



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**South Carolina**

October 7, 2013

1835 Assembly Street, Suite 1270  
Columbia, South Carolina 29201  
803-765-5411  
803-253-3989

In Reply Refer To:  
HDA-SC

Mr. Randy Williamson  
Environmental Engineer  
South Carolina Department of Transportation  
955 Park Street, P.O. Box 191  
Columbia, SC 29202

Dear Mr. Williamson:

Your office recently submitted a Categorical Exclusion (CE) for the Proposed S-103 (Oak Park Road) Bridge Replacement over Fishing Creek in York County, South Carolina (Federal Project Number BR46-012). The FHWA has determined that the project will not have significant impacts and that there will be no effect on threatened or endangered species nor impacts to historic resources. Enclosed is the approved CE for the project.

Please ensure that the project commitments made during the NEPA process are included in the project construction proposal and ultimately carried out. Please address any questions you may have concerning this project to Mr. J. Shane Belcher at 803-253-3187 or [jeffrey.belcher@dot.gov](mailto:jeffrey.belcher@dot.gov).

Sincerely,

  
(for) Robert L. Lee  
Division Administrator

Enclosure

cc: Mr. Ed Frierson, SCDOT NEPA Project Manager-RPG 3  
Ms. Joy Shealy, P.E., SCDOT Asst. Program Manager (via e-mail)  
File 46.169B.1



October 3, 2013

Project No. BR46(012)  
PINs: 31919X, 31918 RD01

**CATEGORICAL EXCLUSION**  
**Type C**

County: York  
File No. 46.169B.1

To: Federal Highway Administration  
From: NEPA Coordinator – Midlands Region

**Description:**

Project involves replacing a structurally deficient bridge on Road S-103 (Oak Park Rd.) over Fishing Creek near the City of Rock Hill (see location map and plan sheets in Appendix A). The existing 27.5 x 195-foot bridge would be replaced with an approximately 37 x 400-foot bridge. It would be constructed approximately 50 feet north of the existing bridge to avoid a blue line stream on the south side of the roadway. Purpose of the project is to replace a structurally deficient bridge with a sufficiency rating of 28.9% (see attached National Bridge Inventory form in Appendix B). The project will encompass a total distance of approximately 0.9 mile. New right of way is expected to increase on S-103(Oak Park Road) from an existing edge of pavement to 33 feet on each side of the roadway centerline and 75 feet on each side of the relocated bridge centerline. Present traffic volume (2012) utilizing this intersection is approximately 400 vehicles per day (VPD). Traffic volumes are expected to increase to approximately 600 VPD by 2032. Total project cost is estimated to be approximately \$3.4 million and is listed in the latest STIP (Statewide Transportation Implementation Plan) and is part of the Department's bridge replacement program with a ranking listed as 70.

The Department's environmental assessment has determined the effects of this project are as described in the "General Support for Categorical Exclusion Determination" dated December 18, 2007, and is in compliance with the required findings reflected below. The project has been assessed for possible effects on the human and natural environment with a determination that no significant environmental impact will occur. The class of action and impact determination documented by this statement would qualify this project as a categorical exclusion under 23 CFR 771, Section 115(b).

A determination has been made that the project will not affect the continued existence of any listed endangered or threatened species or destroy or adversely modify critical habitat. Therefore, no further investigation under Section 7 of the Endangered Species Act is necessary.

This project will involve encroachment on either wetlands and/or streams. Therefore, under Executive Order 11990 and 11988, respectively, it has been determined that no practicable alternative to this involvement is considered and all practicable measures to minimize harm have been incorporated. The Department will obtain the appropriate permits, as applicable, and adhere to any conditions set forth therein. The public will be advised through appropriate notices of this involvement.

Through appropriate coordination with the NRCS (Natural Resource Conservation Service) and a further site assessment, the project will not adversely affect those types of farmlands defined under FPPA (Farmland Protection Policy Act).

In consultation with the SHPO, as appropriate, the project will not affect any properties identified as being on or eligible for inclusion in the National Register of Historic Places under 36 CFR 800.

Oct. 3, 2013  
Date

Oct. 7, 2013  
Date

Edward M. Trivison  
NEPA Coordinator (Midlands Region)

J. Shane Belchey  
Federal Highway Administration

### **C.E. PROJECT ASSESSMENT FORM**

**Project No.:** BR46(012)

**PINs:** 31919X, 31918RD01

**Road/Route Number:** Road S-103 (Oak Park Rd.)

**County:** York

#### **Environmental Commitments:**

1. Standard sediment and erosion control measures would be implemented by the contractor in accordance to the Department's Standard Specifications, Supplemental Technical Specifications, and Special Provisions (November 11, 2008).
2. If cultural remains are found during construction of the project, in accordance with 36 CFR Part 800, the Advisory Council on Historic Preservation would be contacted if resources were found, and the South Carolina Department of Transportation and State Historic Preservation Office will be notified so that a qualified professional could evaluate the resources. Work could continue in areas where no cultural resources were discovered.
3. SCDOT will obtain and conform to the conditions of SCDOT's (South Carolina Department of Transportation) General Permit.
4. Stormwater control measures will be utilized both during construction and post-construction in accordance with SCDOT's MS4 Permit.

**Purpose and Need:** Purpose of the project is to replace a structurally deficient bridge with a sufficiency rating of 28.9% (see attached National Bridge Inventory form in Appendix B).

**Alternatives:** Initially the department had proposed and analyzed constructing the new bridge on the existing alignment. However, during this analysis, it was determined that approximately 350 feet of an unnamed tributary of Fishing Creek running parallel to the roadside would need to be rechannelized on the south side of S-103 in order to remain in the existing alignment. This would result in substantial impacts to the stream and require an individual Corps of Engineers permit. In order to avoid and minimize impacts to this blue line stream and to make the project eligible for the Department's General Permit, it was decided to shift the alignment approximately 50 feet north of the existing alignment. This is the preferred alternative, though it will still have approximately 150 feet of stream impacts on the section of the unnamed tributary to Fishing Creek that crosses perpendicularly to the roadway approach, as this section will need to be culverted.

The "no-build" alternative was considered but rejected as it would not meet the project's purpose and need.

**Noise:** A noise analysis was not conducted because the project does not half the distance between the traffic noise source and the closest receptor between the existing condition and the future build condition.

Construction noise should not hinder or annoy normal community functions as the contractor would be required to comply with OSHA (Occupational Safety and Health Administration) regulations concerning noise attenuation devices on construction equipment.

**Air:** This project is located in a portion of York County that is currently designated as non-attainment for ground-level ozone under the 2008 standard, however since it is not a capacity based project it is exempt from the conformity standards.

The purpose of this project is to replace a structurally deficient bridge over Fishing Creek. This project has been determined to generate minimal air quality impacts for CAAA criteria pollutants and has not been linked with any special MSAT concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts of the project from that of the no-build alternative.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES model forecasts a combined reduction of over 80 percent in the total annual emission rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 100 percent. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project ([http://www.fhwa.dot.gov/environment/air\\_quality/air\\_toxics/policy\\_and\\_guidance/aq\\_intguidmem.cfm](http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/aq_intguidmem.cfm) accessed 10-3-13).

**Displacements:** The project corridor consists of open fields and forested areas, therefore, no relocations or displacements are expected with construction of this project.

**Water/Wetlands:** The proposed project will traverse Fishing Creek in York County. This creek is classified by the South Carolina Department of Health and Environmental Control (DHEC) as a Freshwater creek. As such, the waters of this creek are suitable for primary and secondary contact recreation and as a source for a drinking water supply after conventional treatment in accordance with DHEC requirements. The waters are also suitable for fishing, the survival and propagation of a balanced indigenous aquatic community of fauna and flora, and for industrial and agricultural uses.

In addition, this creek is listed as impaired on DHEC's 303(d) list for fecal. As a result of this, the SCDOT will utilize stormwater control measures both during construction and post-construction in accordance with Department's MS4 Permit.

An unnamed tributary of Fishing Creek is located parallel and perpendicular to the proposed project corridor (Stream 2 on JD Figure 4 in Appendix C). Initially the department had proposed and analyzed constructing the new bridge on the existing alignment. However, during this analysis, it was determined that approximately 350 feet of this unnamed tributary of Fishing Creek running parallel to the roadside would need to be rechannelized on the south side of S-103 in order to remain in the existing alignment. This would result in substantial impacts to the stream and require an individual Corps of Engineers permit. In order to avoid and minimize



impacts to this blue line stream and to make the project eligible for the Department's General Permit, it was decided to shift the alignment approximately 50 feet north of the existing alignment. This is the preferred alternative, as it will have the least impacts to the stream. The preferred alternative will still have approximately 150 feet of stream impacts on the section of the unnamed tributary to Fishing Creek that crosses perpendicularly to the roadway approach, because this section of stream will need to be culverted. This will qualify the project to be covered under SCDOT's General Permit. (see attached Permit Determination and stream map in Appendix C). The project is excluded from a US Coast Guard Permit, see attached response to exclusion request in Appendix C.

During construction activities, temporary siltation may occur in the creek bed and erosion will be of a greater degree than presently occurring on existing terrain. The contractor would be required to minimize this impact by employing erosion control measures reflecting policies contained in Department's Standard Specifications, Supplemental Technical Specifications, and Special Provisions (November 11, 2008)..

After reviewing the engineering plans, and knowing that erosion control methods necessary to curtail runoff will be employed during construction, it has been determined that there would not likely be any substantial impact on water quality in the area as a result of this project.

The contractor would be required to employ erosion control measures reflecting policies contained in 23 CFR 650B and S.C. Code of Regulations 72-400.

**Floodplains:** The project is not located in a FEMA (Federal Emergency Management Agency) regulated floodway, however it is located in a designated floodplain (see attached Risk Assessment Form in Appendix D). The project is not expected to impact the floodplain as it will be constructed longer and have more vertical clearance than the existing structure.

**Archaeological/Historical:** No archaeological or architectural sites will be impacted by the proposed project (see attached Cultural Resources Screening Form and Report in the Appendix E).

**Section 4(f) Properties:** No section 4(f) properties were identified within the project boundaries.

**Endangered Species:** A field survey was conducted on the proposed project area on January 23, 2012. No endangered or threatened species listed for York County by the USFWS would be affected by this project (see attached biological survey in Appendix F).

**Farmlands:** This project has been assessed under the provisions of the Farmland Protection Policy Act of 1981. As a result of this analysis, the Department has determined that the proposal would require the taking of lands protected under the Act. However, based on the Farmland Conversion Impact Rating Form SCS-CPA-106, the total point value on the proposed project is 135 (see attached form in Appendix G). As the total points are less than the maximum allowable score of 160, neither consideration of alternative sites nor additional studies are required under the Act.

**USTs/Hazardous Waste:** A ground surface survey was conducted on 1-23-12. No signs of USTs (Underground Storage Tanks) or hazardous waste sites were identified in the project proposed right of way. However, if any sites are later located during construction, it is the Department's policy to avoid the acquisition of sites containing UST's and hazardous waste materials, if at all possible. If avoidance is not a viable alternative, tanks and other hazardous materials will be tested and removed and/or treated in accordance with EPA and DHEC (Department of Health and Environmental Control) requirements. Cost necessary for clean-up will be taken into consideration during the right of way appraisal acquisition process.

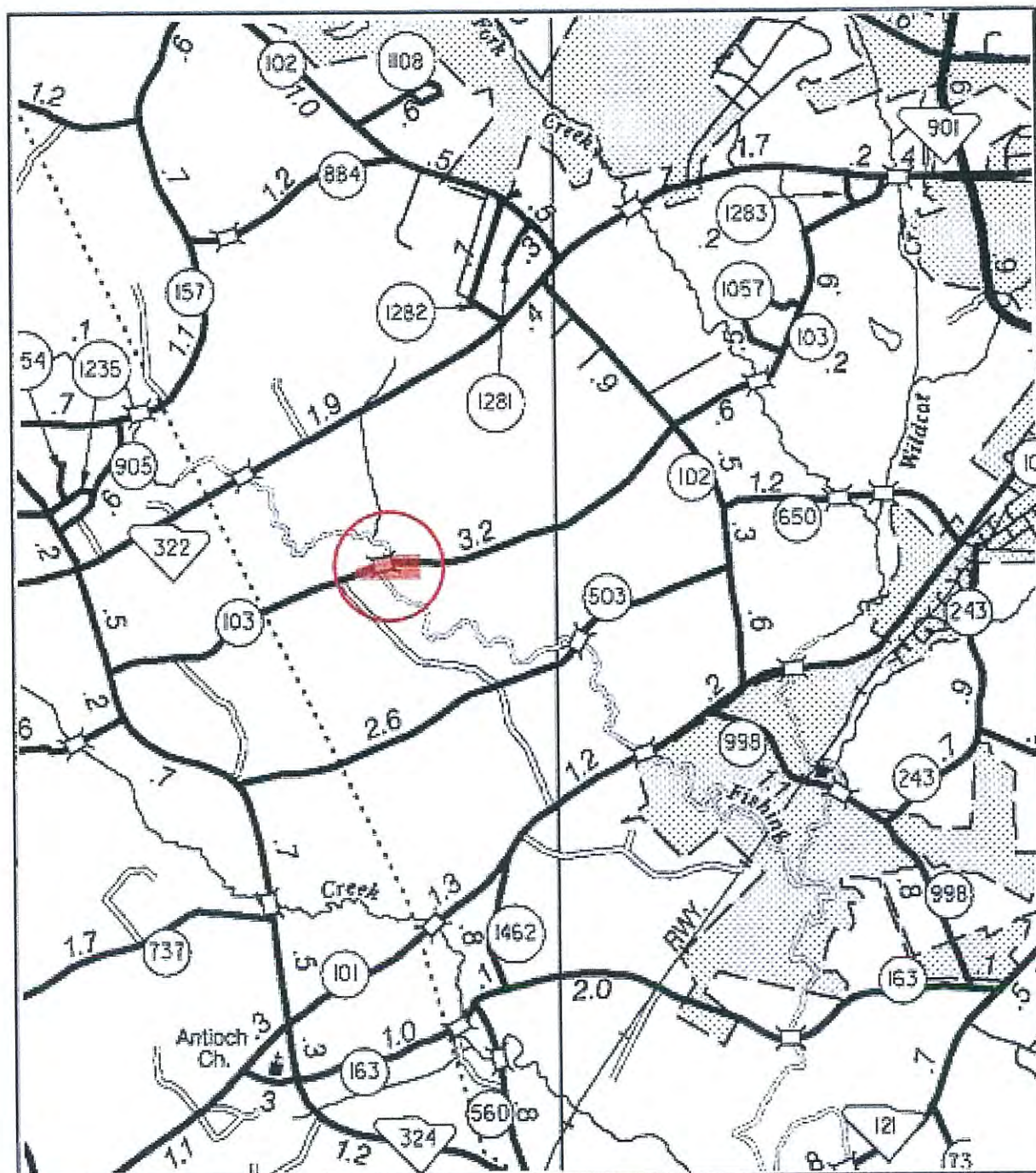
**Public Involvement:** No public meetings were held or are presently planned.

Date 1-6-3-13 Prepared by Ed Iverson

## Appendix

## Appendix A





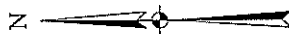
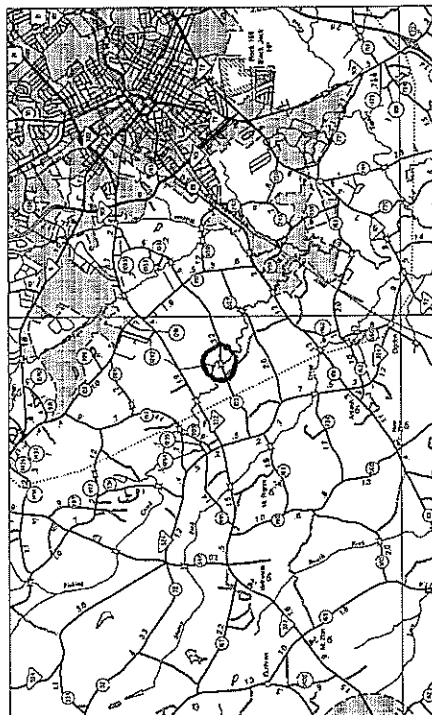
INDEX OF SHEETS  
SEE LIST SHEET FOR INDEX



South Carolina Department of Transportation

# PROPOSED PLANS FOR

YORK COUNTY  
FILE 46.169B.1 PROJ. BR-BR46(012)  
ROAD S-103 (OAK PARK ROAD)  
BRIDGE APPROACHES AT FISHING CREEK



ENVIRONMENTAL PERMIT INFORMATION	
USACE PERMIT	____YES ____NO
NEPA DOCUMENT	____X YES ____NO
401 CERTIFICATION	____YES ____NO
QCRM CAP	____YES ____NO
NAVIGABLE WATERS	____NCGO ____USACE ____NNA

1 DAY BEFORE DIGGING IN  
SOUTH CAROLINA

CALL 811

SOUTH CAROLINA 811 (SC811)  
WWW.SC811.COM

RAILROAD INVOLVEMENT? YES (NR)

TRAFFIC DATA		
2012	ADT	400
2032	ADT	600
TRUCKS		5 %

Hydraulic Design Reference for these plans is the:  
**2009**  
 Edition of SCDOT's "Requirements for  
 Hydraulic Design Studies"

**Design Reference for these plans is the:**

2001

### ASHTO "A Policy on Geometric Design of Highways and Streets"

NAMES DISCLOSED Area # <u>1.870</u> Area(s) <u>          </u>		Approximate Location of Residency is Region <u>          </u> Latitude <u>33° 54' 12.27" N</u> Longitude <u>81° 02' 50.27" W</u>		SCDDOT Designs were not released from the SCDDOT Regional Inspection Group
End		Latitude <u>33° 54' 29.65" N</u> Longitude <u>81° 03' 22.22" W</u>		
Hydrometric and NPDES Design provided by <u>          </u>				

	BUILDING START DATE	CONSTRUCTION DATE
RFQ - RFP		
RFQ - INFORMATION		
RFP - STRUCTURES		
RFP - CIVIL/GENERAL		
PRECONSTRUCTION AUTHOR - RFP		
PERMITTING/INQUIRY - STRUCTURES		
RFQ - DESIGN MANAGER		
RFQ - DESIGN MANAGER		

**Approved for Right Of Way Acquisition:**

Date \_\_\_\_\_

ENGINEER OF RECORD

DECLARATION OF INTEREST: The authors have nothing to disclose.

DATE \_\_\_\_\_

## LAYOUT

	RETURNS	RETURNS
NET LENGTH OF ROADWAY	0.315	MILES
NET LENGTH OF BRIDGES		MILES
NET LENGTH OF PRODUCT	0.315	MILES
LENGTH OF EXCLUDED		MILES
CROSS-SECTION OF PRODUCT	0.315	MILES

DRINKING WATER

$$S(19, 80+22.58) \text{ Dec} = S(19, 80+110.00) \text{ A1end} (+27.58")$$

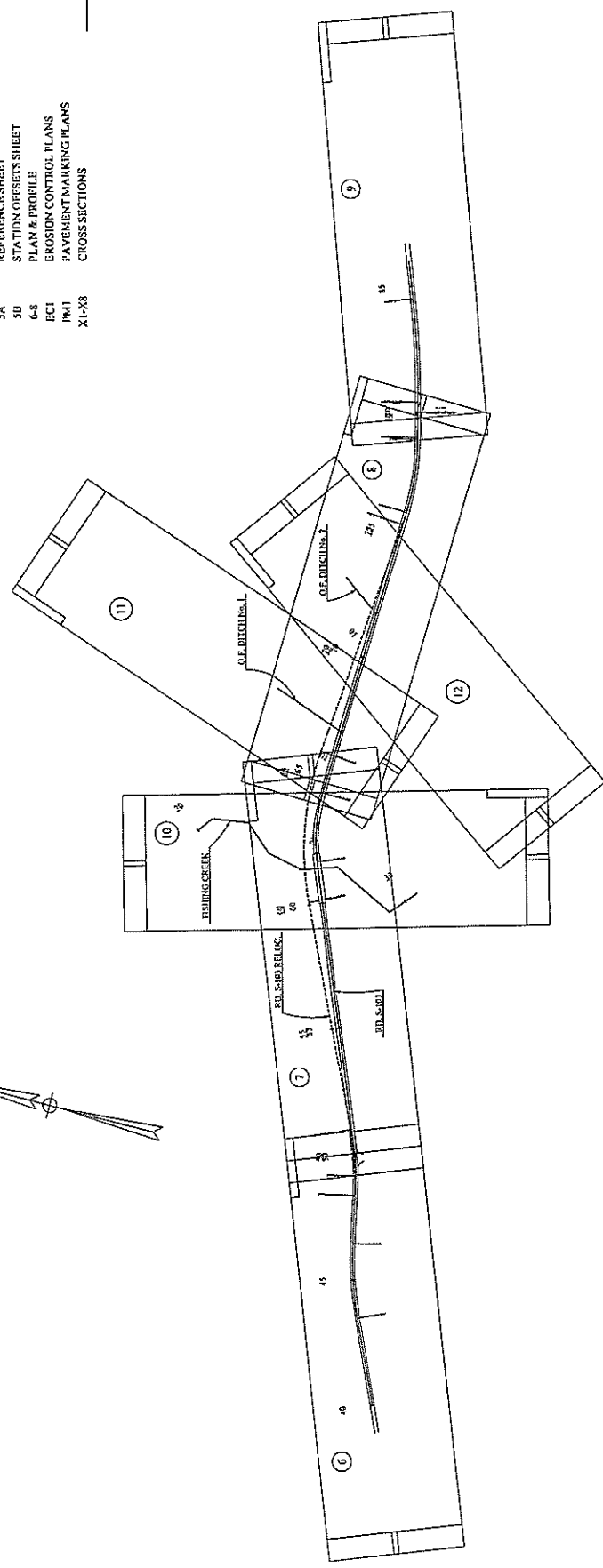
NOTE: EXCEPT AS MAY OTHERWISE BE SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIALS AND WORKMANSHIP ON THIS PROJECT SHALL CONFORM TO THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FIRST EDITION, LATEST EDITION, AND THE STANDARD DRAWINGS FOR ROAD CONSTRUCTION IN EFFECT AT THE TIME OF LETTING.

PPG3D - Milland's Production Group - JDS (U.S.)

DATE	BY	CHKD	DATE	BY	CHKD
10/2/01	J	VC	10/2/01	J	VC

# INDEX OF SHEETS

SHEET NO.	DESCRIPTION	SHEET SUBTOTALS
1	TITLE SHEET	1
1L1	INDEX LAYOUT SHEET	1
2	SUMMARY OF ESTIMATED QUANTITIES	0
2A	MOVING ITEMS	0
3-3A	TYPICAL SECTION	1
4-4A	R/W DATA SHEET	1
4B	PROPERTY STRIP MAP	1
5	GENERAL CONSTRUCTION NOTE	1
5A	REFERENCE SHEET	1
5B	STATION OFFSETS SHEET	1
6-8	PLAN & PROFILE	1
EC1	EROSION CONTROL PLANS	0
PM1	PAVEMENT MARKING PLANS	0
X1-X8	CROSS SECTIONS	0
		9



FOR INFORMATION ONLY				SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION COLUMBIA, S.C.			
REV. NO.	BY	DATE	DESCRIPTION	INDEX LAYOUT SHEET			
1							
DATE	DATE	DATE	DATE	SCALE 1"=20'			
DATE	DATE	DATE	DATE	RFG 311 - 5' LUDLANDS			
DATE	DATE	DATE	DATE	RFG 311 - 5' LUDLANDS			

5-1111  
D. A. P. 1911  
11-23-11

## ROAD S-103 RELOC. (RIGHT)

Year	Age	Sex	Height (cm)	Weight (kg)	Body Mass Index (kg/m <sup>2</sup> )
1997	18	M	175	70	22.2
1998	19	M	178	75	23.1
1999	20	M	180	80	24.7
2000	21	M	182	85	25.8
2001	22	M	185	90	26.5
2002	23	M	188	95	27.1
2003	24	M	190	100	28.2
2004	25	M	192	105	29.1
2005	26	M	195	110	30.1
2006	27	M	198	115	30.8
2007	28	M	200	120	31.5
2008	29	M	202	125	32.2
2009	30	M	205	130	32.8
2010	31	M	208	135	33.5
2011	32	M	210	140	34.2
2012	33	M	212	145	34.8
2013	34	M	215	150	35.5
2014	35	M	218	155	36.2
2015	36	M	220	160	36.8
2016	37	M	222	165	37.5
2017	38	M	225	170	38.2
2018	39	M	228	175	38.8
2019	40	M	230	180	39.5
2020	41	M	232	185	40.2
2021	42	M	235	190	40.8
2022	43	M	238	195	41.5
2023	44	M	240	200	42.2
2024	45	M	242	205	42.8
2025	46	M	245	210	43.5
2026	47	M	248	215	44.2
2027	48	M	250	220	44.8
2028	49	M	252	225	45.5
2029	50	M	255	230	46.2
2030	51	M	258	235	46.8
2031	52	M	260	240	47.5
2032	53	M	262	245	48.2
2033	54	M	265	250	48.8
2034	55	M	268	255	49.5
2035	56	M	270	260	50.2
2036	57	M	272	265	50.8
2037	58	M	275	270	51.5
2038	59	M	278	275	52.2
2039	60	M	280	280	52.8
2040	61	M	282	285	53.5
2041	62	M	285	290	54.2
2042	63	M	288	295	54.8
2043	64	M	290	300	55.5
2044	65	M	292	305	56.2
2045	66	M	295	310	56.8
2046	67	M	298	315	57.5
2047	68	M	300	320	58.2
2048	69	M	302	325	58.8
2049	70	M	305	330	59.5
2050	71	M	308	335	60.2
2051	72	M	310	340	60.8
2052	73	M	312	345	61.5
2053	74	M	315	350	62.2
2054	75	M	318	355	62.8
2055	76	M	320	360	63.5
2056	77	M	322	365	64.2
2057	78	M	325	370	64.8
2058	79	M	328	375	65.5
2059	80	M	330	380	66.2
2060	81	M	332	385	66.8
2061	82	M	335	390	67.5
2062	83	M	338	395	68.2
2063	84	M	340	400	68.8
2064	85	M	342	405	69.5
2065	86	M	345	410	70.2
2066	87	M	348	415	70.8
2067	88	M	350	420	71.5
2068	89	M	352	425	72.2
2069	90	M	355	430	72.8
2070	91	M	358	435	73.5
2071	92	M	360	440	74.2
2072	93	M	362	445	74.8
2073	94	M	365	450	75.5
2074	95	M	368	455	76.2
2075	96	M	370	460	76.8
2076	97	M	372	465	77.5
2077	98	M	375	470	78.2
2078	99	M	378	475	78.8
2079	100	M	380	480	79.5

[illegible]

OAK PARK ROAD

74551.18.3	WOODS LINE
74607.01.6	WOODS LINE
77+14.3.3	WOODS LINE
77+45.9.3	WOODS LINE
78+11.8.3.3	WOODS LINE
78+25.6.3.4	METAL GATE MISC LINE
78+61.3.3	ALICE LINE
79+00.7.3	WOODS LINE
79+40.7.3.3	WOODS LINE
79+60.7.3.7	WOODS LINE
80+11.6.3.3.3	WOODS LINE
80+36.3.6.3.3	WOODS LINE
80+46.6.2.1	WOODS LINE
80+46.6.2.1	WOODS LINE
82+37.5.3	WOODS LINE
82+37.5.3	WOODS LINE
82+50.3.6.3	WOODS LINE
82+50.3.6.3	WOODS LINE
83+14.7.3	WOODS LINE
84+19.7.3.4	WOODS LINE
85+00.7.1.5	WOODS LINE
85+00.7.1.5	WIRE
85+04.3.3.3	POLE

[illegible]

78-17-28-3 FENCE  
78-17-28-4 FENCE  
78-17-28-5 FENCE  
79-15-16-9 WOODS LINE  
79-16-4-2-5 FENCE  
79-16-4-2-7 FENCE  
79-16-18-2 WOODS LINE  
80-11-1-13 WOODS LINE  
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80-76-9-19 FENCE  
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81-21-1-10-0 P POLE  
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81-52-1-6-7 FENCE  
81-62-7-10 WOODS LINE  
81-62-7-10-4 BARBED WIRE FENCE  
81-62-7-10-5 WOODS LINE  
81-62-7-10-6 FENCE  
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82-9-19-1 FENCE  
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82-9-19-2 WOODS LINE  
83-4-2-1-1 WOODS LINE  
83-4-1-1-2-0 FENCE  
84-18-1-2-6 FENCE  
84-18-1-2-6 WOODS LINE  
84-18-1-2-7 FENCE  
85-19-2-8-6 WOODS LINE

**FOR INFORMATION ONLY**

[illegible]

STATION OFFSETS SHEET

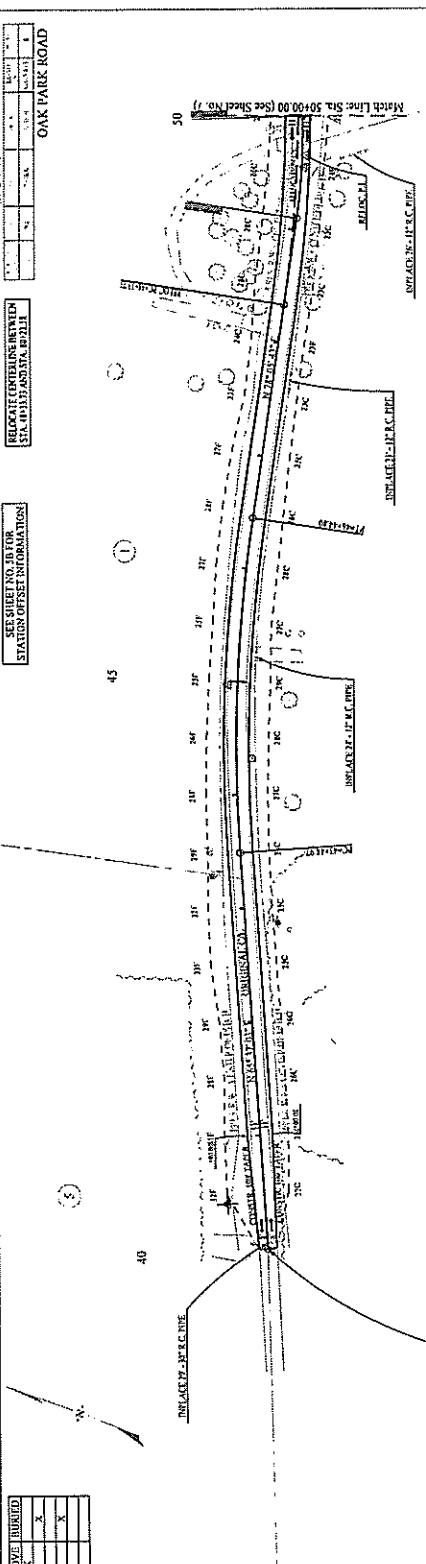


UTILITY OWNERS		ABOVE	BELOW
POWER	YORK ELECTRIC CO-OP	X	
TELEPHONE	CONSUMER TELECOMMUNICATIONS		X
CABLE TV	CONSUMER TELECOMMUNICATIONS/SAFARI		X
WATER	WELLS		
SEWER	SUPPLY TANKS		

SEE SHEET NO. 10 FOR  
STATION OFFSET INFORMATION

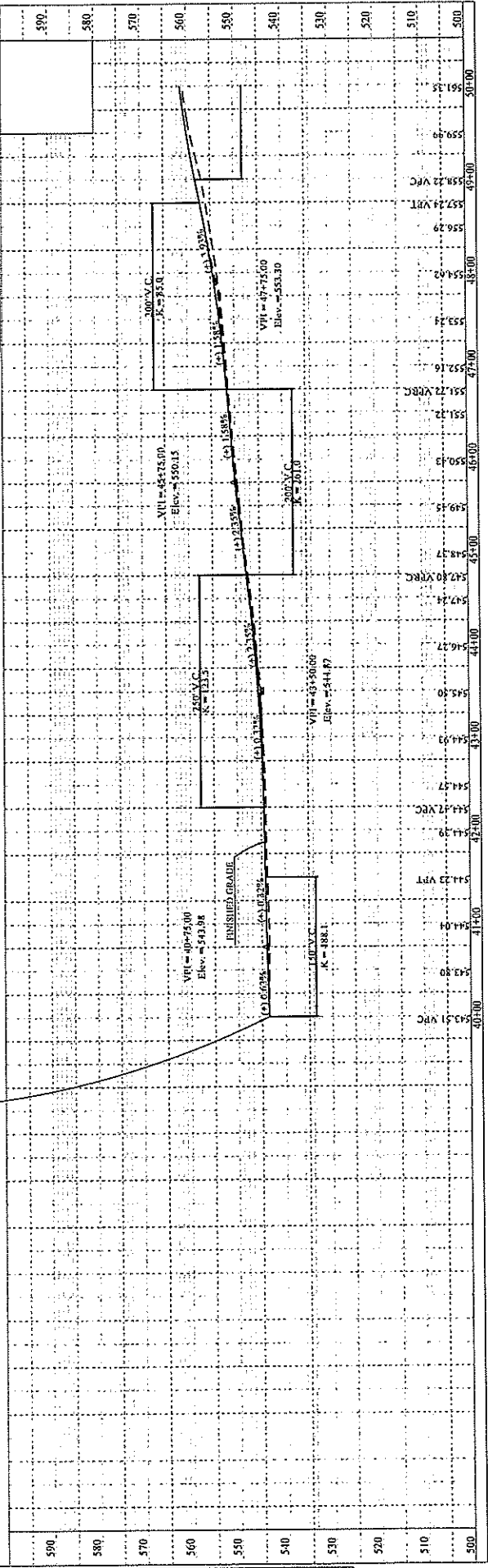
RELOCATE CENTERLINE BETWEEN  
STA. 40+31.7 AND STA. 40+31.1

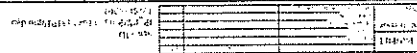
OAK PARK ROAD



SURVEY STA. 40+00.00 BEGIN  
SUC. 40+00.00  
ROAD S-103 (OAK PARK ROAD)

ALIGNMENT CONTROL CAN BE FOUND ON REFERENCE SHEET







OAK PARK ROAD

SHEET NO. 10 OF 10  
STATION OFFSET INFORMATION

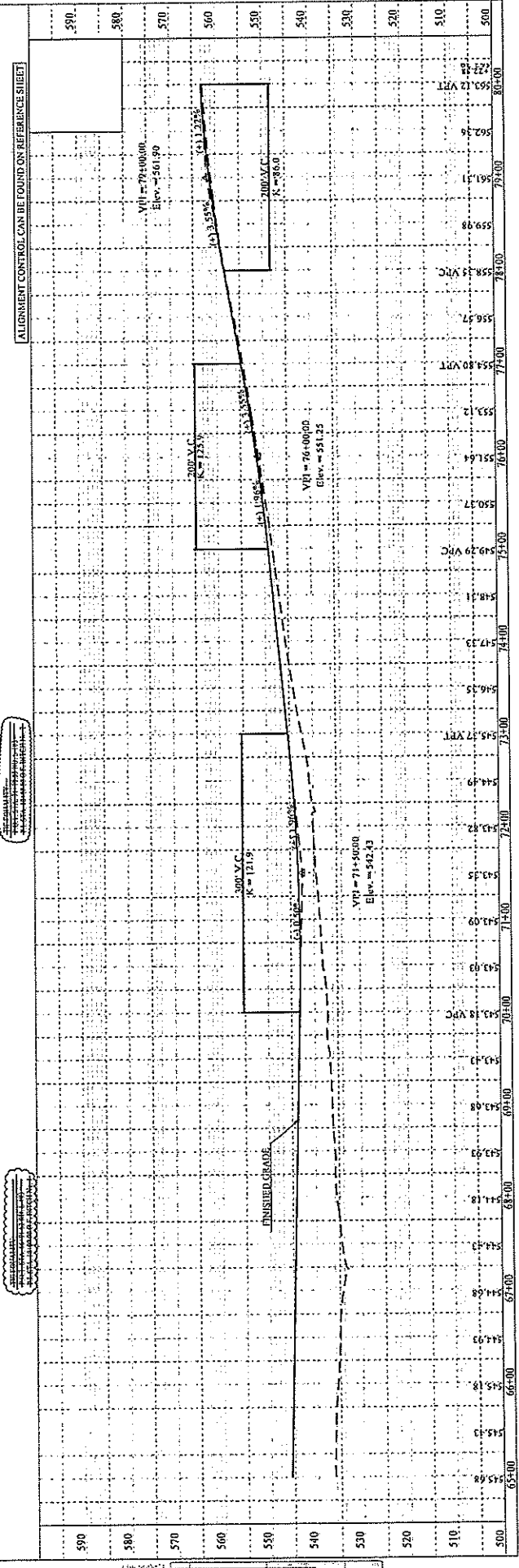
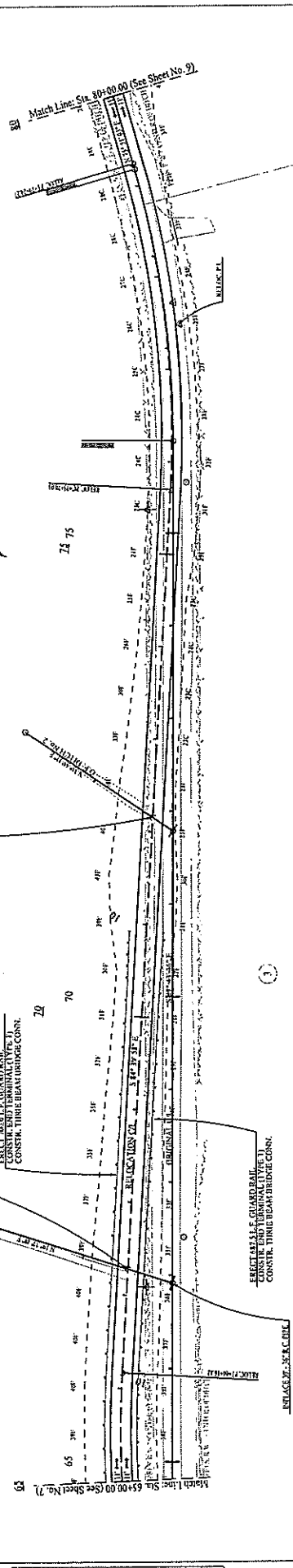
PROJECT: OAK PARK ROAD  
SHEET NO. 10 OF 10

REMARKS:  
1. SEE SHEET NO. 9 FOR  
STATION OFFSET INFORMATION

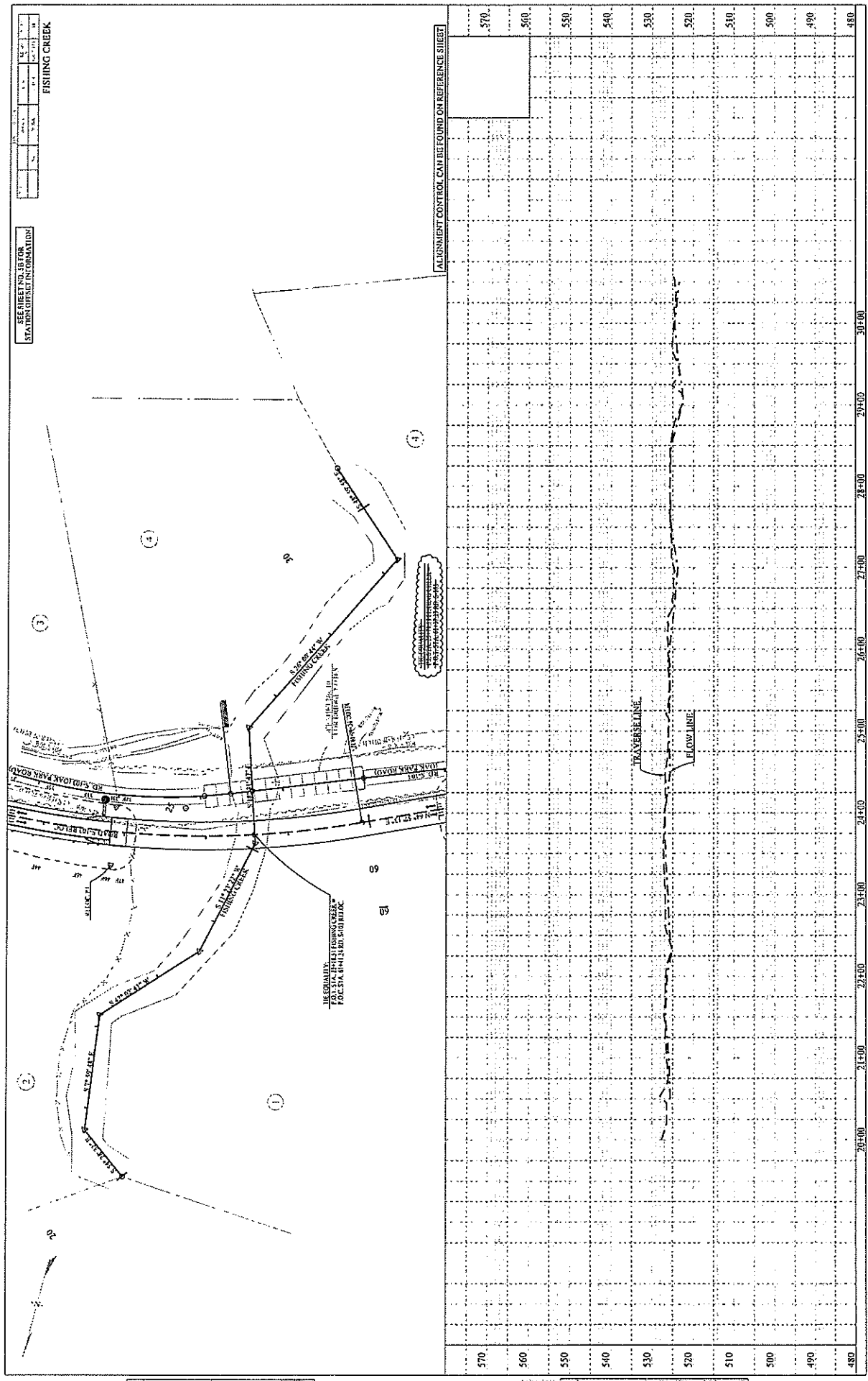
REMARKS:  
2. SEE SHEET NO. 9 FOR  
STATION OFFSET INFORMATION

REMARKS:  
3. SEE SHEET NO. 9 FOR  
STATION OFFSET INFORMATION

REMARKS:  
4. SEE SHEET NO. 9 FOR  
STATION OFFSET INFORMATION

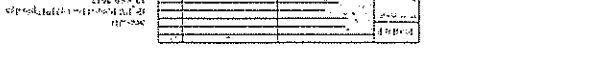
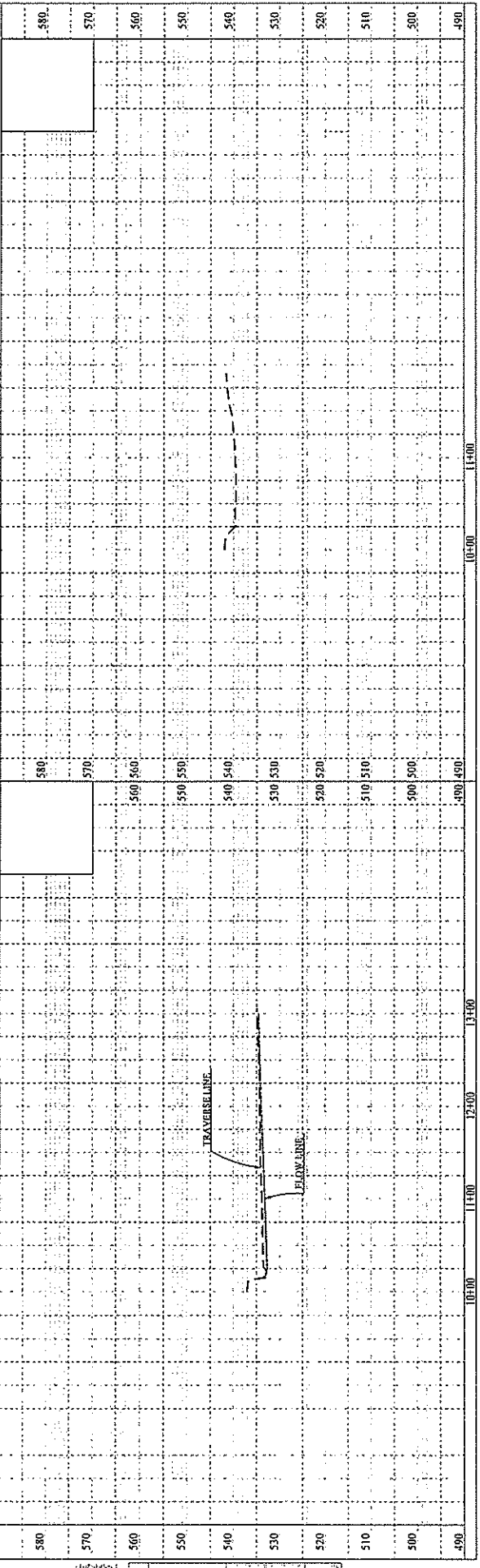
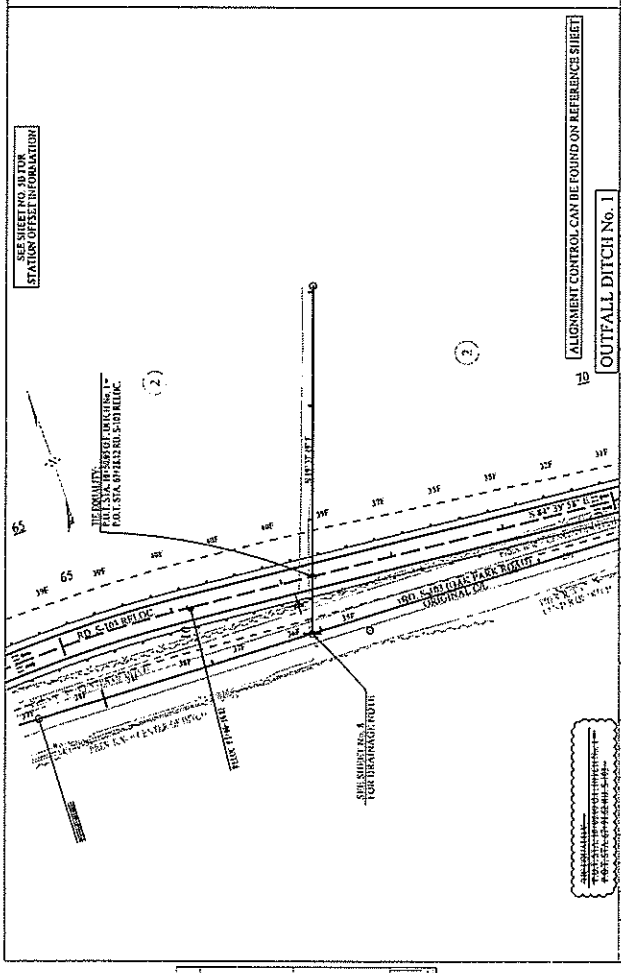
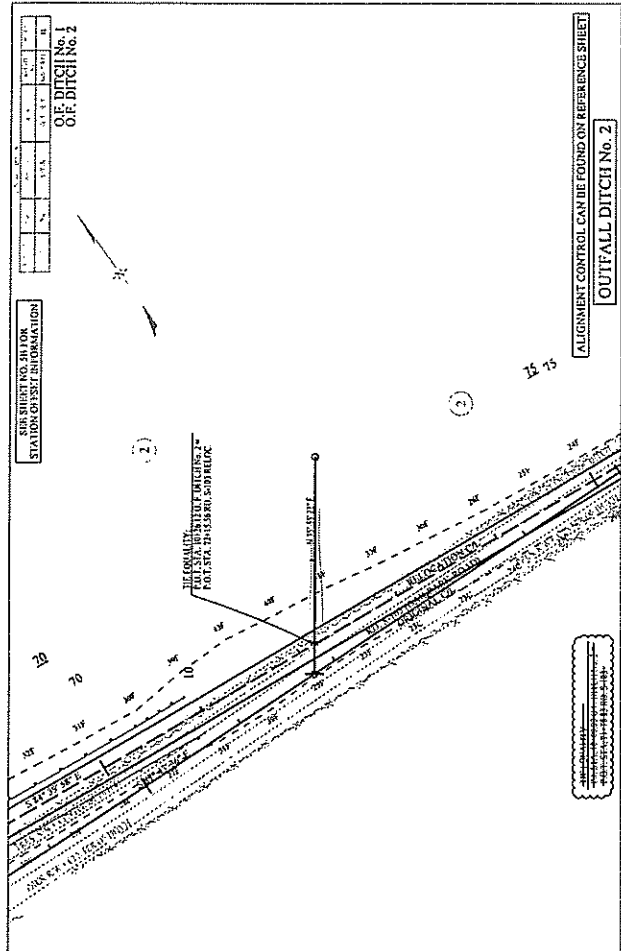






PLAN	SECTION	PROFILES
1	2	3

PLAN	SECTION	PROFILES
1	2	3



## Appendix B

IDENTIFICATION

(1) State Name - SOUTH CAROLINA Code 454  
 (8) Structure Number # 0004670010300100  
 (5) Inventory Route (On/Under) On - 171001030  
 (2) State Highway Department District 4  
 (3) County Code 91 (4) Place Code  
 (6) Features Intersected FISHING CREEK  
 (7) Facility Carried S-46-103  
 (9) Location 4.9 MI W ROCK HILL  
 (11) Milepoint 3.370  
 (12) Base Highway Network -NOT PART OF NET Code 0  
 (13) LRS Inventory Route & Subroute  
 (16) Latitude 34 Degrees 54 Minutes 20.00 Seconds  
 (17) Longitude 81 Degrees 6 Minutes 27.00 Seconds  
 (98) Border Bridge State Code % SHARE %  
 (99) Border Bridge Structure No. #

Sufficiency Rating = 28.9  
 Functionally Obsolete = NO  
 Structurally Deficient = YES

CLASSIFICATION Code

(112) NBIS Bridge Length - YES  
 (104) Highway System - NOT NHS 0  
 (26) Functional Class - RURAL-LOCAL 09  
 (100) Strahnet Highway - NOT STRAH HWY 0  
 (101) Parallel Structure - NONE EXIST N  
 (102) Direction of Traffic - 2-WAY TRAFFIC 2  
 (103) Temporary Structure -  
 (105) Federal Lands Highways -N/A 0  
 (110) Designated National Network -NO 0  
 (20) Toll - ON FREE ROAD 3  
 (21) Maintain - SCDOT 1  
 (22) Owner - SCDOT 1  
 (37) Historical Significance -NOT ELIGIBLE 5

STRUCTURE TYPE AND MATERIAL

(43) Structure Type Main: MATERIAL -CONCRETE  
 Type - 1 Code 101  
 (44) Structure Type Appr: MATERIAL -OTHER OR N/A  
 Type - OTHER OR N/A Code 000  
 (45) Number of Spans in Main Unit 13  
 (46) Number of Approach Spans 0  
 (107) Deck Structure Type -CONCRETE PRECAST PNL Code 2  
 (108) Wearing Surface / Protective System:  
 A) Type of Wearing Surface - BITUMINOUS Code 6  
 B) Type of Membrane - UNKNOWN Code 8  
 C) Type of Deck Protection - UNKNOWN Code 8

CONDITION Code

(58) Deck - FAIR 5  
 (59) Superstructure - FAIR 5  
 (60) Substructure - POOR 4  
 (61) Channel and Channel Protection -BNK SLUMPING 6  
 (62) Culverts - NOT APPLICABLE N

AGE AND SERVICE

(27) Year Built 1961  
 (106) Year Reconstructed  
 (42) Type of Service On -HIGHWAY  
 Under - WATERWAY Code 5  
 (28) Lanes: On Structure = 2 Under Structure = 0  
 (29) Average Daily Traffic 600  
 (30) Year of ADT 2006 (109) Truck ADT 06 %  
 (19) Bypass, Detour Length 1 MI

LOAD RATING AND POSTING Code

(31) Design Load - H 10 1  
 (64) Operating Rating - LF 5  
 (66) Inventory Rating - LF 5  
 (70) Bridge Posting - > 39.9% BELOW 0  
 (41) Structure Open, Posted or Closed -  
 Description -POSTED FOR LOAD P

GEOMETRIC DATA

(48) Length of Maximum Span 15 FT  
 (49) Structure Length 195 FT  
 (50) Curb or Sidewalk: Left 0.7 FT Right 0.7 FT  
 (51) Bridge Roadway Width Curb to Curb 26.1 FT  
 (52) Deck Width Out to Out 27.5 FT  
 (32) Approach Roadway Width (W/Shoulders) 29 FT  
 (33) Bridge Median -NONE Code 0  
 (34) Skew 0 Deg (35) Structure Flared NO  
 (10) Inventory Route Min Vert Clear 99 FT 99 IN  
 (47) Inventory Route Total Horz Clear 26.1 FT  
 (53) Min Vert Clear Over Bridge Roadway 99 FT 99 IN  
 (54) Min Vert Underclear Ref - NOT HWY OR RX 0 FT 0 IN  
 (55) Min Lat Underclear Right Ref -NOT HWY OR RXR 99.9 FT  
 (56) Min Lat Underclear Left 0.0 FT

APPRAISAL Code

(67) Structure Evaluation - INTOLERABLE; HIGH PRI REI 2  
 (68) Deck Geometry 5  
 (69) Underclearances, Vertical and Horizontal N  
 (71) Waterway Adequacy 7  
 (72) Approach Roadway Alignment 7  
 (36) Traffic Safety Features 0000  
 (113) Scour Critical Bridges - SCOUR WITHIN LIMITS 5

PROPOSED IMPROVEMENTS

(75) Type of Work -REPLACE/LOAD CAPACITY Code 311  
 (76) Length of Structure Improvement 226.8 FT  
 (94) Bridge Improvement Cost \$698,000  
 (95) Roadway Improvement Costs \$175,000  
 (96) Total Project Cost \$1,047,000  
 (97) Year of Improvement Cost Estimate 2007  
 (114) Future ADT 1044  
 (115) Year of Future ADT 2026

NAVIGATION DATA

(38) Navigation Control -NONE Code 0  
 (111) Pier Protection - Code  
 (39) Navigation Vertical Clearance FT  
 (116) Vert-Lift Bridge Nav Min Vert Clear FT  
 (40) Navigation Horizontal Clearance FT

INSPECTIONS

(90) Inspection Date 04/2007 (91) Frequency 12 Mo  
 (92) Critical Feature Inspection: (93) CFI Date  
 A) Fracture Crit Detail NO Mo A)  
 B) Underwater Insp NO Mo B)  
 C) Other Special Insp YES Mo 12 C) 10/01/2007

## Appendix C



Date: September 18, 2013

## PERMIT DETERMINATION

FROM Ed Frierson COMPANY SCDOT

CONTACT INFO (phone and/or email) 803-737-1861

SCDOT PROJECT ENGINEER Joy Shealy

TO Siobhan Gordon - RPG 3 Permits Coordinator

Project Description Bridge replacement over Fishing Creek on Oak Park Road.

Route or Road No. S-103 County York

CONST. PIN 31918 RD01 OTHER PINS or STRUCTURE # 31919 X

### RESPONSE:

☐ It has been determined that no permits are required because:

☒ The following permit(s) is/are necessary:  
(Please check which type(s) of permit the project will need)

USACE Permit ☒ GP ☐ IP ☐ 401 ☒ JD

OCRM Permit ☐ CAP ☐ CZC

Navigable ☐ SCDHEC NAVGP — if checked a USCG and/or USACE navigable permit may also be required, but will be determined during the NEPA and Permitting stages.

Other \_\_\_\_\_

Water Classification: FW

*Print and attach the SCDHEC water quality report*

303(d) listed ☐ no ☒ yes, for \* NH3N, CR, CU, HG, HGF, NI, PB, ZN, DO, PH, Turbidity, BIO, and FC

TMDL developed ☐ no ☒ yes, for \* Fecal

\*List all that apply using the SCDHEC abbreviations

Comments: Classification is of nearest waterbody that project will drain into.

The determination above was based on the most recently available information at the time. This is a preliminary determination and is subject to change if the design of the project is modified.

friersonew@dot.state.sc.us  
e.SC.US

Digitally signed by  
friersonew@dot.state.sc.us  
DN: cn=friersonew@dot.state.sc.us  
Date: 2013.04.04 15:03:09 -04'00'

Biologist, SCDOT/Consultant

**9-18-13**

Date



1 / 1



Main Report



100%

Basic Report Objects

Image

9/18/2013

## Watershed and Water Quality Information

## General Information

Latitude:

Longitude:

MS4 Designation:

Monitoring Station: CW-225

Within Coastal Critical Area:

Water Classification (Provisional): FW

Waterbody Name: FISHING CREEK

Entered Waterbody Name:

## Parameter Descriptions

NH3N Ammonia  
CR Chromium  
CU Copper  
HG Mercury  
NI Nickel  
PB Lead  
ZN Zinc  
DO Dissolved Oxygen  
PH pH  
TURBIDITY Turbidity

FC Fecal Coliform  
FCB Fecal Coliform (Shellfish)  
BIO Macroinvertebrates (Bio)  
TP (Lakes) Phosphorus  
TN (Lakes) Nitrogen  
CHLA (Lakes) Chlorophyll a  
ENTERO (Beach) Enterococcus  
HGF Mercury (Fish)  
PCB PCB (Fish)

## Impaired Status (downstream sites)

Station	NH3N	CR	CU	HG	NI	PB	ZN	DO	PH	TURBIDITY	BIO	FC	FCB	TP	TN	CHLA	ENTERO	HGF	PCB
CW-225	F	F	F	F	F	F	F	F	F	F	X	T	X	X	X	X	X	X	X
CW-224	A	A	A	A	A	A	A	A	A	A	X	A	X	X	X	X	X	X	X
CW-654	A	A	A	A	A	A	A	A	A	A	N	A	X	X	X	X	X	X	X
CW-697	A	A	A	A	A	A	A	A	A	A	A	A	X	X	X	X	X	X	X

F = Standards Fully Supported  
N = Standards Not Supported

A = Assessed at Upstream Station  
X = Parameter Not Assessed at Station

T = Within TMDL Approved Watershed

## Parameters to be addressed (those not supporting standards)

BIO

FC

## Fish Consumption Advisory

## TMDL Information - TMDL Parameters to be addressed

In TMDL Watershed: Yes

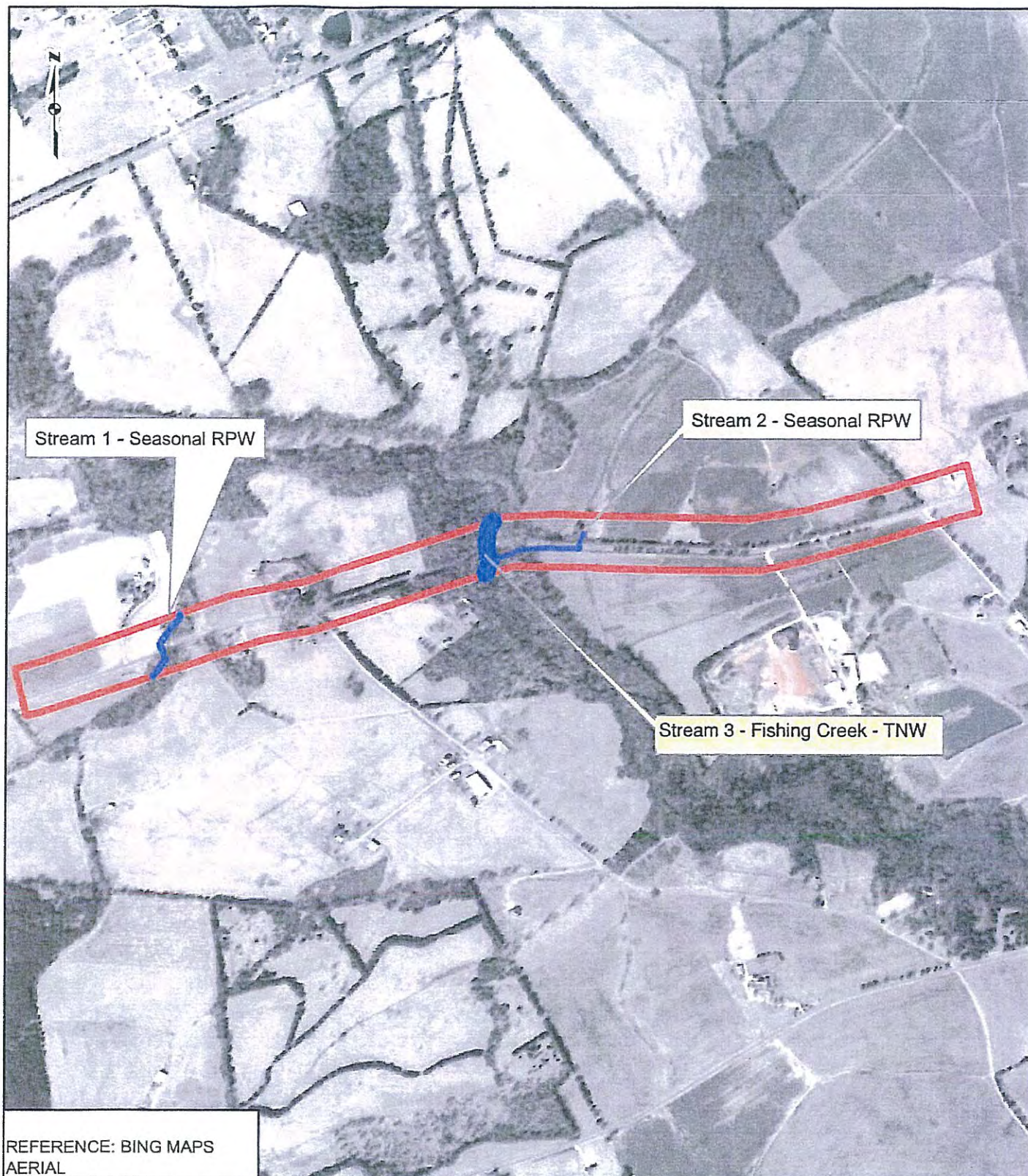
TMDL Site: CW-225

TMDL Report No: 004-02

TMDL Parameter: Fecal

TMDL Document Link: <http://www.scdhec.gov/environment/water/tmdl/docs/tmdlifish.pdf>



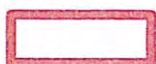


REFERENCE: BING MAPS  
AERIAL



gai consultants  
**York County  
South Carolina**

#### LEGEND



Project Location



Jurisdictional Stream

0 305 610 1,220 1,830 2,440 Feet

**FIGURE 4**  
JD Map

**SR103 Fishing Creek Bridge  
Replacement Project**  
South Carolina Department of Transportation

DRAWN BY: RGJ  
CHECKED:

DATE: 8/22/2012  
APPROVED:



U.S. Department  
of Homeland Security

United States  
Coast Guard



Commander  
Seventh Coast Guard District

909 SE 1<sup>st</sup> Ave Rm 432  
Miami, FL 33131-3050  
Staff Symbol: (dpb)  
Phone: (305) 415-6989  
Fax: (305) 415-6763  
Email: Evelyn.Smart@uscg.mil

16211/SC TITLE 23  
Serial #: 2339  
September 19, 2013

Mr. Ken Johnson, MSCE, PE  
Division Structural Engineer  
FHWA, South Carolina Division  
1835 Assembly Street, Ste. 1270  
Columbia, SC 29201

Dear Mr. Johnson:

We have received your e-mail and U.S. Coast Guard Permit Exclusion Request Checklist dated September 18, 2013 regarding the replacement of the SC 103 Bridge across Fishing Creek in York County, South Carolina.

Our research and examination indicates that Fishing Creek is not navigable waters of the United States and is not subject to Coast Guard Bridge permitting jurisdiction. Your checklist dated September 18, 2013 states that the proposed projects fall under 23 CFR Part 650, Subpart H, section 650.807 which exempts you from obtaining a formal Coast Guard bridge permits. We concur with your determination that a USCG bridge permit is not required for the SC 103 Bridge project across **Fishing Creek**. Coast Guard permits are not required for any highway bridges constructed with funds authorized by FHWA and over waters which: are non-tidal; not used or not susceptible for use in their natural conditions or by reasonable improvement as a means to transport interstate or foreign commerce; or if tidal, used only by vessels less than 21 feet in length (23 CFR Part 650, Subpart H, section 650.805).

If you have any questions regarding our determination feel free to call me at (305) 415-6989.

Sincerely,

A handwritten signature in blue ink that reads "Evelyn Smart". The signature is written in a cursive, flowing style.

EVELYN SMART  
Environmental Protection Specialist  
Bridge Administration Branch  
Seventh Coast Guard District  
By direction of the District Commander

Copy: BM1 David E. Browne, USCG ANT Georgetown

## Appendix D

## BRIDGE SCOPE AND RISK ASSESSMENT FORM

COUNTY: York

DATE: 08/13/2013

ROAD #: S-103

STREAM CROSSING: Fishing Creek

Purpose & Need for the Project:

The bridge is structurally deficient.

### I. FEMA Acknowledgement

Is this project located in a regulated FEMA Floodway? ☐ Yes ☒ No

Panel Number: 45091C0313E Effective Date: 09/26/2008 (See Attached)

### II. FEMA Floodmap Investigation

FEMA Flood Profile Sheet Number \_\_\_\_\_ illustrates the existing 100 year flood:

- ☐ Passes under the existing low chord elevation.
- ☐ Is in contact with the existing low chord elevation.
- ☐ Overtops the existing bridge finished grade elevation.

### III. No Rise/CLOMR Preliminary Determination

- ☐ Preliminary assessment indicates this project may be constructed to meet the "No-Rise" requirements. A detailed hydraulic analysis will be performed to verify this assessment.

Justification:

- ☒ Preliminary assessment indicates this project may require a CLOMR/LOMR. Impacts will be determined by a detailed hydraulic analysis.

Justification:

In order to meet SCDOT Hydraulic Design Requirements, the height of the bridge will need to be raised and the length of the bridge should be longer. It is not in a designated floodway, but in a designated flood zone.

## BRIDGE SCOPE AND RISK ASSESSMENT FORM

### IV. Preliminary Bridge Assessment

#### A. Locate Existing Plans

- a. Bridge Plans ☐ Yes File No. \_\_\_\_\_ Sheet No. \_\_\_\_\_ (See Attached)  
☒ No
- b. Road Plans ☒ Yes File No. 46.441 Sheet No. 6-8 (See Attached)  
☐ No

#### B. Historical Highwater Data

- a. USGS Gage ☐ Yes Gage No. \_\_\_\_\_ Results: \_\_\_\_\_  
☒ No
- b. SCDOT/USGS Documented Highwater Elevations  
☐ Yes Results: \_\_\_\_\_  
☒ No
- c. Existing Plans ☒ Yes See Above  
☐ No

### V. Field Review

#### A. Existing Bridge

Length: 195 ft. Width: 27.5 ft. Max. span Length: 15 ft.

Alignment: ☐ Tangent ☒ Curved

Bridge Skewed: ☐ Yes ☒ No Angle: \_\_\_\_\_

End Abutment Type: Spill Through

Riprap on End Fills: ☐ Yes ☒ No Condition: Erosion Present

Superstructure Type: Concrete Slab

Substructure Type: Wooded Piles

Utilities Present: ☒ Yes ☐ No

Describe: Telecommunications and Gas

Debris Accumulation on Bridge: Percent Blocked Horizontally: 8 %  
Percent Blocked Vertically: 8 %

Hydraulic Problems: ☐ Yes ☒ No

Describe: \_\_\_\_\_



## BRIDGE SCOPE AND RISK ASSESSMENT FORM

### V. Field Review (cont.)

#### B. Hydraulic Features

a. Scour Present: ☒ Yes ☐ No Location: Near Abutments

b. Distance from F.G. to Normal Water Elevation: 12.5 ft.

c. Distance from Low Steel to Normal Water Elev.: 12 ft.

d. Distance from F.G. to High Water Elevation: 6 ft.

e. Distance from Low Steel to High Water Elev.: 6.5 ft.

f. Channel Banks Stable: ☒ Yes ☐ No

Describe: Brush, ground cover, and trees

g. Soil Type: Clay; Sandy Clay, Sandy Loam

h. Exposed Rock: ☐ Yes ☒ No Location: \_\_\_\_\_

i. Give Description and Location of any structures or other property that could be damaged due to additional backwater.

#### C. Existing Roadway Geometry

a. Can the existing roadway be closed for an On-Alignment Bridge Replacement

☐ Yes ☒ No

Describe:

Need access for emergency vehicles.

If "yes", does the existing vertical and horizontal curves meet the proposed design speed criteria?

If "No", will the proposed bridge be:

☐ Staged Constructed

☒ Replaced on New Alignment

## BRIDGE SCOPE AND RISK ASSESSMENT FORM

### VI. Field Review (cont.)

#### A. Proposed Bridge Recommendation:

Length: 400 ft. Width: 37 ft. Elevation: 540.00 ft.

Span Arrangement: 100'-100'-100'-100'

Notes: Approximate size needed to meet Hydraulic Design Requirements, 2009

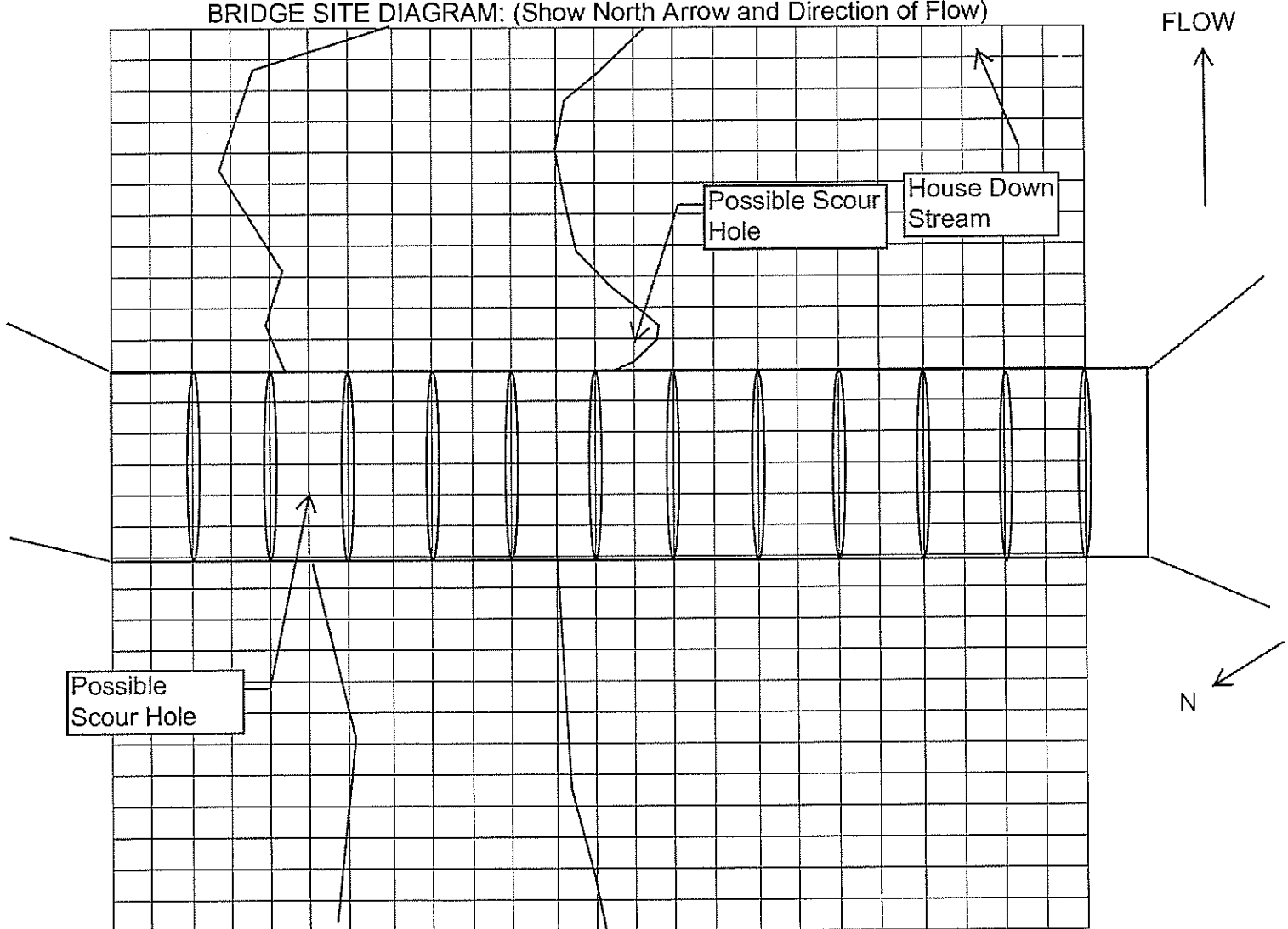
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BRIDGE SITE DIAGRAM: (Show North Arrow and Direction of Flow)



Performed By: Randall Mungo, Hydro. Eng.

## Appendix E



# Cultural Resources Project Screening Form

File Number: 46.031919 PIN: 31919 Route: S-45-103

County: York

Project Name:

S-106 Fishing Creek Bridge replacement

Type 1: Resurfacing, installation of fencing, signs, pavement markings, traffic signals, passenger shelters, railroad warning devices, construction of bicycle/ped lanes, installation of rumble strips, landscaping)

Project Type

2

Type 2: Off-system bridge replacement, intersection improvements that involve turn lanes and/or realignment of roads no greater than 300' in length)

Type 3: Projects that do not fall into Type 1 and Type 2 categories (e.g. road widening)

## Comments

S-103 Fishing Creek Bridge replacement was surveyed 12-02-2010. Shovel testing was conducted on the south side of the bridge in areas of new right of way and found no cultural materials. The proposed bridge replacement was changed to the north side of the current bridge. Thus a second survey was conducted in May of 2013. Four additional shovel tests were placed within the areas of new right of way. No cultural materials were discovered. There are no previously identified archaeological sites within the area of potential effect. The current deficient bridge is not historically or technologically significant and recommended not eligible for the NRHP. There are no historic properties affected. No additional investigations are recommended.

Effect Determination: No Historic Properties Affected

\*SHPO consultation is required for all Type 3 projects and any project with a No Adverse or Adverse Effect Determination.

This screening form was developed to satisfy documentation requirements for Type I and Type II projects under a Programmatic Agreement between the Federal Highway Administration, the South Carolina State Historic Preservation Office, and the South Carolina Department of Transportation. For Type I and Type II projects that have no effect on historic properties, the completion of this screening form with supporting documentation (e.g. ArchSite Map) provides evidence of FHWA and SCDOT's compliance with Section 106 of the National Historic Preservation Act.

Prepared by: Jeff Craver

Review Date:

6/5/2013

## MEMORANDUM

**TO:** Ed Frierson, Environmental Project Manager  
David Kelly, DOT National Register Survey Coordinator

**FROM:** Jeff A. Craver, Staff Archaeologist

**RE:** S-46-103 Fishing Creek Bridge Replacement

**DATE:** December 02, 2010

---

I have examined the plans for the project referenced above in York County (Figure 1). The purpose of the project consists of replacing the deficient bridge located on S-46-103 (Oak Park Road) over Fishing Creek 4.9 miles west of Rock Hill. The proposed bridge will be raised approximately 7 ft and will be lengthened. No right of way or easements exist on the current deficient bridge, so new right of way will have to be obtained.

The files of the NRHP of the South Carolina Department of Archives and History were examined on November 5, 2010 online GIS database (Archsite) was examined for previously identified cultural resources within a half mile of the project. There are no previously identified archaeological sites, and one historic structure located within half a mile of the project area. The site is abstracted in Table 1 below. There are no National Register properties located within half a mile of the project area (Figure 2).

Table 1. Historic Structures located within half a mile of the proposed project.

Site Number	Resource Name	NR Eligibility	Date of Resource	Address	Report Title
434-2033	Robertson-Fairey House	Not Eligible	1820	Oak Park Rd., Se side, .2 mi. NE of Millen Rd	York County Historic and Architectural Inventory Survey Report (Jaeger Co. 1991-3)

SCDOT Historic Bridge Inventory (Lichtenstein, 2006) was checked for information regarding the current bridge that will be replaced by the project. The current deficient bridge was not found. However the bridge was built in 1961 and is a 13 span, 2 lane, precast concrete slab bridge. As described by Lichtenstein (2006) this type of bridge is part of a highly successful standardized design that was developed by state engineers specifically to address the pressing need to replace bridges on the state's secondary road system beginning in the late 1940s. This bridge has no real innovative or distinctive details. It is not historically or technologically significant and thus not eligible for the NRHP.

After careful review of the Rock Hill West USGS topographic map, the project plans and the Google earth aerial map it was determined that due to the amount of new right of way shovel testing would be conducted. A total of 7 shovel tests were placed within areas of new ROW on the south side of the current deficient bridge and approach on S-46-103 (Figure 3). Shovel tests 1-4 were placed within a recently plowed field with 75% ground visibility. The four shovel tests all encountered 21-31 cm of (10YR3/4) dark yellowish brown sandy loam over 24+ cm of (10YR4/6) dark yellowish brown clay loam.

Shovel test 5 was placed adjacent to Fishing Creek 3 meters south of an earthen berm. The shovel test encountered 18 cm of (10YR3/1) very dark gray loam over 27+ cm of (10YR3/4) dark yellowish brown clay loam. Two shovel tests were placed on the west side of Fishing Creek spaced 30 meters apart. Both shovel tests encountered 20-22 cm of very dark gray loam over 28-34+ cm of dark yellowish brown clay loam. No cultural resources were discovered on the surface or within any of the shovel tests.

There are no previously identified archaeological sites within the area of potential effect. The current deficient bridge is not historically or technologically significant and recommended not eligible for the NRHP. There are no historic properties affected. No additional investigations are recommended.

### REFERENCES CITED

Lichtenstein Consulting Engineers.

2006 *South Carolina Historic Bridge Survey Statewide, South Carolina Phase 1B Report*. South Carolina Department of Transportation. Columbia, SC.



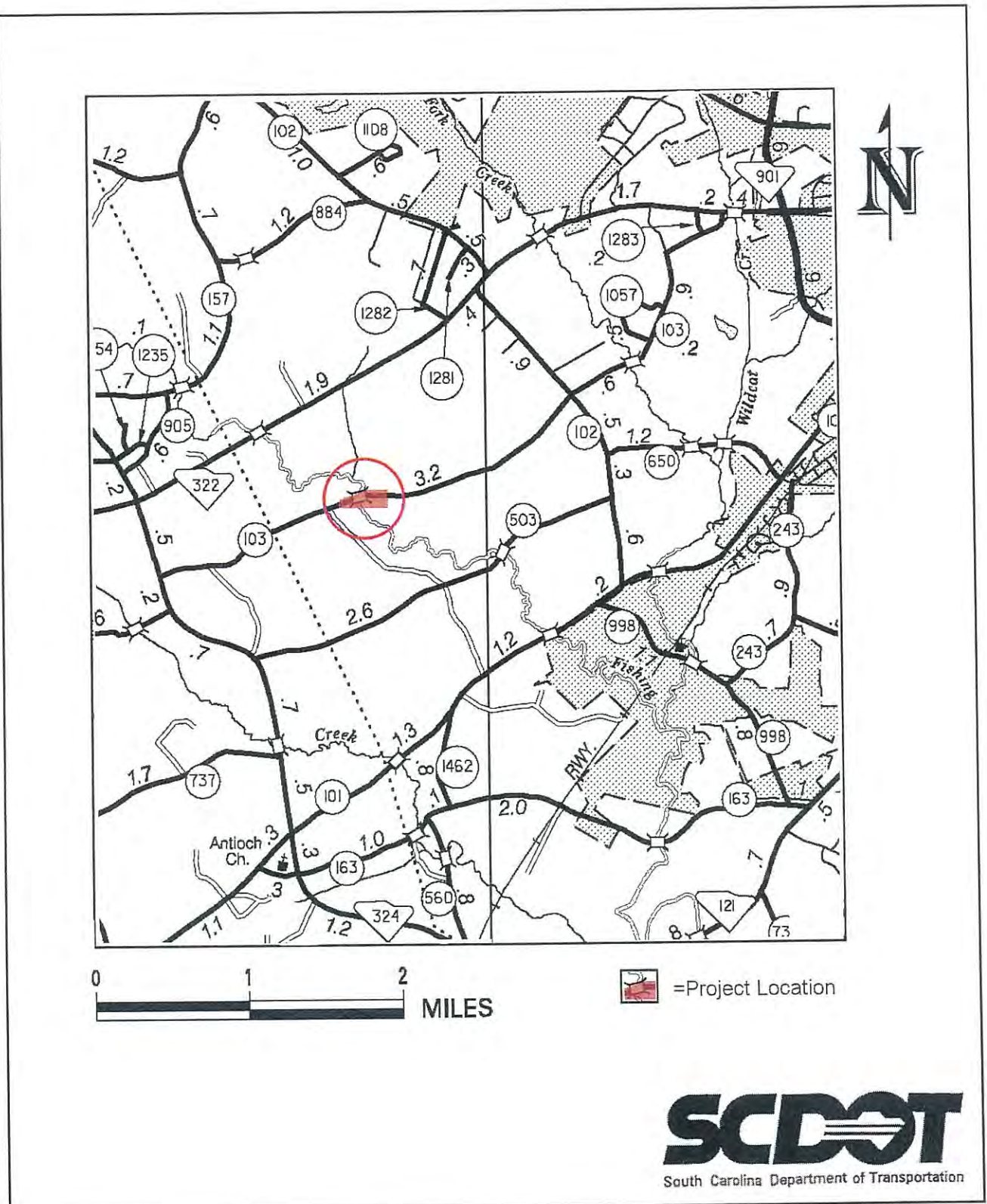


Figure 1. General Highway map showing the project location.



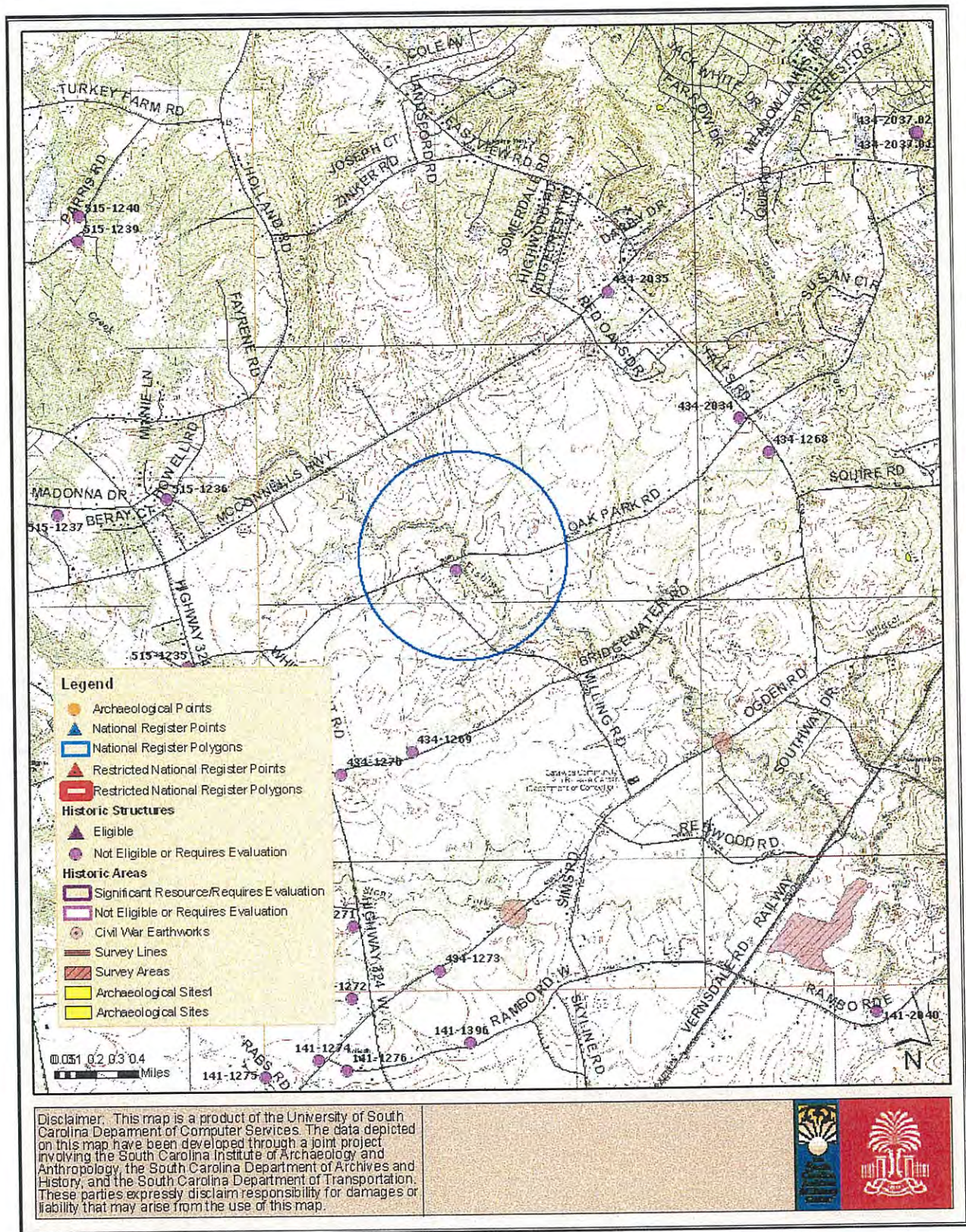


Figure 2. Arcview map showing sites within a half mile of the project area.





Figure 3. Plan map showing shovel test locations.

**From:** Kelly, David [KELLY@SCDAH.STATE.SC.US]  
**Sent:** Tuesday, December 07, 2010 4:16 PM  
**To:** Craver, Jeff A.  
**Subject:** RE: S-46-103 BR over Fishing Creek in York County

Hello Jeff--

I concur with the assessments in your message and attachment below. Let me know if you need anything else.

*David P. Kelly*

*Department of Transportation Coordinator  
National Register Survey Coordinator*

South Carolina Department of Archives and History  
8301 Parklane Road  
Columbia, SC 29223  
Phone (803) 896-6184  
Fax (803) 896-6167

---

**From:** Craver, Jeff A. [<mailto:CraverJA@dot.state.sc.us>]  
**Sent:** Tuesday, December 07, 2010 8:32 AM  
**To:** Kelly, David  
**Subject:** S-46-103 BR over Fishing Creek in York County

Afternoon David,

I have another survey for you this time in York County. The proposed project will consists of replacing the deficient bridge located on S-46-103 (Oak Park Road) over Fishing Creek 4.9 miles west of Rock Hill. The proposed bridge will be raised approximately 7 ft and will be lengthened. New right of way will have to be obtained. Shovel testing was conducted along the areas where the new bridge will be constructed south of the current deficient bridge, but no cultural materials were discovered. There are no historic properties affected. No additional survey is recommended.

Attached are the memo and a copy of the plans. If you concur, an email response will suffice.

Thank you, and have a good one

*Jeff Craver*

Archaeologist II

South Carolina Department of Transportation  
955 Park Street, Room 519  
Columbia, SC 29201  
Direct Line: 803-737-1414  
Email: [CraverJA@scdot.org](mailto:CraverJA@scdot.org)

## Appendix F



**Biological Survey for Road S-103 (Oak Park Road) Bridge Replacement over  
Fishing Creek, York County, South Carolina**

Prepared by: Ed Frieson Biologist

Pursuant to Section 7 of the Endangered Species Act a field survey was conducted on the proposed new right of way. The following list of endangered (E), threatened (T), state threatened (ST) species was obtained from the U. S. Fish and Wildlife Service:

**ANIMALS**

Bald eagle – *Haliaeetus leucocephalus* – (BGEPA)  
Carolina heelsplitter – *Lasmigona decorata* – (E)  
Carolina darter - *Etheostoma collis* – (ST)

**PLANTS**

Dwarf-flowered heartleaf - *Hexastylis naniflora* – (T)  
Little amphianthus – *Amphianthus pusillus* – (T)  
Schweinitz' sunflower – *Helianthus schweinitzii* – (E)

**METHODS**

The project area was examined by reconnaissance methods and remote sensing data on January 23, 2012 and September 19, 2013. Habitats surveyed were determined by each species ecological requirements.

**RESULTS**

The improvements will require primarily grassed mowed fields, grassy road shoulders, and a bottomland forested area surrounding the creek. The forested area consists primarily of sweetgum (*Liquidambar styraciflua*), red maple (*Acer rubrum*) and tulip poplar (*Liriodendron tulipifera*)

Potential habitat for the state listed Carolina darter is in the project corridor. The project may affect but not adversely this species of fish. No habitat for any of the federally listed species was located in the proposed project corridor (see separate attached report for Carolina heelsplitter).

Based on the lack of suitable habitat and no observations of the federally listed species during the assessment, the proposed action will not affect any threatened or endangered species or critical habitats currently listed by the USFWS.



**Alderman Environmental Services, Inc.**

**April 21, 2006**

**PROJECT:** Freshwater mussel snrvey for SCDOT Project PIN # 31919 at S-103;  
Fishing Cr., York County, SC

**TARGET SPECIES:** Federally listed endangered Carolina heelsplitter (*Lasmigona  
decorata*)

**BIOLOGISTS:** John Alderman  
Jeffrey West

**SCDNR Endangered Mussel Survey Permit Authorization:** November 25, 2002

**U.S. FISH AND WILDLIFE SERVICE ES PERMIT:** TE065756-0

**STATION** 20060417.4jma

**LOCATION:** Fishing Cr., Santee Cooper River Basin, York County, South Carolina;  
within 600 m downcreek to 300 m upcreek from the bridge; Location: 34.90563 N,  
81.10741 W; see **associated map at end of report.**

**SURVEY DATE:** April 17, 2006

**SITE COMMENTS:** Heavy sediment load; limited good habitat; effluent odor(?)

**HABITAT:**

<b>WATERBODY TYPE:</b>	Creek
<b>FLOW:</b>	Run, riffle, slack

**HABITAT (CONTINUED):**

RELATIVE DEPTH:	Very shallow
DEPTH (%<2 FEET):	90
SUBSTRATE:	Clay, <b>silt, sand</b> , gravel, cobble, boulder, bedrock
COMPACTNESS:	Normal and <b>unconsolidated</b>
SAND/GRAVEL BARS:	Abundant
WOODY DEBRIS:	High
BEAVER ACTIVITY:	Evidence (gnawed sticks)
WINDTHROW:	Moderate
TEMPORARY POOLS:	None
CHANNEL WIDTH:	10+ meters
BANK HEIGHT:	2+ meters
BANK STABILITY:	Some erosion/undercutting
BUFFER WIDTH:	Wide
RIPARIAN VEGETATION:	Wooded, shrub-brush
LAND USE:	Natural, timber , rural
PERCENT COVER:	90
WOODLAND EXTENT:	Intermediate to extensive
NATURAL LEVEES:	At least one
VISIBILITY:	Slightly turbid
WATER LEVEL:	Low
WEATHER:	Sun-Cloud, hot

**TECHNIQUES AND SURVEY TIME:**

TECHNIQUES:	Visual; tactile
SURVEY TIME:	2.0 person hours

**FRESHWATER MUSSELS:**

*Elliptio complanata* – 52 live, 8 shells

**OTHER TAXA:**

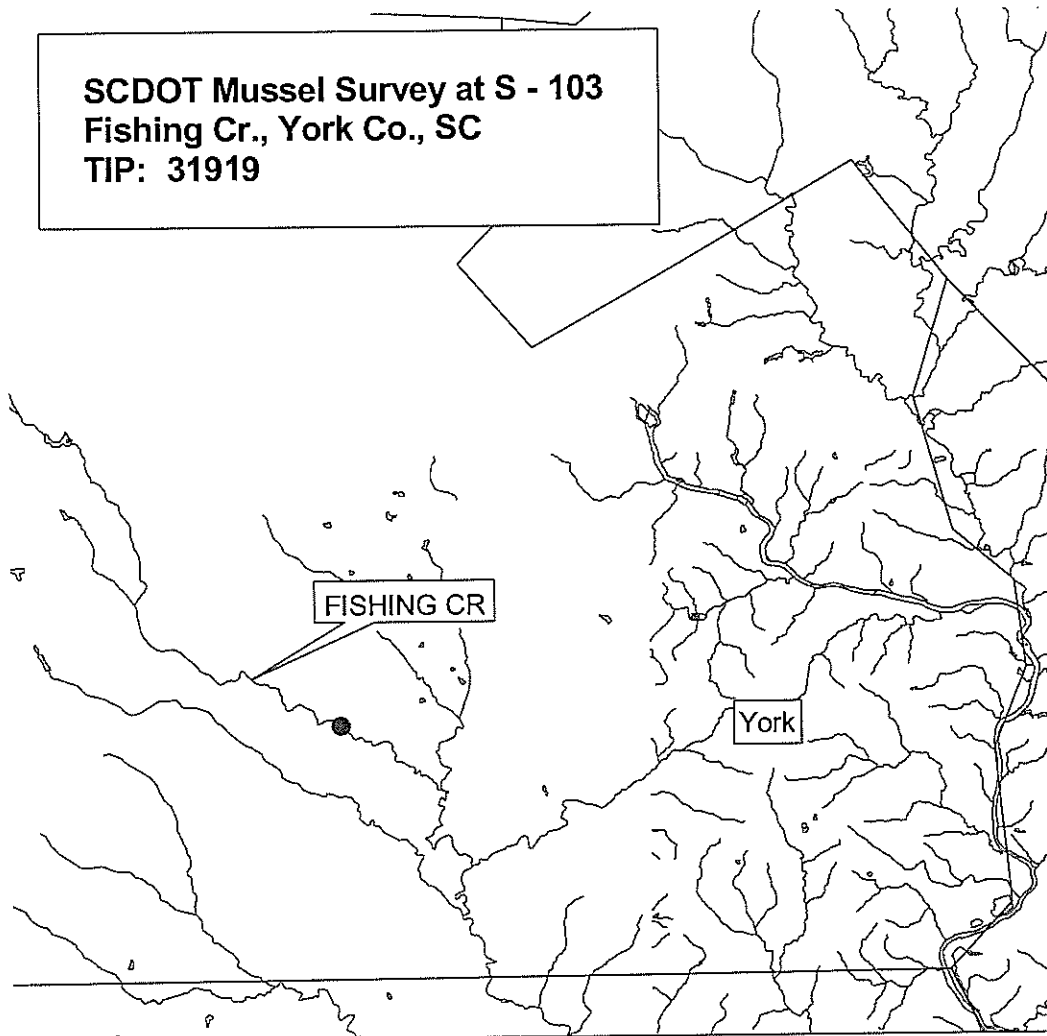
*Corbicula fluminea*


**BIOLOGICAL DETERMINATION:**

No effect



**SCDOT Mussel Survey at S - 103**  
**Fishing Cr., York Co., SC**  
**TIP: 31919**



 **Streams**  
 **Survey Station**  
 **Counties**



0 9 Miles



## Appendix G

**FARMLAND CONVERSION IMPACT RATING  
FOR CORRIDOR TYPE PROJECTS**

<b>PART I (To be completed by Federal Agency)</b>		3. Date of Land Evaluation Request <b>1/24/12</b>	4. Sheet 1 of _____
1. Name of Project <b>S-103 Fishing Creek Bridge Replacement</b>		5. Federal Agency Involved <b>USDOT- FHWA</b>	
2. Type of Project <b>Highway Project</b>		6. County and State <b>York County, South Carolina</b>	
<b>PART II (To be completed by NRCS)</b>		1. Date Request Received by NRCS	2. Person Completing Form <b>Ed Frierson</b>
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form).		YES <input type="checkbox"/> NO <input type="checkbox"/>	4. Acres Irrigated   Average Farm Size
5. Major Crop(s)	6. Farmable Land in Government Jurisdiction Acres: %	7. Amount of Farmland As Defined in FPPA Acres: %	
8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS	

<b>PART III (To be completed by Federal Agency)</b>		<b>Alternative Corridor For Segment</b>			
		Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	3				
B. Total Acres To Be Converted Indirectly, Or To Receive Services	0				
C. Total Acres In Corridor	3	0	0	0	0
<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide And Local Important Farmland					
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value					
<b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b>	<b>100</b>				
<b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b>	<b>Maximum Points</b>				
1. Area in Nonurban Use	15	8			
2. Perimeter in Nonurban Use	10	5			
3. Percent Of Corridor Being Farmed	20	2			
4. Protection Provided By State And Local Government	20	0			
5. Size of Present Farm Unit Compared To Average	10	10			
6. Creation Of Nonfarmable Farmland	25	0			
7. Availability Of Farm Support Services	5	5			
8. On-Farm Investments	20	5			
9. Effects Of Conversion On Farm Support Services	25	0			
10. Compatibility With Existing Agricultural Use	10	0			
<b>TOTAL CORRIDOR ASSESSMENT POINTS</b>	<b>160</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>PART VII (To be completed by Federal Agency)</b>					
Relative Value Of Farmland (From Part V)	100	100			
Total Corridor Assessment (From Part VI above or a local site assessment)	160	35	0	0	0
<b>TOTAL POINTS (Total of above 2 lines)</b>	<b>260</b>	<b>135</b>	<b>0</b>	<b>0</b>	<b>0</b>
1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		

5. Reason For Selection:

Assuming 100 pts. for Section V makes the Total Points 135. Therefore no further action is necessary.

Signature of Person Completing this Part:  
**Ed Frierson**

DATE  
**1/24/12**

NOTE: Complete a form for each segment with more than one Alternate Corridor