

TENNESSEE
DEPARTMENT OF TRANSPORTATION



TRANSPORTATION INVESTMENT REPORT
Special Bridge Replacement Program
Local Route 00859 – Old State Route 22
Middle Fork Obion River,
Log Mile 10.31 Weakley County
PIN 122682.00

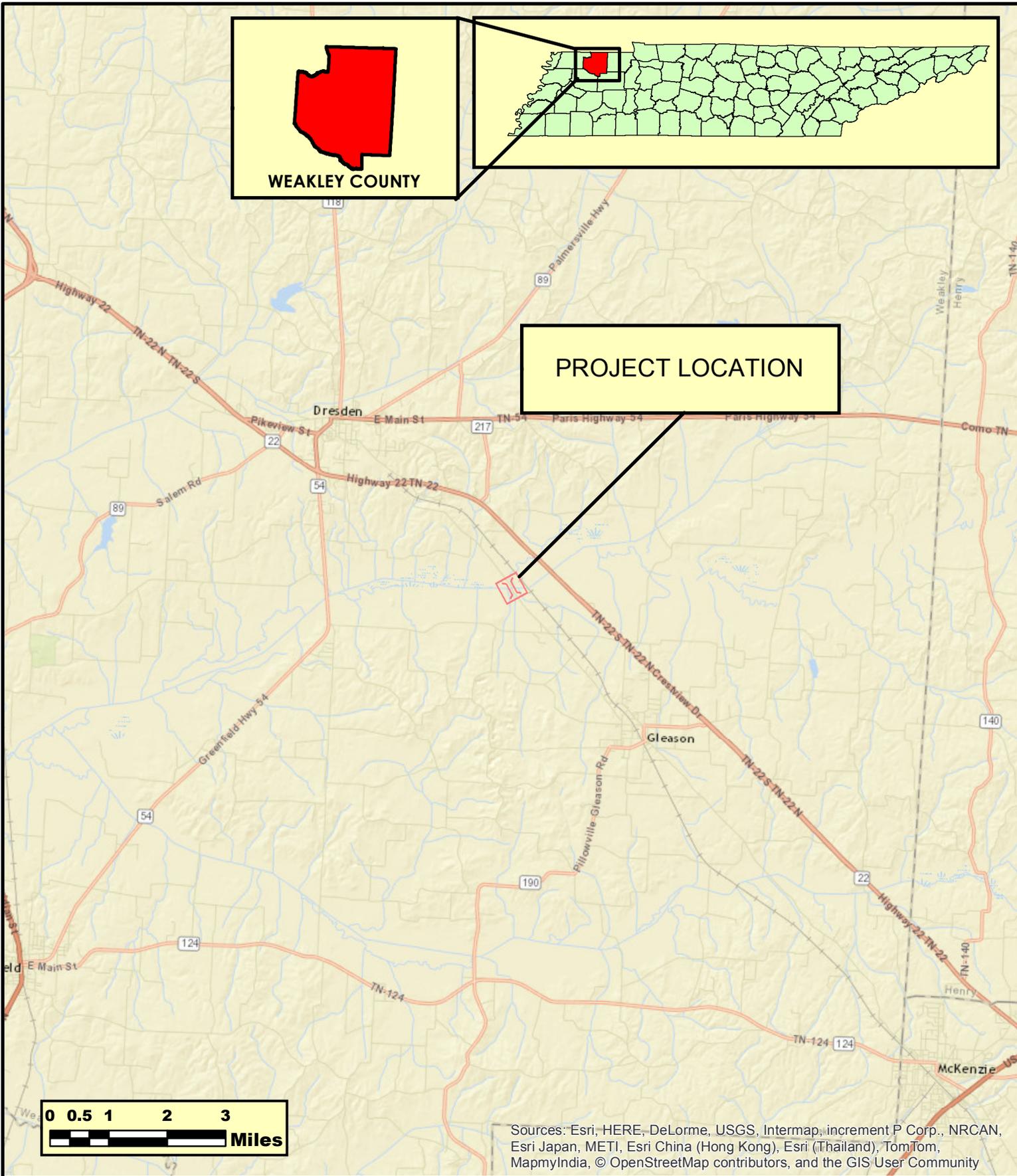
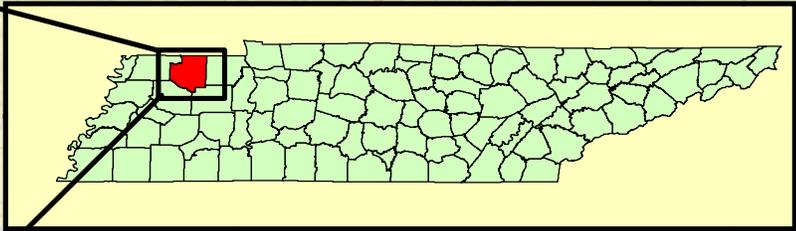
PREPARED BY TENNESSEE DEPARTMENT OF TRANSPORTATION
Strategic Transportation Investments Division

Approved by [Signature] Date 4-28-16
Chief of Environment and Planning

Approved by [Signature] Date 4/13/16
Deputy Commissioner and Chief Engineer

Approved by:	Signature	DATE
TRANSPORTATION DIRECTOR STRATEGIC TRANSPORTATION INVESTMENTS DIVISION	<u>[Signature]</u>	3-28-16
ENGINEERING DIRECTOR DESIGN DIVISION	<u>[Signature]</u>	7/1/16
ENGINEERING DIRECTOR STRUCTURES DIVISION	<u>[Signature]</u>	3/30/16

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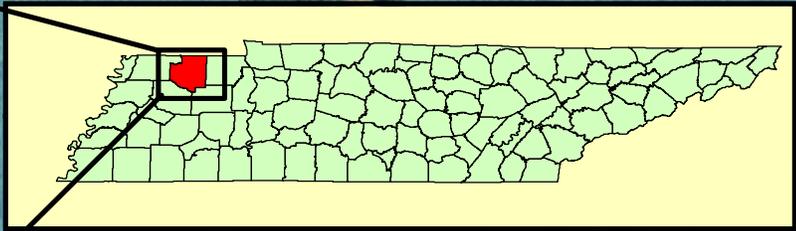


Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



AREA MAP
BRIDGE TIR
LOCAL ROUTE 00859 (OLD S.R. 22) LM 10.31
BRIDGE OVER MIDDLE FORK OBION RIVER
WEAKLEY COUNTY





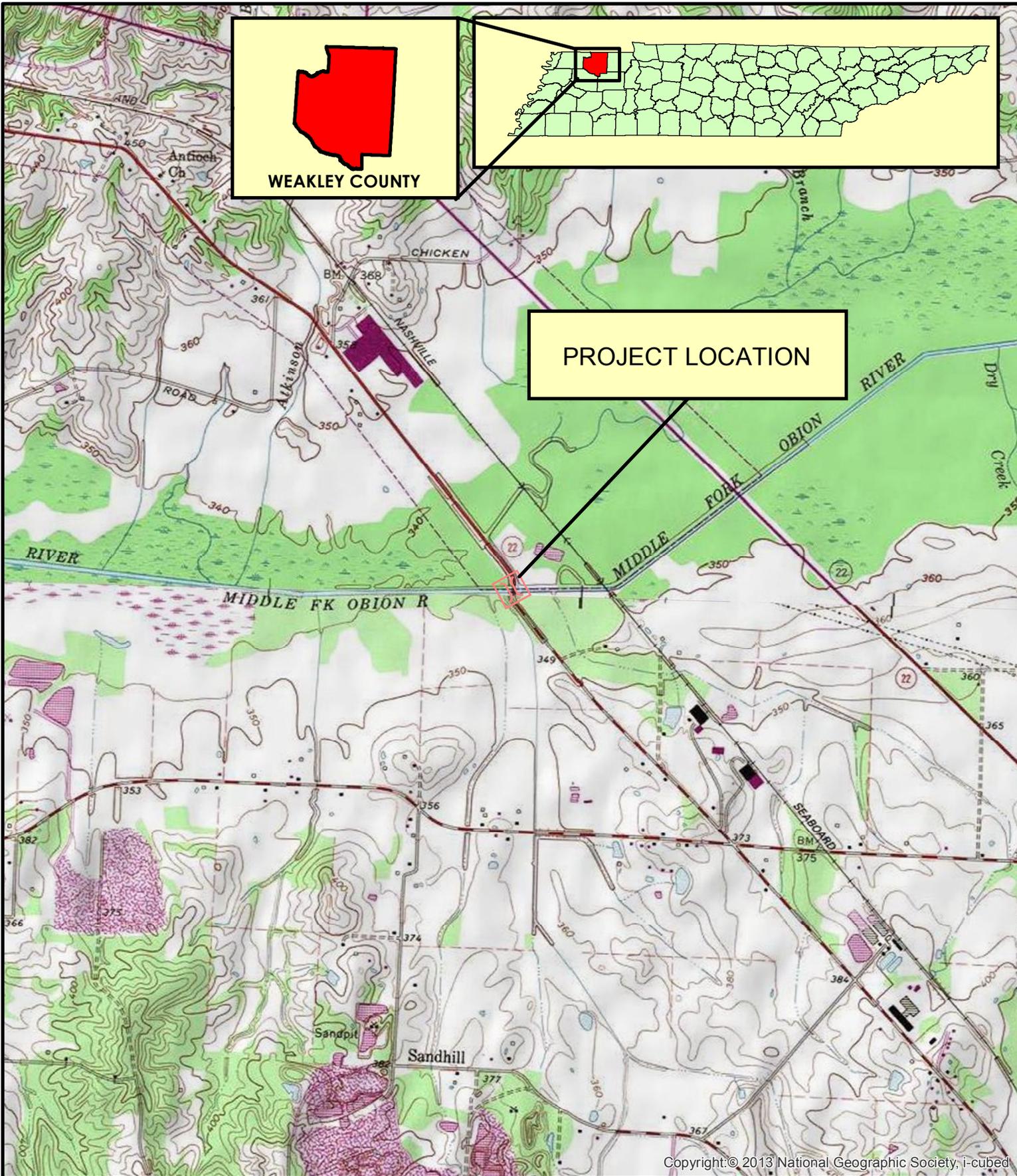
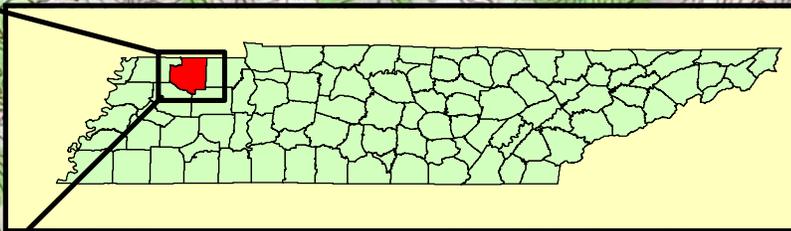
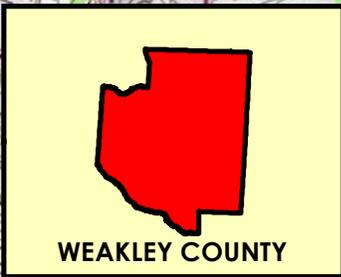
PROJECT LOCATION

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



AREA MAP
BRIDGE TIR
LOCAL ROUTE 00859 (OLD S.R. 22) LM 10.31
BRIDGE OVER MIDDLE FORK OBION RIVER
WEAKLEY COUNTY





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AREA MAP
BRIDGE TIR
LOCAL ROUTE 00859 (OLD S.R. 22) LM 10.31
BRIDGE OVER MIDDLE FORK OBION RIVER
WEAKLEY COUNTY



BRIDGE REPLACEMENT ANALYSIS, NEEDS, AND COSTS

County: Weakley Route: Old State Route 22 Log Mile: 10.31
Feature Crossed: Middle Fork of the Obion River System: Local Road
Functional Class: Rural Minor Collector Bridge ID: 92008590011

EXISTING CONDITIONS

2020 AADT: 830 App. Cross Section: 20' / 20' / 60' No. Lanes: 2
Approach Alignment: Curve sections on each approach Year Built: 1938 Load Limit: 15 tons
Width (out to out): 21 ft Sidewalks: Right N/A Left N/A Length: 108 ft
No. Spans: Approach: -- Main: 3
Substructure: Concrete Piers Vertical Clearance: 27 ft Sufficiency Rating: 45.4
Other: _____

PROPOSED IMPROVEMENTS

STANDARDS FROM RD01-TS-2 Type of Work: Replacement
Design Year: 2040 Design AADT: 980 Terrain Level ADL (F): -- (R): --
Project Length: 1035 ft Bridge Length: 125 ft Approach Length: 455' from north/440' from south
Design Speed (MPH): 40 Posted Speed (MPH): 35
Approach Width: 22' / 28' / as required Bridge Width (O to O): 31 ft No. Lanes: 2
Right-of-Way Required: 1.06 ac Tract(s) 5 Structure Type: Single Span, Prestressed Concrete (BT-63 Beams)

MAINTENANCE OF TRAFFIC

Temporary Detour: Temporary Runaround: Stage Construct:
Alternate Route: Traffic to use the following 6.4 mile detour during construction of the proposed bridge. Old State Route 22 to Bynum Road to State Route 22 to Swanson Drive back to Old State Route 22. Will require coordination between TDOT and Weakley County.
Remarks: _____

ESTIMATED COST

Right-of-Way: \$484,900 Approaches: \$770,115 Structure: \$723,485
Preliminary Engineering: \$283,500 Utilities: \$125,000 Misc./Cont.: \$614,700
Mobilization: \$63,300 Total: \$3,065,000

Remarks: The grade is to be raised four (4) foot and stay on new alignment. The typical section on the proposed structure structure will consist of two (2) eleven (11) foot travel lanes and three (3) foot shoulders on each side in accordance with TDOT Standard RD01-TS-2 (Design Standards ADT between 400 to 1,500). Right-of-way will be aquired. Utilites will be relocated.

Field Investigation by: Stephanie Kissel (Region 4 Design), Nora Dixon (Region 4 Design), Robert Hope (Region 4 Survey) Amin Araim (Region 4 Bridge Inspection), Charles Ross (Weakley County), Zane Pannell (S.T.I.D.), David Duncan (S.T.I.D)

Route:	Old State Route 22 (LR 00859)
Description:	Bridge over Middle Fork Obion River L.M. 10.31
County:	Weakley
Length:	1,035 feet
Date:	February 24, 2016



DESCRIPTION	LOCAL	STATE	FEDERAL	TOTAL
	20%	0%	80%	
Construction Items				
Pavement Removal	\$24,400	\$0	\$97,700	\$122,100
Asphalt Paving	\$23,000	\$0	\$92,100	\$115,100
Concrete Pavement	\$0	\$0	\$0	\$0
Drainage	\$0	\$0	\$0	\$0
Appurtenances	\$0	\$0	\$0	\$0
Structures	\$144,700	\$0	\$578,800	\$723,500
Fencing	\$0	\$0	\$0	\$0
Signalization	\$0	\$0	\$0	\$0
Railroad Crossing or Separation	\$0	\$0	\$0	\$0
Earthwork	\$39,000	\$0	\$156,200	\$195,200
Clearing and Grubbing	\$12,200	\$0	\$48,800	\$61,000
Seeding & Sodding	\$900	\$0	\$3,500	\$4,400
Rip-Rap or Slope Protection	\$3,000	\$0	\$12,200	\$15,200
Guardrail	\$3,100	\$0	\$12,500	\$15,600
Signing	\$300	\$0	\$1,200	\$1,500
Pavement Markings	\$300	\$0	\$1,100	\$1,400
Maintenance of Traffic	\$2,300	\$0	\$9,100	\$11,400
Mobilization (5%)	\$12,700	\$0	\$50,600	\$63,300
Other Items	20% \$53,200	\$0	\$212,700	\$265,900
Const. Contingency =	40% \$69,800	\$0	\$279,000	\$348,800
Construction Estimate	\$388,900	\$0	\$1,555,500	\$1,944,400
Interchanges & Unique Intersections				
Roundabouts	\$0	\$0	\$0	\$0
Interchanges	\$0	\$0	\$0	\$0
Right-of-Way & Utilities				
Right-of-Way	\$97,000	\$0	\$387,900	\$484,900
Utilities	\$25,000	\$0	\$100,000	\$125,000
Preliminary & Construction Engineering and Inspection				
Prelim. Eng. (10%)	\$51,100	\$0	\$204,300	\$255,400
Const. Eng. & Inspec. (10%)	\$51,100	\$0	\$204,300	\$255,400
Total Project Cost	\$613,000	\$0	\$2,452,000	\$ 3,065,000

TDOT PAY ITEM	TDOT DESCRIPTION	UNIT	TOOLBOX QUANTITIES	ADDITIONAL QUANTITIES	QUANTITIES	TN - 2014 UNIT COST	TOTAL COST
Payment Removal							
202-03.01	Removal of Asphalt Pavement	SY	11250		11250	\$ 10.56	\$ 118,800.00
415-01.02	Cold Planing Bituminous Pavement	SY	2233		2233	\$ 1.47	\$ 3,282.51
PAVEMENT REMOVAL TOTAL (ROUNDED)							\$ 122,100
Asphalt Roads							
307-02.01	Asphalt Concrete Mix (PG70-22) (BPMB-HM) Grading A	TON	445		445	\$ 78.76	\$ 35,070.25
307-02.02	Asphalt Cement (PG70-22)(BPMB-HM) Grading A-S	TON	10		10	\$ 842.76	\$ 8,810.55
307-02.03	Aggregate (BPMB-HM) Grading A-S Mix	TON	338		338	\$ 49.99	\$ 16,897.90
307-02.08	Asphalt Concrete Mix (PG70-22) (BPMB-HM) Grading B-M2	TON	292		292	\$ 78.99	\$ 23,040.65
402-01	Bituminous Material For Prime Coat (PC)	TON	6		6	\$ 497.96	\$ 2,751.90
402-02	Aggregate For Cover Material (PC)	TON	20		20	\$ 23.81	\$ 474.93
403-01	Bituminous Material For Tack Coat (TC)	TON	2		2	\$ 626.55	\$ 1,470.30
411-01.07	ACS (PG64-22) GR "E"	TON	114		114	\$ 92.37	\$ 10,485.84
411-02.10	ACS Mix(PG70-22) Grading D	TON	171		171	\$ 93.96	\$ 16,068.41
PAVING TOTAL (ROUNDED)							\$ 115,100
Concrete Roads							
CONCRETE RAMPS AND ROADWAYS TOTAL (ROUNDED)							\$ -
Drainage							
DRAINAGE TOTAL (ROUNDED)							\$ -
Appurtenances							
ROADWAY AND PAVEMENT APPURTENANCES TOTAL (ROUNDED)							\$ -
Earthwork & Mineral							
105-01	Construction Stakes, Lines, and Grades	LS	1		1	\$ 50,000.00	\$ 50,000.00
203-01	Road & Drainage Excavation (Unclassified)	CY	11029		11029	\$ 5.10	\$ 56,249.60
203-03	Borrow Excavation (Unclassified)	CY	1103		1103	\$ 5.20	\$ 5,735.25
303-01	Mineral Aggregate, Type A Base, Grading D	TON	4377		4377	\$ 19.00	\$ 83,160.85
EARTHWORK & MINERAL TOTAL (ROUNDED)							\$ 195,200.00
Structures							
N/A	Removal of Bridge	SF	2268		2268	\$ 20.00	\$ 45,360.00
N/A	New Bridge (Concrete Girder)	SF	3875		3875	\$ 175.00	\$ 678,125.00
STRUCTURES TOTAL (ROUNDED)							\$ 723,500.00
Interchanges and Unique Intersections							
INTERCHANGES AND UNIQUE INTERSECTIONS TOTAL (ROUNDED)							\$ -
Lighting & Signalization							
LIGHTING & SIGNALIZATION TOTAL (ROUNDED)							\$ -
Guardrail							
705-01.01	Guardrail at Bridge Ends	LF	100		100	\$ 64.44	\$ 6,444.00
705-02.02	Single Guardrail (Type 2)	LF	120		120	\$ 15.65	\$ 1,878.00
705-04.04	Guardrail Terminal (Type 21)	EA	4		4	\$ 1,813.42	\$ 7,253.68
GUARDRAIL TOTAL (ROUNDED)							\$ 15,600.00
Seeding and Sodding							
801-01	Seeding (With Mulch)	UNIT	79		79	\$ 25.90	\$ 2,051.28
801-01.07	Temporary Seeding (With Mulch)	UNIT	59		59	\$ 18.40	\$ 1,092.96
801-02	Seeding (Without Mulch)	UNIT	59		59	\$ 19.47	\$ 1,156.52
SODDING TOTAL (ROUNDED)							\$ 4,400.00
Maintenance of Traffic							
N/A	Traffic Control	LS	1		1	\$ 10,000.00	\$ 10,000.00
712-02.02	Interconnected Portable Barrier Rail	LF	53		53	\$ 26.47	\$ 1,397.62
MAINTENANCE OF TRAFFIC TOTAL (ROUNDED)							\$ 11,400.00
Signs							
Not Listed	Signs	LS	10.000		10	\$ 150.00	\$ 1,500.00
SIGNING TOTAL (ROUNDED)							\$ 1,500.00
Pavement Markings							
716-13.06	Spray Thermo P.M. (40 mil 4")	LM	1.0000		1.0000	\$ 1,376.74	\$ 1,376.74
PAVEMENT MARKINGS TOTAL (ROUNDED)							\$ 1,400.00
Fencing							
FENCE TOTAL (ROUNDED)							\$ -
Clearing and Grubbing							
201-01	Clearing and Grubbing	LS	1		1	\$ 60,931.51	\$ 60,931.51
CLEAR AND GRUBBING TOTAL (ROUNDED)							\$ 61,000.00
Railroad At-Grade Crossing							
RAILROAD CROSSING OR SEPARATION TOTAL (ROUNDED)							\$ -
Utilities							
N/A	Overhead Distribution	LM	0.2		0.2	\$ 375,000	\$ 75,000
N/A	Underground Gas	LM	0.2		0.2	\$ 250,000	\$ 50,000
UTILITIES TOTAL (ROUNDED)							\$ 125,000.00
Right-of-Way							
N/A	Right-of-Way	LS	1		1	\$ 484,848.48	\$ 484,848.48
RIGHT-OF-WAY TOTAL (ROUNDED)							\$ 484,900.00



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: Zane Pannell, Transportation Project Specialist
Strategic Transportation Investments Division

DATE: March 28, 2016

SUBJECT: TIR Field Review (Special Bridge Replacement Program)
Old State Route 22 (00859), Bridge over Middle Fork Obion River
Log Mile 10.31
Weakley County
PIN: 122682.00

A field review was held for the above-mentioned project on December 21, 2015.

The existing structure is a three (3) span concrete bridge with an out-to-out width of twenty-one (21) feet. The overall bridge length is 108 feet with approximately twenty seven (27) feet of vertical clearance. The sufficiency rating for this bridge is 45.4. The 10-year, 50-year, and 100-year discharges of flow for the drainage basin were determined using the appropriate regression equations. The Q10, Q50, and Q100 are 14,879 cfs, 22,297 cfs and 25,636 cfs, respectively.

Due to the radius on each approach and the number of lane departure crashes, the proposed alignment for this structure will be raised four (4) feet on new alignment to accommodate the roadway design standards and for safety. There were five (5) lane departure crashes within the project limits from 2012 to 2015, including two (2) non-incapacitating injury crashes. There is a posted speed limit of thirty five (35) mph on Old State Route 22; the proposed bridge will be designed to meet TDOT standard RD01-TS-2 for a design speed of forty (40) mph. The proposed structure will be a single span prestressed concrete bridge with BT-63 beams with a total vertical clearance of twenty nine (29) feet and a length of 125 feet. A small amount of R.O.W. will be acquired to widen the bridge and the bridge approaches. Based on evidence in the field, cost for

relocating overhead power lines, cable lines attached to the bridge, and gas lines under the bridge have been accounted for within the cost estimate.

The route has a base year 2020 AADT of 830 and a design year 2040 AADT of 980. The existing structure has two (2) ten (10) foot travel lanes, no shoulder, and sixty (60) feet of R.O.W. The typical section on the proposed structure will consist of two (2) eleven (11) foot travel lanes and shoulder width of (3) feet on each side. The project will extend 450 feet on each side of the structure to accommodate raising the structure four (4) feet. The total bridge width will have an out-to-out width of thirty one (31) feet.

Weakley County recommends closing Old State Route 22 during construction since detour time will be minimal (See Detour Map); it will also expedite the construction process. TDOT will need to coordinate with Weakley County for detouring traffic.

The required approach work, estimated replacement, and preliminary engineering costs for this bridge replacement are approximately \$3,065,000. The local match will be \$613,000 based on the current 80% and 20% local match Grant Bridge Program.

ZP

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		X
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		
13. Other		
14. Location coordinated with local officials		X
15. Railroad crossings		
16. Hazardous materials site		

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

PROJECT NO.: 99109-1453-04 ROUTE: Old State Route 22
 COUNTY: Weakley CITY: _____
 PROJECT PIN NUMBER: 122682.00
 PROJECT DESCRIPTION: Special Bridge Replacement Program
Bridge over the Middle Fork of the Obion River
LM 10.31

DIVISION REQUESTING:

MAINTENANCE	<input type="checkbox"/>	PAVEMENT DESIGN	<input type="checkbox"/>
S.T.I.D.	<input checked="" type="checkbox"/>	STRUCTURES	<input type="checkbox"/>
PROG. DEVELOPMENT & ADM.	<input type="checkbox"/>	SURVEY & ROADWAY DESIGN	<input type="checkbox"/>
PUBLIC TRANS. & AERO.	<input type="checkbox"/>	TRAFFIC SIGNAL DESIGN	<input type="checkbox"/>
YEAR PROJECT PROGRAMMED FOR CONSTRUCTION:	_____	OTHER	<input type="checkbox"/>
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
830	2020	980	147	15	2040	65 - 35	13	19		

REQUESTED BY: NAME Zane Pannell DATE 10/1/15
 DIVISION STID
 ADDRESS Suite 1000 James K Polk Building
Nashville, TN 37243

REVIEWED BY: TONY ARMSTRONG *Tony Armstrong* DATE 10.2.15
 TRANSPORTATION MANAGER 1
 SUITE 1000, JAMES K. POLK BUILDING

APPROVED BY: MIKE PRESLEY *Mike Presley* DATE 10.2.15
 TRANSPORTATION MANAGER 2
 SUITE 1000, JAMES K. POLK BUILDING

COMMENTS:

THIS TRAFFIC IS BASED ON 2015 CYCLE COUNTS. THE DESIGN YEAR 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.

(REV. 7/1/14)

TYPE	YEAR	COUNTY	FIGURE NO.
BRIDGE	2015	WEAKLEY	1

3/15/2016 9:01:52 AM X:\Projects\Weakley\01d SR 22 (LR 00859)\Bridge over the Middle Fork of the Obion River (L.M.10.31)\Project Files\Microstation\DN Files\old sr 22 concept revised.dgn



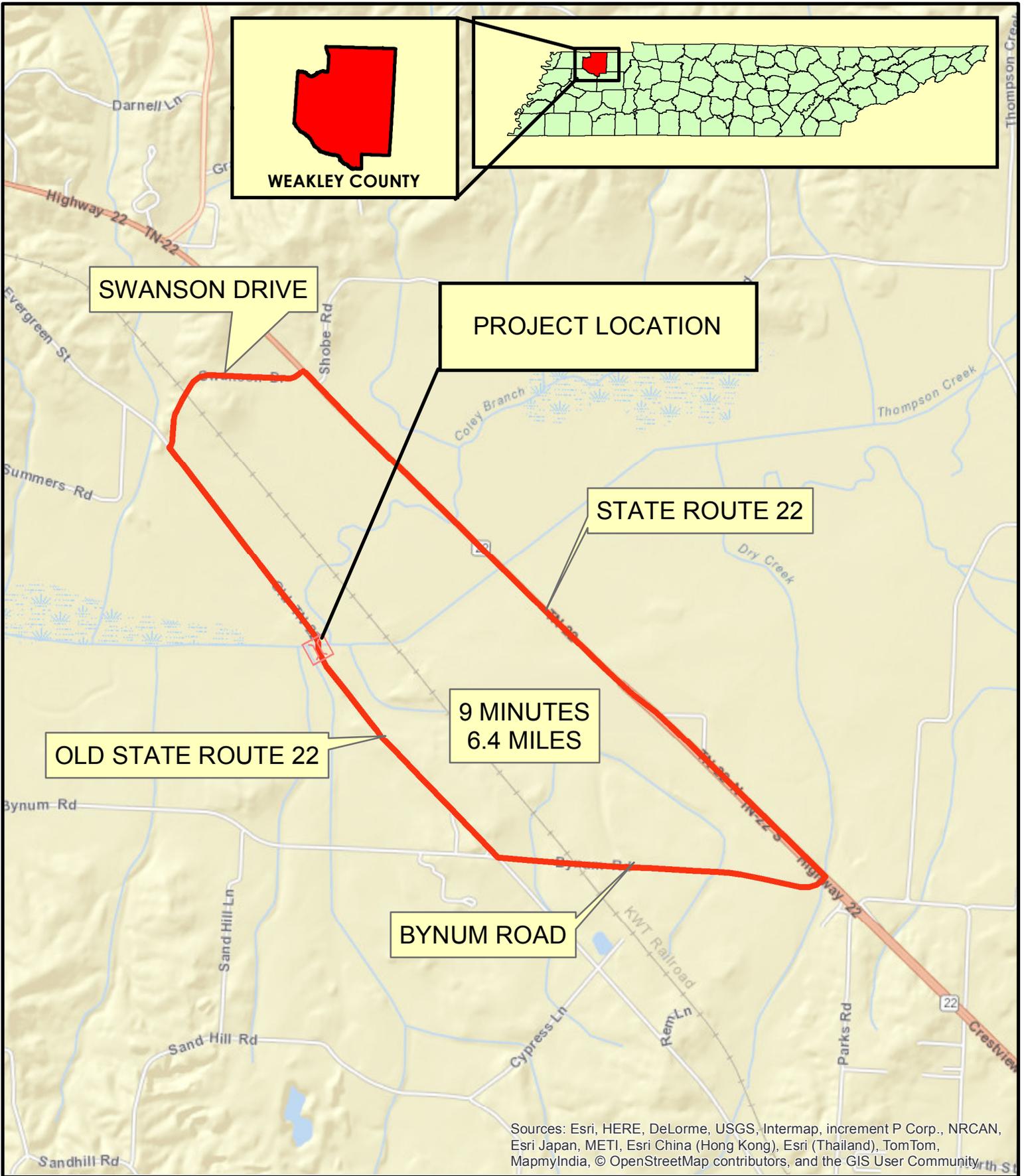
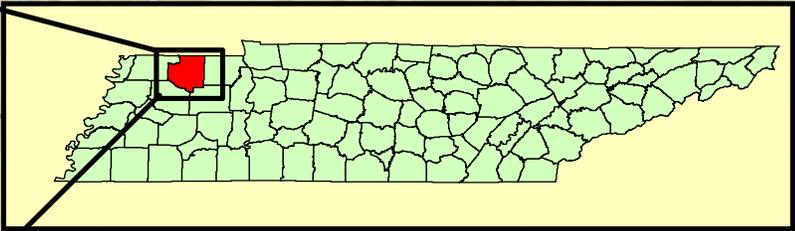
BRIDGE REPLACEMENT

OLD STATE ROUTE 22
BRIDGE OVER MIDDLE FORK OBION RIVER
WEAKLEY COUNTY

11' LANES
3' SHOULDER
RD01-TS-2

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

FIGURE 1
00859
L.M. 10.31



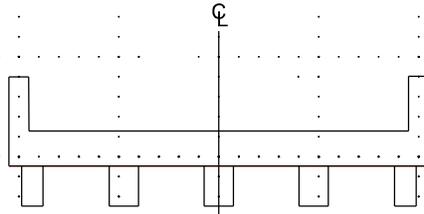
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DETOUR MAP
BRIDGE TIR
LOCAL ROUTE 00859 (OLD S.R. 22) LM 10.31
BRIDGE OVER MIDDLE FORK OBION RIVER
WEAKLEY COUNTY

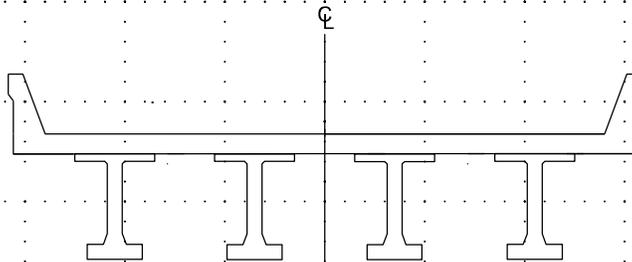


EXISTING STRUCTURE



TOTAL WIDTH: 21'
CURB TO CURB WIDTH: 19'

COMPLETED PROPOSED STRUCTURE



TOTAL WIDTH: 31'
CURB TO CURB WIDTH: 28'



SCALE: 1" = 10'

BRIDGE TYPICAL SECTION
OLD STATE ROUTE 22 (00859) WEAKLEY COUNTY
BRIDGE OVER MIDDLE FORK OBION RIVER L.M. 10.31
BRIDGE ID 92008590011

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

County: Weakley
 Bridge ID: 92008590011
 Route: Old SR 22
 Feature Crossed: Middle Fork of the Obion River
 Log Mile: 10.31

By: ZP
 Date: 1/13/16
 PIN: 122682.00

DRAINAGE BASIN

Measurement from quad = 89,395 acres
 Contributing Drainage Area, CDA = acres/640 = 139.68 sq. mi.

USGS REGRESSION EQUATIONS FOR FLOW

$Q_2 = 207(CDA)^{0.725} = 7,433$ cfs
 $Q_5 = 344(CDA)^{0.715} = 11,758$ cfs
 $Q_{10} = 444(CDA)^{0.711} = 14,879$ cfs
 $Q_{25} = 578(CDA)^{0.708} = 19,085$ cfs
 $Q_{50} = 682(CDA)^{0.706} = 22,297$ cfs
 $Q_{100} = 788(CDA)^{0.705} = 25,636$ cfs

DEPTH OF FLOW EQUATIONS

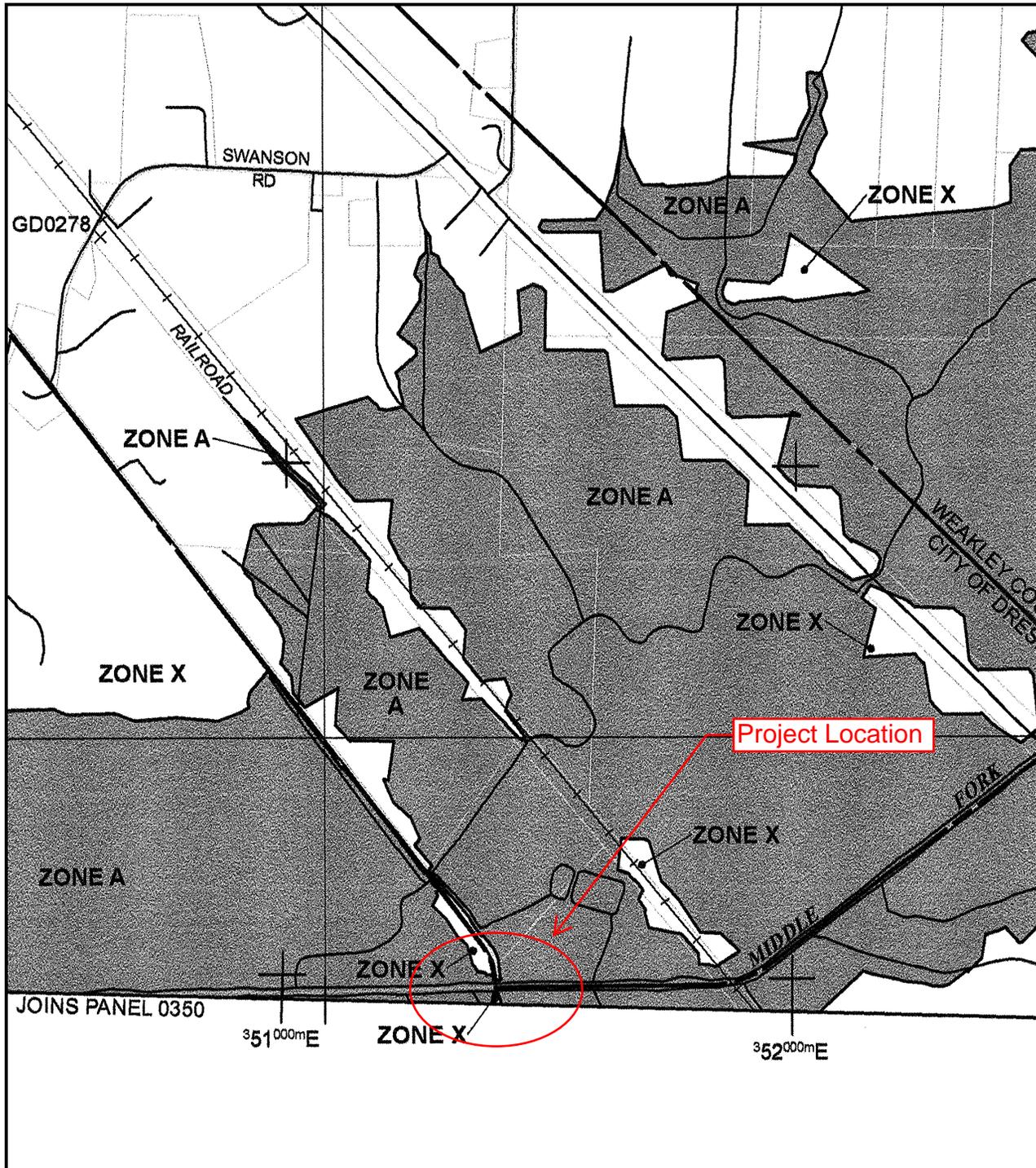
10-Year Flood Depth = $5.33(CDA)^{0.197} = 14.1$ ft
 100-Year Flood Depth = $7.43(CDA)^{0.181} = 18.2$ ft

AREAS

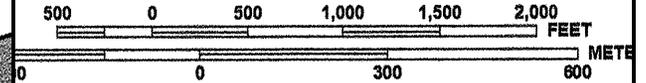
Existing Area Below Low Chord = 566 ft²
 Proposed Area Below Low Chord = 570 ft²
 Proposed 10-Year Flood Area, $A_{10} = 183$ ft²
 Proposed 100-Year Flood Area, $A_{100} = 303$ ft²

VELOCITIES

Proposed 10-Year Flood Velocity, $V_{10} = Q_{10}/A_{10} = 81.3$ fps
 Proposed 100-Year Flood Velocity, $V_{100} = Q_{100}/A_{100} = 84.6$ fps



MAP SCALE 1" = 1000'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0245D

FIRM
FLOOD INSURANCE RATE MAP
WEAKLEY COUNTY,
TENNESSEE
AND INCORPORATED AREAS

PANEL 245 OF 450

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
DRESDEN, CITY OF	470240	0245	D
WEAKLEY COUNTY	470384	0245	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.

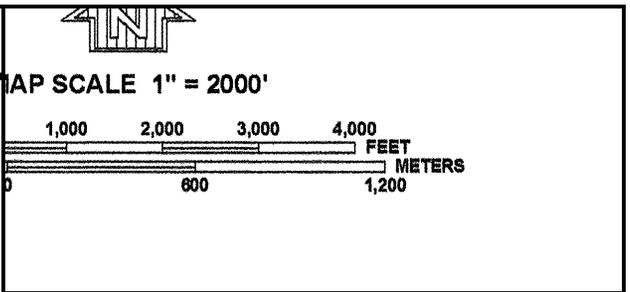
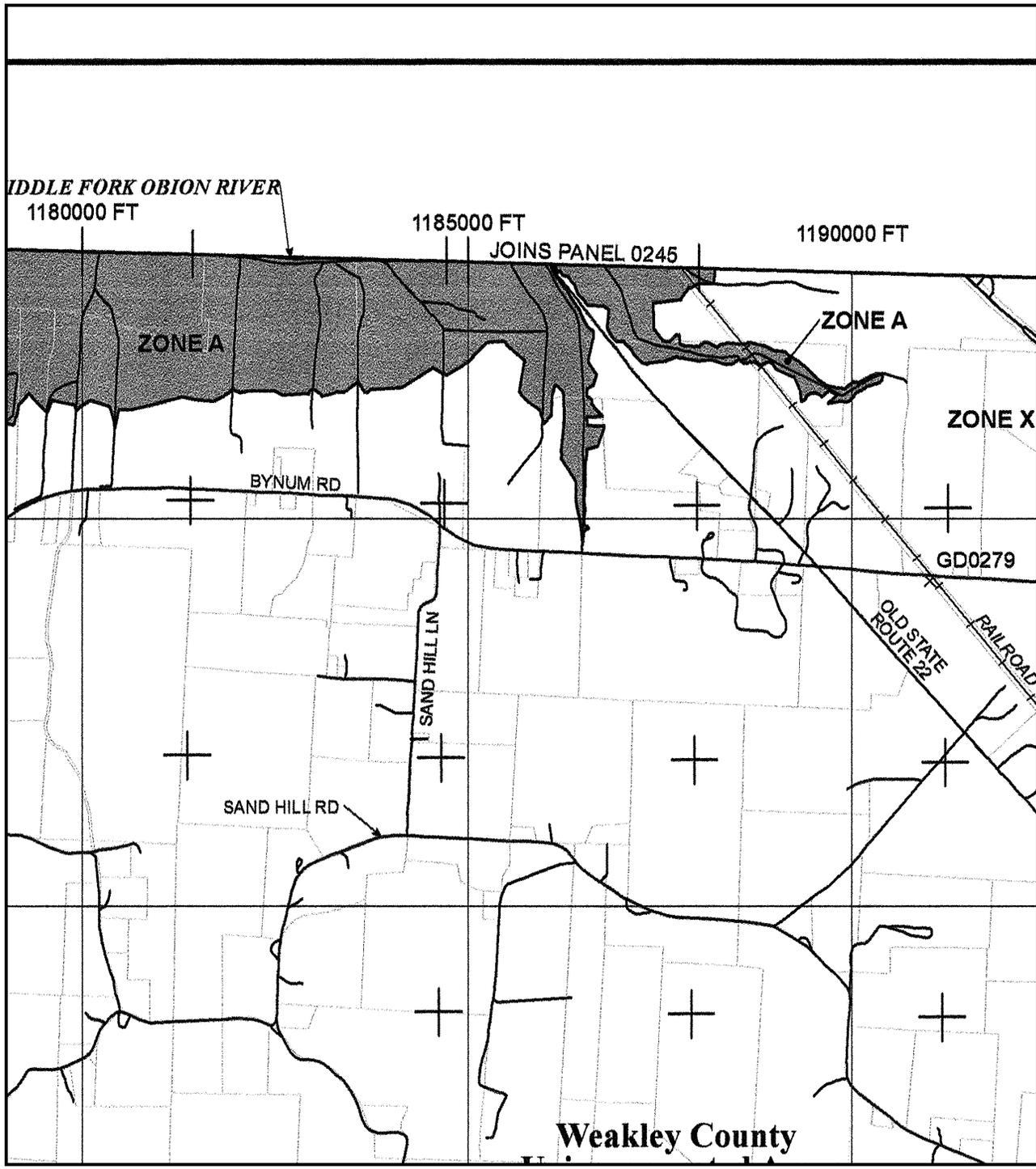
MAP NUMBER
47183C0245D



EFFECTIVE DATE
NOVEMBER 5, 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



PANEL 0350D

FIRM
FLOOD INSURANCE RATE MAP
WEAKLEY COUNTY,
TENNESSEE
AND INCORPORATED AREAS

PANEL 350 OF 450
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
GLEASON, CITY OF	470468	0350	D
WEAKLEY COUNTY	470364	0350	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
47183C0350D

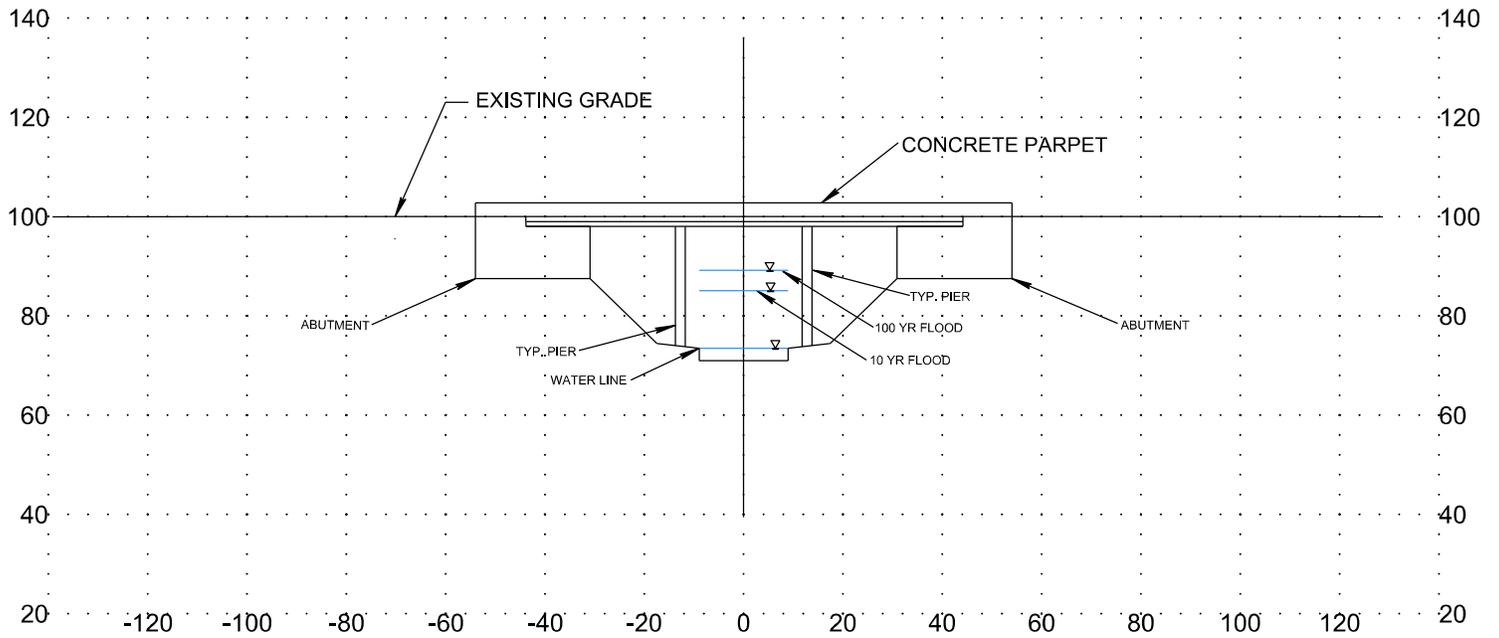
EFFECTIVE DATE
NOVEMBER 5, 2008



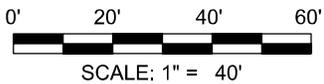
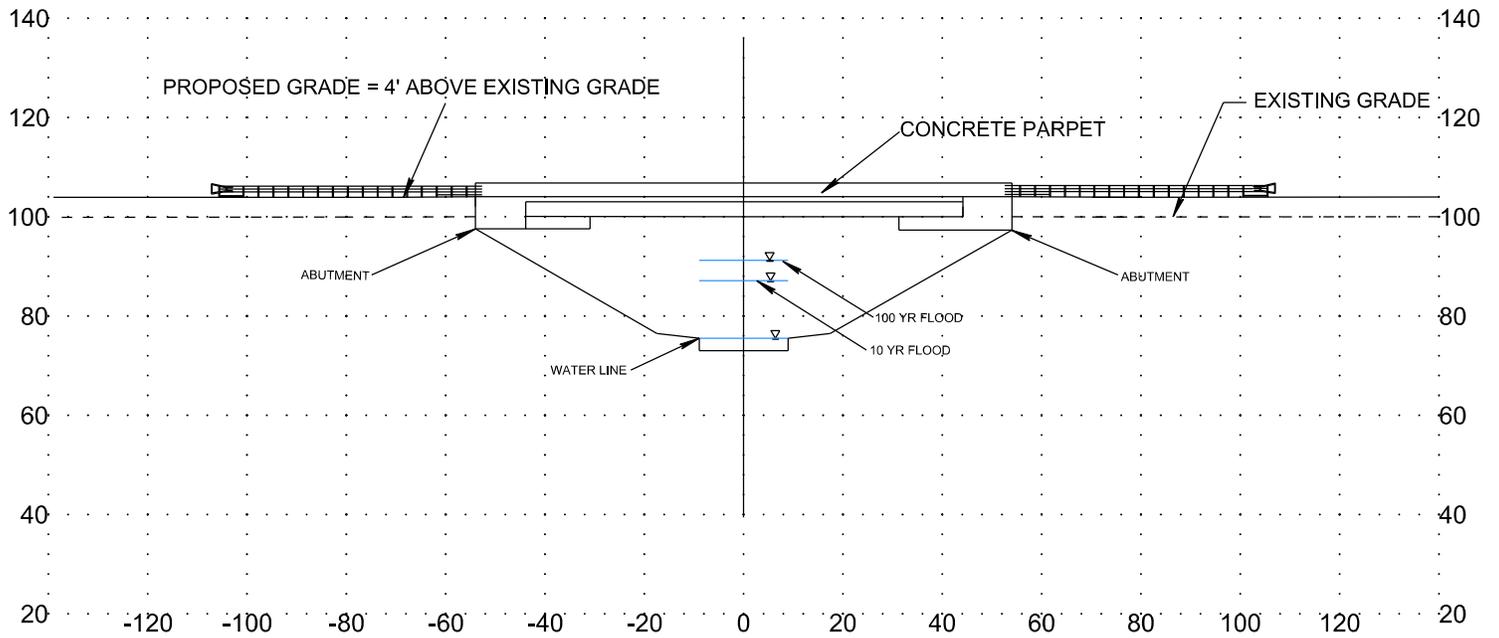
Federal Emergency Management Agency

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

EXISTING STRUCTURE (INLET)



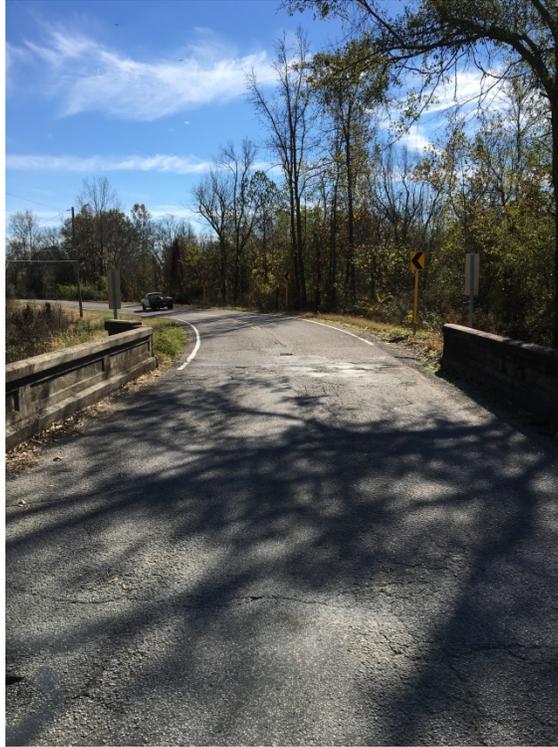
PROPOSED STRUCTURE (INLET)



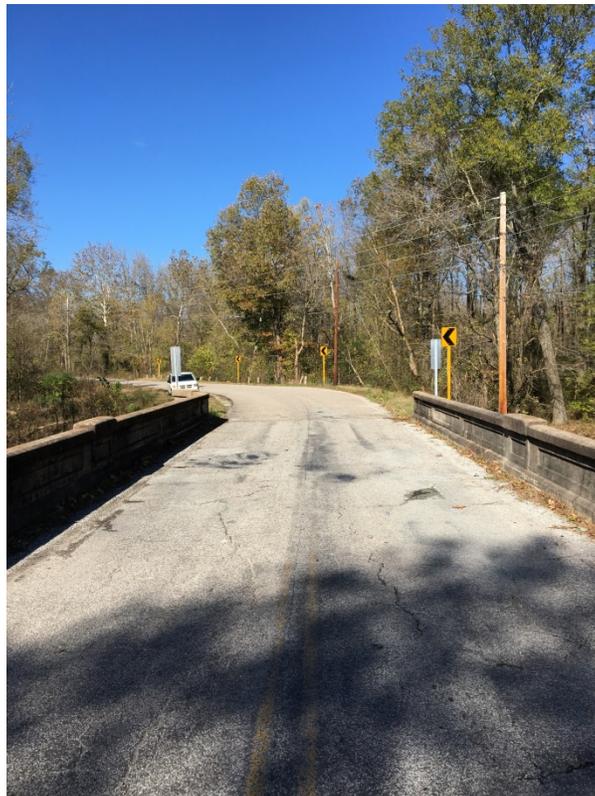
BRIDGE SECTIONS

OLD STATE ROUTE 22 (00859) WEAKELY COUNTY
BRIDGE OVER MIDDLE FORK OBION RIVER @ L.M. 10.31
BRIDGE ID: 92008590011

BRIDGE ID: 92008590011
Wekley County



Center of Bridge Looking Southbound on Local Route 00859

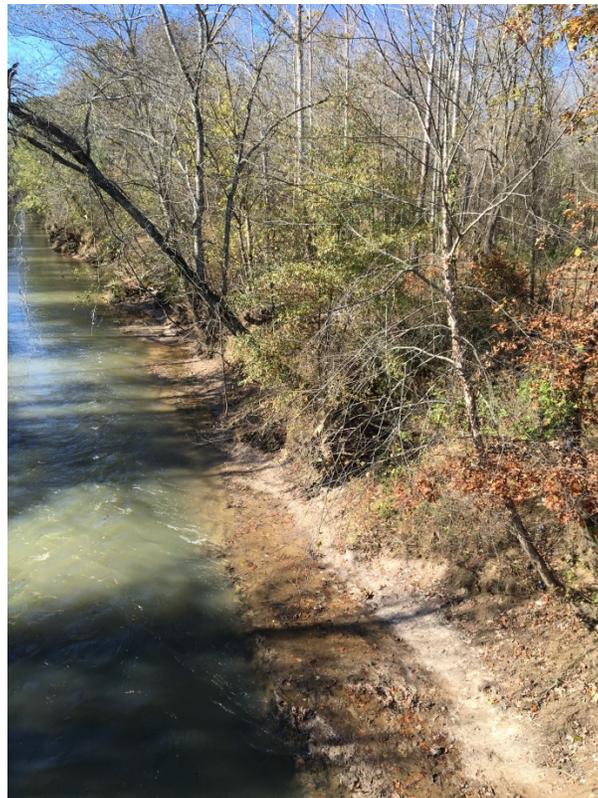


Center of Bridge Looking Northbound on Local Route 00859

BRIDGE ID: 92008590011
Wekley County

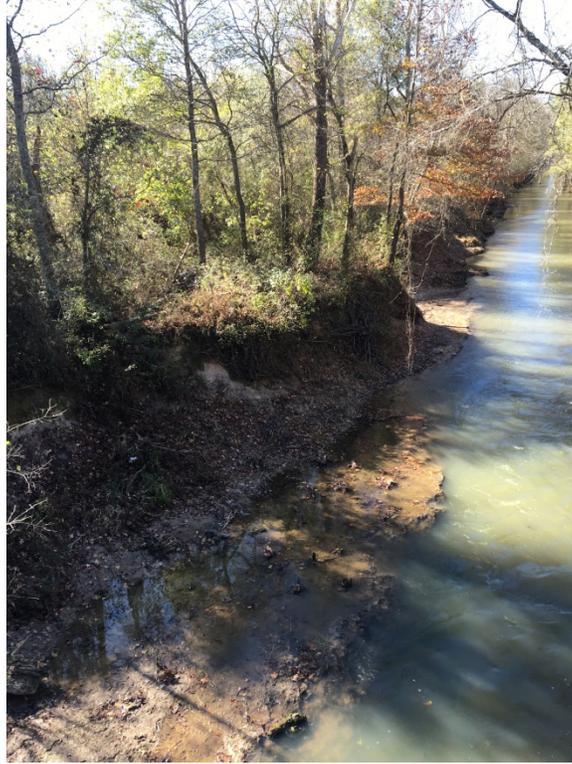


Downstream Center



Downstream Right

BRIDGE ID: 92008590011
Wekley County



Downstream Left

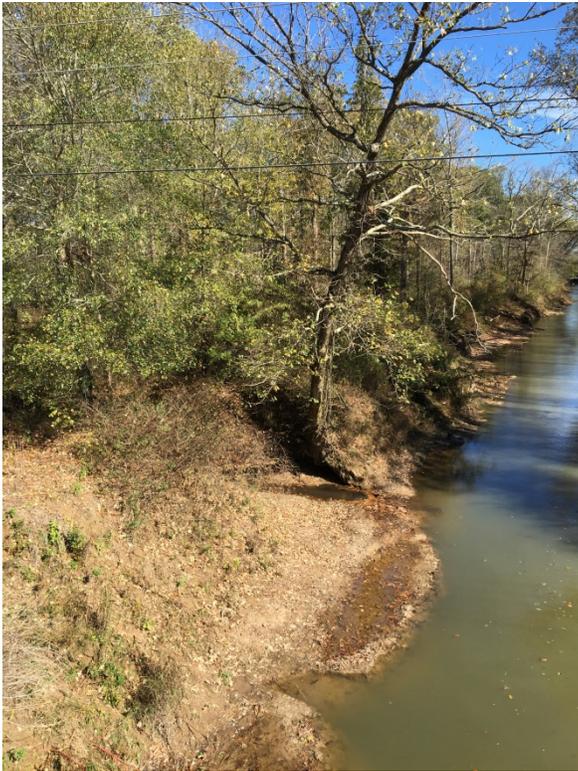


Upstream Center

BRIDGE ID: 92008590011
Wekley County



Upstream Right



Upstream Left

BRIDGE ID: 92008590011
Wekley County



Underneath Bridge Deck



Bridge Piers

BRIDGE ID: 92008590011
Wekley County



Utilities Attached to the Bridge



Exposed Rebar