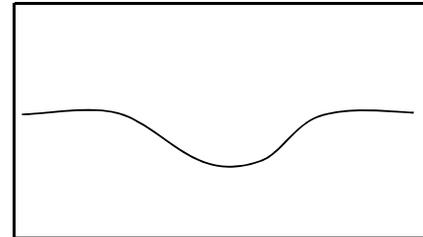
Approx depth and width of channel: Horizontal: 55' Vertical: 10'  
 Depth of normal flow: 1.5' In Reservoir:  Yes  No  
 Depth of Ordinary High Water: >14' (May 2010)  
 Type of material in stream bed: Earth Channel (Clean)  
 Type of vegetation on banks: grass/weeds  
 "N" factor of the channel: 0.022  
 Are channel banks stable:  Yes  No  
 If the streambed is gravel:  $D_{30} =$  --  $D_{85} =$  --  
 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.: Trees - 0.15 Right U.S.: Trees - 0.15  
 Left D.S.: Trees - 0.15 Right D.S.: Trees - 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: 69' No. of spans: 3 Structure type: Steel I-Beam No. of lanes: 1 Skew: 90°  
 Width (out to out): 12.1' Width (curb to curb): 10.2' Approach:  paved  graveled  
 Sidewalks on Structure:  Yes  No Bridgerail type: Guardrail Bridgerail height = 2.3'  
 Superstructure depth: 4.1' Finished Grade to low girder = 1.8' Girder depth = 1.5'  
 Are any substructures in the channel?  Yes  No Vertical Clearance = 14 ft  
 Indications of overtopping: Yes, previous superstructure destroyed in 2010 May Flood  
 High water marks: Low Chord (2010 May Flood)  
 Local scour:  Yes, \_\_\_\_\_  No  
 Any signs of stream  aggradation or  degradation? None  
 Any drift or drift potential?  Yes, \_\_\_\_\_  No  
 Any obstructions (pipes, stock fences, etc.)? None

### PROPOSED STRUCTURE

Replacement  Rehabilitate  Widening  New Location  
 Bridge length: 125 ft Bridge type: Prestressed Conc. Span arrangement: 2 @ 25' & 1 @ 75' Skew: 80°  
 Bridge width: 23.0 ft Sidewalks: No Design Speed (MPH): 20 ADT ( 2037 ) = 370  
 Proposed grade: Raise 3.9 ft Proposed alignment: Shift Approx. 30 ft South of Exist. Struct.  
 Method of maintaining traffic:  Stage construction  On site detour  Close road  Shift Centerline 30 ft south  
 Cost of proposed Structure: \$150 per ft<sup>2</sup> X 125 / 23.0 length (ft) / width (ft) Cost = \$431,300  
 Cost of bridge removal: \$15 per ft<sup>2</sup> X 69 / 12.1 length (ft) / width (ft) Cost = \$12,500  
 Detour structure: Type and size = N/A Cost = \$0  
**Total Structure Cost = \$443,800**

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

County: Clay  
Bridge ID: 14022520001  
Route: Brimstone Creek Rd. (0A593)  
Feature Crossed: Brimstone Creek  
Log Mile: 1.31

By: MG  
Date: 7/26/12  
PIN: 010685.00

**DRAINAGE BASIN**

Measurement from quad = 15,860 acres  
Contributing Drainage Area, CDA = acres/640 = 24.78 sq. mi.

**USGS REGRESSION EQUATIONS FOR FLOW**

$Q_2 = 207(CDA)^{0.725} = 2,122$  cfs  
 $Q_5 = 344(CDA)^{0.715} = 3,415$  cfs  
 $Q_{10} = 444(CDA)^{0.711} = 4,351$  cfs  
 $Q_{25} = 578(CDA)^{0.708} = 5,610$  cfs  
 $Q_{50} = 682(CDA)^{0.706} = 6,577$  cfs  
 $Q_{100} = 788(CDA)^{0.705} = 7,575$  cfs

**DEPTH OF FLOW EQUATIONS**

10-Year Flood Depth =  $5.33(CDA)^{0.197} = 10.0$  ft  
100-Year Flood Depth =  $7.43(CDA)^{0.181} = 13.3$  ft

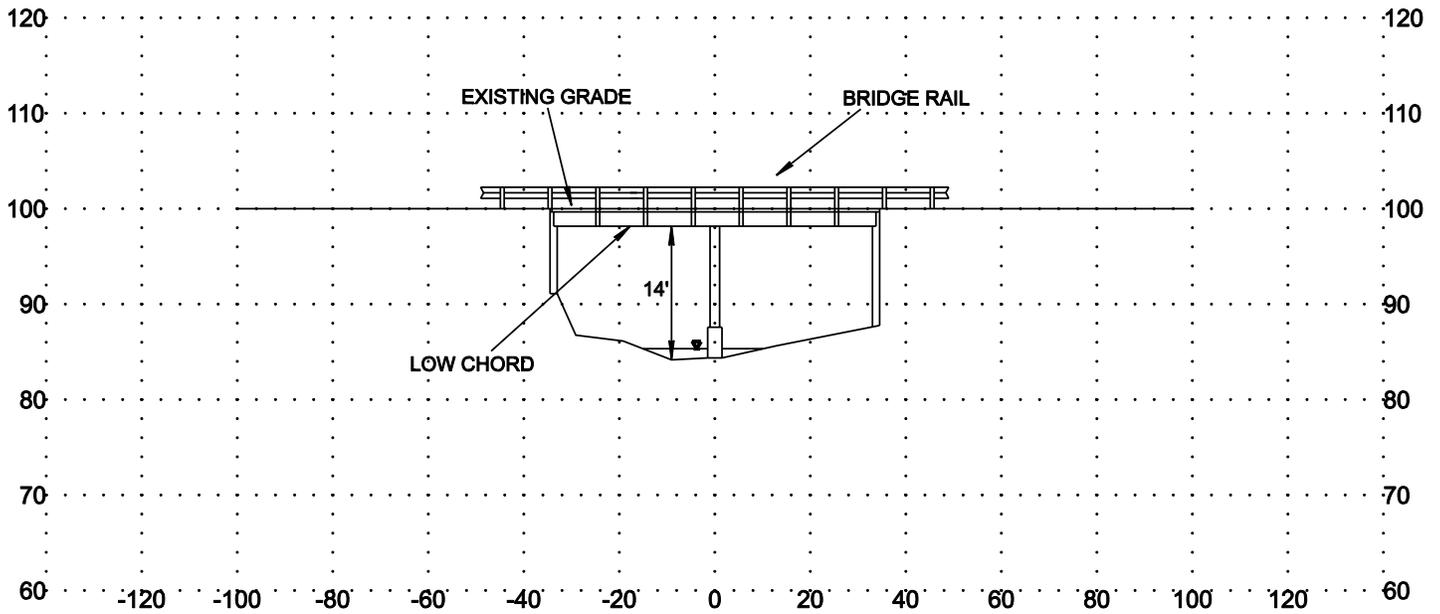
**AREAS**

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>

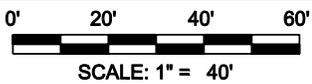
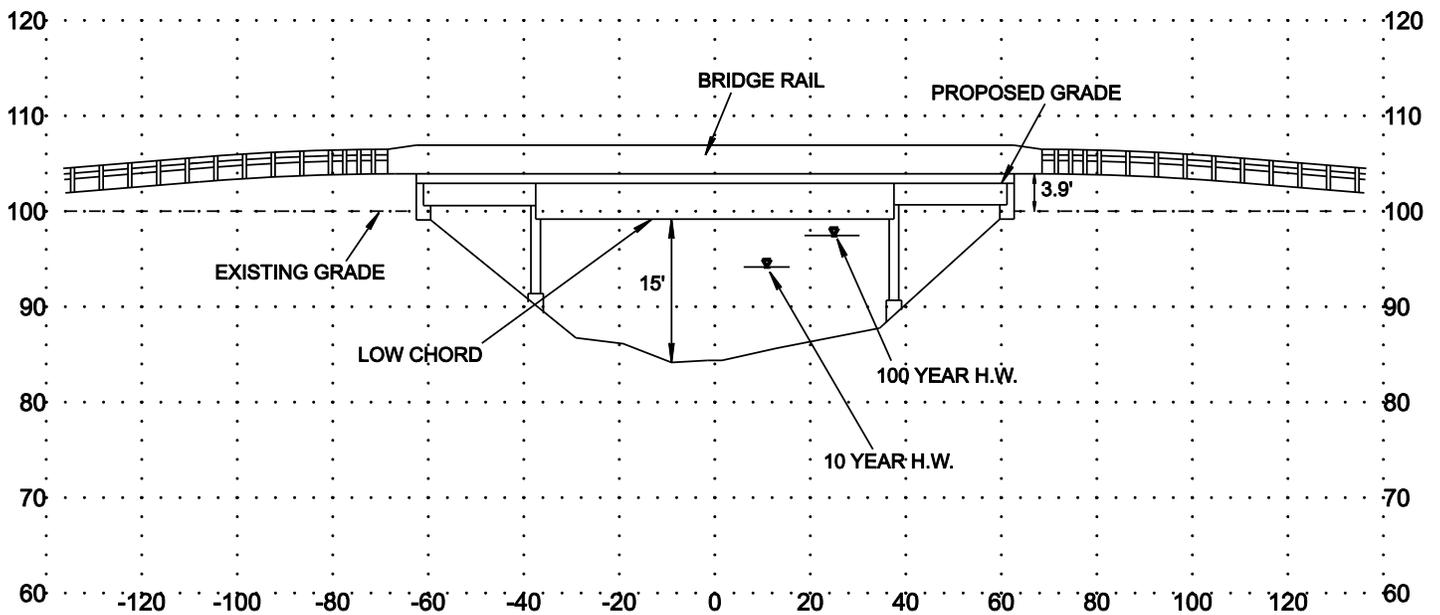
**VELOCITIES**

Proposed 10-Year Flood Velocity,  $V_{10} = Q_{10}/A_{10} = 23.8$  fps  
Proposed 100-Year Flood Velocity,  $V_{100} = Q_{100}/A_{100} = 25.0$  fps

## EXISTING STRUCTURE (INLET)



## PROPOSED STRUCTURE (INLET)



**BRIDGE SECTIONS**  
**BRIMSTONE CREEK RD. (0A593) CLAY COUNTY**  
**BRIDGE OVER BRIMSTONE CREEK @ L.M. 1.31**  
**BRIDGE ID 14022520001**

Bridge ID: 14022520001

Clay County



**View of Structure**



**Northbound Bridge Approach on Brimstone Creek Rd.**

Bridge ID: 14022520001  
Clay County



**Southbound Bridge Approach on Brimstone Creek Rd.**



**Bridge Looking North on Brimstone Creek Rd.**

Bridge ID: 14022520001

Clay County



**Bridge Looking South on Brimstone Creek Rd.**



**Bridge Rail**

Bridge ID: 14022520001

Clay County



**Structure**



**Substructure**

Bridge ID: 14022520001

Clay County



**Overhead Utilities**



**Inlet**

Bridge ID: 14022520001

Clay County



**Outlet**



**Upstream**

Bridge ID: 14022520001

Clay County



**Upstream Right**



**Upstream Left**

Bridge ID: 14022520001

Clay County



**Downstream**



**Downstream Right**

Bridge ID: 14022520001

Clay County



**Downstream Left**