



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
SAVANNAH DISTRICT, CORPS OF ENGINEERS
100 W. OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3640

MARCH 13 2013

Regulatory Division
SAS-2013-00168

JOINT PUBLIC NOTICE
Savannah District/State of Georgia

The Savannah District has received an application for a Department of the Army Permit, pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), as follows:

Application Number: SAS-2013-00168

Applicant: Mr. Glenn S. Bowman, P.E.
State Environmental Administrator
Georgia Department of Transportation
Office of Environmental Services
One Georgia Center, 16th Floor, 600 W. Peachtree Street, NW
Atlanta, GA, 30308-3607

Location of Proposed Work: The project corridor is on State Route 133 (SR 133) from County Road 276 (CR 276)/Troupeville Road in Brooks County to State Route 35 (SR 35)/East Moultrie Bypass in Colquitt County, Georgia. The approximate latitude and longitude of the CR 276/Troupeville Road begin point and the SR 35/East Moultrie Bypass end point of the proposed linear transportation project are 30.8540, -83.3564 and 31.1765, -83.7615, respectively. The proposed project corridor is located within eight-digit Hydrologic Unit Code (HUC) 03110203 and 03110204 of the Withlacoochee River and Little River watersheds.

Description of Work Subject to the Jurisdiction of the US Army Corps of Engineers: The Georgia Department of Transportation (GDOT) project would consist of road widening on State Route 133 (SR 133) from County Road 276 (CR 276)/Troupeville Road in Brooks County to State Route 35 (SR 35)/East Moultrie Bypass in Colquitt County, Georgia. The proposed improvements include five units that would widen SR 133 between Valdosta and Moultrie. The proposed limits of the five units (PI Nos. 0000543, 0000544, 0000545, 0000546, and 431780) between Valdosta and Moultrie have logical termini; the southern terminus of these projects would tie into the existing four-lane section of SR 133 near CR 276/Troupeville Road in Brooks County and the northern terminus of these projects would tie into the existing four-lane section at the SR 35/East Moultrie Bypass in Colquitt County. The Georgia Department of Transportation (GDOT) has separated this project into five separate units for construction, under one overall permit application. The total project length is approximately 34.5 miles.

Impacts to Federally Jurisdictional Resources		
Resource Type	Length of Impact (feet)	Area of Impact (acres)
Perennial Stream	962	0.50
Intermittent Stream	2,567	0.27
Ephemeral Channel	0	0
TOTAL	3,529	0.77
	Area of Permanent Impact (acres)	Area of Clearing Impact/Temporary Drain (acres)
Wetland	9.60	6.97
Open Water	0.63	5.16
TOTAL	10.23	12.13

To mitigate for the proposed impacts, the applicant is proposing to purchase 130.5 wetland credits (41.0 wetland credits in HUC 03110203 and 89.5 wetland credits in HUC 03110204) and 14,988.4 stream mitigation credits (6,221.4 stream credits in HUC 03110203 and 8,767.0 stream credits 03110204) from either the Cecil Bay and/or Cherry Creek Mitigation Banks and/or In-lieu Fee Program.

BACKGROUND

The project is federally funded and the Federal Highway Administration (FHWA) is the lead federal agency responsible for coordination and consultation under Section 7(a)(2) of the Endangered Species Act and Section 106 of the National Historic Preservation Act of 1966, as amended.

State Route 133 is identified for eventual widening due to its inclusion on the Governor's Road Improvement Program (GRIP). The GRIP was initiated in the 1980's to address the importance of stimulating economic growth via an improved transportation network. SR 133 was added to the GRIP by the State Legislature and approved by the Governor prior to the concept report approval in 2006. The improvement would aid in the economic development of sparsely populated rural areas and small towns along this route. Traffic carrying capacity would be increased; safety and operational characteristics would be improved.

The wetland boundaries shown on the project drawings have not yet been verified by the Corps. If the Corps determines the boundaries of the wetland/waters are substantially inaccurate a new public notice may be published.

This Joint Public Notice announces a request for authorizations from both the U.S. Army Corps of Engineers and the State of Georgia. The applicant's proposed work may also require local governmental approval.

STATE OF GEORGIA

Water Quality Certification: The Georgia Department of Natural Resources, Environmental Protection Division, intends to certify this project at the end of 30 days in accordance with the provisions of Section 401 of the Clean Water Act, which is required for a Federal Permit to conduct activity in, on, or adjacent to the waters of the State of Georgia. Copies of the application and supporting documents relative to a specific application will be available for review and copying at the office of the Georgia Department of Natural Resources, Environmental Protection Division, Water Protection Branch, 4220 International Parkway, Suite 101, Atlanta, Georgia 30354, during regular office hours. A copier machine is available for public use at a charge of 25 cents per page. Any person who desires to comment, object, or request a public hearing relative to State Water Quality Certification must do so within 30 days of the State's receipt of application in writing and state the reasons or basis of objections or request for a hearing. The application can be reviewed in the Savannah District, U.S. Army Corps of Engineers, Regulatory Division, 100 West Oglethorpe Avenue, Savannah, Georgia 31401-3640.

State-owned Property and Resources: The applicant may also require assent from the State of Georgia, which may be in the form of a license, easement, lease, permit or other appropriate instrument.

US ARMY CORPS OF ENGINEERS

The Savannah District must consider the purpose and the impacts of the applicant's proposed work, prior to a decision on issuance of a Department of the Army Permit.

Cultural Resources Assessment: The Federal Highway Administration (FHWA), the lead federal agency, has reviewed this project in accordance with Section 106 of the National Historic Preservation Act of 1966. In compliance with Section 106 of the National Historic Preservation Act of 1966 and amendments thereto, GDOT surveyed the project area for historic and archaeological resources, especially those on or eligible for inclusion in the National Register of Historic Places (NRHP). Historic surveys were conducted for all project units. As a result of the survey, three additional eligible historic properties were identified within the proposed project's Area of Potential Effect (APE). An Addendum to the Approved Assessment of Effects was submitted to the Georgia State Historic Preservation Office (GASHPO) and the FHWA in April 2010. The Addendum was approved by GDOT on April 27, 2010 and by the GASHPO on May 18, 2010. An Archaeological survey for the proposed APE was conducted in 2005. The 2005 survey located and recorded 42 archeological sites, the vast majority of which were late

nineteenth to mid-twentieth century houses and farmstead sites. All were recommended as not eligible for inclusion in the NRHP. Subsequent surveys were conducted in 2011 and 2012 and the findings of no new sites recorded were submitted in the January 2011 Addendum and December 2012 Addendum. The FHWA is the lead federal agency for this proposed road improvement project; therefore it is their responsibility to ensure that the project complies with Section 106 of the National Historic Preservation Act of 1966 and subsequent amendments. Also, if cultural resources are identified on the project site, FHWA would be required to complete coordination/consultation pursuant to Section 106 of the NHPA. Based on this, the Corps did not make an effect determination with regards to Section 106 of the NHPA for the proposed project.

Endangered Species: The Federal Highway Administration, the lead federal agency, has reviewed this project in accordance with Section 7 of the Endangered Species Act (ESA). The FHWA made effects determinations, that the proposed project would have no effect to American chaffseed, red-cockaded woodpecker and gopher tortoise and that the project may effect, not likely to adversely affect the wood stork (*Mycteria americana*) and frosted flatwoods salamander (*Ambystoma cingulatum*). Informal Section 7 Consultation initiated under the ESA with the U.S. Fish and Wildlife Service was completed on July 6, 2006 for the wood stork and in October 2010 for the frosted flatwoods salamander. During the construction phase of the proposed project, GDOT would implement Special Provision 107.23G to prevent impacts to the federally protected species. In compliance with the Bald and Golden Eagle Protection Act, the project area was surveyed for bald eagles (*Haliaeetus leucocephalus*). According to GDOT, no suitable foraging habitat, nesting sites within one mile of the project corridor, or individuals were identified. Therefore, FHWA determined that the proposed project would not result in a "take" for bald eagles. The FHWA is the lead federal agency for this proposed action, and as such, would meet all lead federal agency responsibilities pursuant to Section 7 of the Endangered Species Act (ESA). Therefore, the Corps did not make an effects determination with regard to Section 7 of the ESA for the proposed project.

Public Interest Review: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and in general, the needs and welfare of the people.

A copy of the Environmental Assessment approved by the FHWA for the subject project is available for review at the Federal Highway Administration, Atlanta Federal Center, 61 Forsyth Street, SW., Suite 17th Floor, Atlanta, Georgia; 30303-8821 and GDOT's Office of Environmental Services, One Georgia Center, 16th Floor, 600 West Peachtree Street, NW, Atlanta, Georgia 30808-3607.

Consideration of Public Comments: The U.S. Army Corps of Engineers is soliciting comments from the public; federal, state, and local agencies and officials; Native American Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Application of Section 404(b)(1) Guidelines: The proposed activity involves the discharge of dredged or fill material into the waters of the United States. The Savannah District's evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under the authority of Section 404(b) of the Clean Water Act.

Public Hearing: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application for a Department of the Army Permit. Requests for public hearings shall state, with particularity, the reasons for requesting a public hearing. The decision whether to hold a public hearing is at the discretion of the District Engineer, or his designated appointee, based on the need for additional substantial information necessary in evaluating the proposed project.

Comment Period: Anyone wishing to comment on this application for a Department of the Army Permit should submit comments in writing to the Commander, U.S. Army Corps of Engineers, Savannah District, Attention: Mr. Stanley J. Knight, 100 West Oglethorpe Avenue Savannah, Georgia 31401-3640, no later than 30 days from the date of this notice. Please refer to the applicant's name and the application number in your comments.

If you have any further questions concerning this matter, please contact Stanley J. Knight, Project Manager, Coastal Branch, at 912-652-5348.

Attachments

1. Permit Application Supporting Information
2. Project Vicinity Map (Figure 1)
3. State and Federal Waters Maps (Figures a thru o)
4. Waters Maps

PERMIT APPLICATION SUPPORTING INFORMATION

State Route 133 Widening from County Road 276/Troupeville Road to
State Route 35/East Moultrie Bypass
(PI Nos. 0000543, 0000544, 0000545, 0000546, and 431780, Brooks and Colquitt Counties)

1.0 PROJECT DESCRIPTION

The Georgia Department of Transportation (GDOT) project would consist of road widening on State Route 133 (SR 133) from County Road 276 (CR 276)/Troupeville Road in Brooks County to State Route 35 (SR 35)/East Moultrie Bypass in Colquitt County, Georgia (see Figure 1 – Vicinity Map and Figure 2 – Project Location). The proposed improvements include five projects that would widen SR 133 between Valdosta and Moultrie. The proposed limits of the five projects (PI Nos. 0000543, 0000544, 0000545, 0000546, and 431780) between Valdosta and Moultrie have logical termini; the southern terminus of these projects would tie into the existing four-lane section of SR 133 near CR 276/Troupeville Road in Brooks County and the northern terminus of these projects would tie into the existing four-lane section at the SR 35/East Moultrie Bypass in Colquitt County. The Georgia Department of Transportation (GDOT) has separated this into five separate projects for construction, but they would be permitted as one project. There are no existing bridges within the project limits of the five projects. The total project length is approximately 34.5 miles.

PROJECT STP00-0000-00(543), PI 0000543

GDOT Project STP00-0000-00(543), Brooks County begins at CR 276/Troupeville Road where a traffic signal is being proposed and ends at CR 10/Pauline Church Road for an approximate distance of 6.7 miles. The existing typical section consists of two 12-foot lanes with 10-foot shoulders (2 feet paved and 8 feet grassed). The proposed typical section consists of four 12-foot travel lanes with a 14-foot flush two-way center turn, with 10-foot shoulders (6.5 feet paved and 3.5 feet grassed) from CR 276/Troupeville Road to Ridgeland Drive. At Ridgeland Drive, the rural shoulder transitions to an urban shoulder to include curb and gutter and sidewalks, and maintains the same 14-foot flush two-way center turn median to Fellowship Lane. From Fellowship Lane to CR 10/Pauline Church Road, the roadway transitions to a rural typical section with four 12-foot travel lanes and a 32-foot depressed median and 10-foot shoulders (6.5 feet paved and 3.5 feet grassed). The required right of way varies from 140 to 230 feet along the urban typical section, and from 165 to 235 feet along the rural typical section.

The proposed structures and fill that would impact waters of the US within this segment are included in the following table. There are no perennial streams within this section.

Resource	STA. (Road)	Permanent Impact	Clearing Impact	Impact Type	Structure Dimensions
W/L 1 PFO	STA. 818+00 to STA. 830+40	0.10 ac	0.02 ac	Fill/Clear	
Stream 2 Intermittent	STA. 822+25 to STA. 822+61	62 ft		Culvert/Bank Armor	46 ft for culvert replacement and 16 ft of bank armor
W/L 4 PFO	STA. 791+00 to STA. 803+50 RT		0.02 ac	Clear	
W/L 5 PEM	STA. 791+40 to STA. 794+25 LT	0.03 ac	0.03 ac	Fill/Clear	
W/L 7 PFO	STA. 772+25 to STA. 780+50 LT	0.56 ac	0.07 ac	Fill/Clear	42 in diameter pipe
Pond 9 POW	STA. 770+50 to STA. 771.50 RT		0.33 ac	Temporary Drain	
W/L 12 PFO	STA. 741+80 to STA. 744+90 RT	0.06 ac	0.02 ac	Fill/Clear	30 in diameter pipe
Stream 14b Intermittent	STA. 717+21 to STA. 717+25	107 ft		Culvert/Bank Armor	79 ft for culvert replacement and 28 ft of bank armor
W/L 15a PSS	STA. 715+15 to STA. 717+65 LT	0.04 ac		Fill	
Pond 17 POW	STA. 702+00 to STA. 703+45 LT	0.21 ac	0.36 ac	Fill/Temporary Drain	
W/L 19 PFO	STA. 687+25 to STA. 689+50 LT	0.01 ac	0.03 ac	Fill/Clear	
Stream 19a Intermittent	STA. 680+25 to 681+95 RT	167 ft		Culvert/Bank Armor/Channel Loss	102 ft for culvert replacement, 25 ft of bank armor, and 40 ft of channel loss

PROJECT STP00-0000-00(544), PI 0000544

GDOT Project STP00-0000-00(544), Brooks County begins at CR 10/Pauline Church Road and ends at CR 1/Old Quitman Road for an approximate distance of 5.7 miles. The existing typical section consists of two 12-foot lanes with 10-foot shoulders (2 feet paved and 8 feet grassed). The proposed typical section would be a rural typical section consisting of four 12-foot lanes with a 32-foot depressed grassed median and 10-foot shoulders (6.5 feet paved and 3.5 feet grassed)

from CR 10/Pauline Church Road to Lawson Pond Road. Beginning at Lawson Pond Road, through the community of Morven, the proposed typical section would change to an urban typical section consisting of four 12-foot lanes with a 14-foot two-way center turn lane, curb and gutter, and sidewalks. The use of an urban typical section would continue to CR 1/Old Quitman Road. The required right of way varies from 150 to 260 feet along the rural typical section and from 130 to 230 feet along the urban typical section.

The proposed structures and fill that would impact waters of the US within this segment are included in the following table. Stream 23 and 23a are perennial streams within this section.

Resource	STA. (Road)	Permanent Impact	Clearing Impact	Impact Type	Structure Dimensions
W/L 22 PFO	STA. 371+50 to STA. 386+40 RT	0.63 ac	0.57 ac	Fill/Clear	
Pond 22a POW	STA. 388+00 to STA. 393+00 RT	0.24 ac	2.83 ac	Fill/Temporary Drain	
Stream 22c Intermittent	STA. 369+25 to 371+75 LT	99 ft		Pipe/Bank Armor	74 ft for culvert replacement and 25 ft of bank armor
Stream 22d Intermittent	STA. 377+40 to STA. 378+40 RT	60 ft		Channel Loss/Bank Armor	45 ft for channel loss and 15 ft of bank armor
Stream 23 Downing Creek	STA 362+85 to STA. 368+65	125 ft		Pipe/Bank Armor	95 ft for culvert extension and 30 ft of bank armor
Stream 23a Jones Creek	STA. 349+50 349+60	130 ft		Pipe/Bank Armor	100 ft for culvert replacement and 30 of bank armor
Stream 23b (side channels) Intermittent	STA. 346+50 to 351+00	350 ft		Fill	
W/L 24 PEM/PSS	STA. 343+50 to STA. 374+80	2.35 ac	1.52 ac	Fill/Clear	(2) 10 ft X 4 ft culverts, (1) 48 in and (7) 18 in diameter pipes
W/L 25 PFO	STA. 286+35 to STA. 295+40	1.02 ac	0.22 ac	Fill/Clear	(2) 18 in diameter pipes
Stream 26 Intermittent	STA. 288+25 to STA. 291+35	168 ft		Pipe/Bank Armor/Channel Loss	108 ft for culvert replacement, 25 ft of bank armor, and 35 ft of channel loss

Resource	STA. (Road)	Permanent Impact	Clearing Impact	Impact Type	Structure Dimensions
W/L 27 PFO	STA. 235+75 to STA. 240+90 LT	0.19 ac	0.16 ac	Fill/Clear	
Stream 27a Intermittent	STA. 237+00 to STA. 237+29 LT	60 ft		Pipe/Bank Armor	36 ft for pipe extension and 24 ft of bank armor
Pond 28 POW	STA. 196+56 to 197+75 RT	0.05 ac		Fill	36 in diameter pipe
W/L 28b PSS	STA. 211+40 to STA. 241+75 RT	0.01 ac	0.02 ac	Fill/Clear	24 in diameter pipe
W/L 29 PFO	STA. 182+60 to STA. 190+20	0.34 ac	0.39 ac	Fill/Clear	
Stream 30 Intermittent	STA. 185+65 to STA. 188+95	75 ft		Pipe/Bank Armor	50 ft for culvert replacement and 25 ft of bank armor

PROJECT STP00-0000-00(545), PI 0000545

GDOT Project STP00-0000-00(545), Brooks and Colquitt Counties begins at CR 1/Old Quitman Road in Brooks County and ends at CR 256/Old Berlin Road in Colquitt County for a distance of approximately 9.6 miles. The existing typical section consists of two 12-foot lanes with 10-foot shoulders (2 feet paved and 8 feet grassed). The proposed typical section consists of four 12-foot lanes, a 32-foot depressed grassed median and two 10-foot shoulders (6.5 feet paved and 3.5 feet grassed) from CR 1/Old Quitman to SR 333 and a rural typical section consisting of four 12-foot lanes with a 24-foot raised median and 10-foot shoulders (6.5 feet paved and 3.5 feet grassed) would be utilized from SR 333 to CR 256/Old Berlin Road. The required right of way varies from 145 to 225 feet along this section of the project corridor.

The proposed structures and fill that would impact waters of the US within this segment are included in the following table. Stream 32, Stream 53, and Stream 55 are perennial streams within this section.

Resource	STA. (Road)	Permanent Impact	Clearing Impact	Impact Type	Structure Dimensions
W/L 31 PFO	STA. 579+23 to STA. 592+76	0.24 ac	0.46 ac	Fill/Clear	
Stream 32 Perennial	STA. 587+68 to STA. 587+84	164 ft		Pipe/Bank Armor/Channel Loss	90 ft for culvert extension, 10 ft of bank armor, and 64 ft of channel loss

Resource	STA. (Road)	Permanent Impact	Clearing Impact	Impact Type	Structure Dimensions
W/L 33 PSS	STA. 566+65 to STA. 571+71	0.50 ac	0.38 ac	Fill/Clear	(2) 24 in diameter pipes
W/L 34 PSS	STA. 546+96 to STA. 551+90	0.05 ac	0.16 ac	Fill/Clear	
W/L 36 PSS	STA. 526+40 to STA. 529+37	0.49 ac	0.17 ac	Fill/Clear	
Stream 37 Intermittent	STA. 528+00 to STA. 528+12	146 ft		Pipe/Bank Armor	127 ft for culvert replacement and 19 ft of bank armor
Pond 38 POW	STA. 490+00 to STA. 491+43 LT	0.03 ac	0.64 ac	Fill/Temporary Drain	
W/L 39 PFO	STA. 432+60 to STA. 437+42	0.26 ac	0.18 ac	Fill/Clear	(1) 42 in and (1) 18 in diameter pipes
Pond 45 POW	STA. 374+84 to STA. 377+70 LT	0.10 ac	1.00 ac	Fill/Temporary Drain	
Stream 46 Intermittent	STA. 351+34 to STA. 351+63 RT	146 ft		Pipe/Bank Armor	108 ft pipe for culvert replacement and 38 ft of bank armor
W/L 47 PSS	STA. 338+21 to STA. 339+76 LT	0.07 ac	0.03 ac	Fill/Clear	(2) 4 ft X 3 ft culvert
W/L 48 PFO	STA. 279+73 to STA. 286+06 LT	0.04 ac	0.06 ac	Fill/Clear	
Stream 49 Intermittent	STA. 299+04 to STA. 301+91	366 ft		Morphological Change/Pipe/Bank Armor	248 ft for morphological change, 78 ft for pipe replacement, and 40 feet of bank armor
Stream 50 Intermittent	STA. 276+56 to STA. 277+64	146 ft		Pipe/Bank Armor	114 ft for culvert extension and 32 ft of bank armor
W/L 52 PFO	STA. 235+43 to STA. 246+23	0.41 ac	0.37 ac	Fill/Clear	(2) 18 in and (1) 24 in diameter pipes

Resource	STA. (Road)	Permanent Impact	Clearing Impact	Impact Type	Structure Dimensions
Stream 53 Perennial	239+59 to 240 +19	96 ft		Pipe/Bank Armor	76 ft for culvert extension and 20 ft of bank armor
W/L 54 PFO	173+41 to 187+97	0.02 ac	0.22 ac	Fill/Clear	(1) 18 in and (1) 48 in diameter pipes
Stream 55 Perennial	186+03 to 186+92	135 ft		Pipe/Bank Armor	105 ft for culvert replacement and 30 ft of bank armor
W/L 57 PSS	160+42 to 164+45 LT		0.16 ac	Clear	
W/L 58 PSS	156+74 to 158+40 RT	0.06 ac	0.06 ac	Fill/Clear	
W/L 59 PSS	151+47 to 152+44 LT	0.01 ac	0.03 ac	Fill/Clear	
W/L 60 PFO	147+04 to 151+20 RT	0.01 ac	0.02 ac	Fill/Clear	
Stream 61 Intermittent	150+54 to 150+87 RT	19 ft		Pipe/Bank Armor	7 ft for culvert replacement and 12 ft of bank armor
W/L 62 PSS	140+02 to. 143+31 LT		0.15 ac	Clear	
Stream 63 Intermittent	141+97 to 142+13 RT	46 ft		Pipe/Bank Armor	28 ft for culvert extension and 18 ft of bank armor

PROJECT STP00-0000-00(546), PI 0000546

GDOT Project STP00-0000-00(546), Colquitt County begins at CR 256/Old Berlin Road and ends at CR 388/Hawthorne Road for an approximate distance of 7.9 miles. The existing typical section consists of two 12-foot lanes with 10-foot shoulders (2 feet paved and 8 feet grassed). The proposed typical section would be a rural typical section consisting of four 12-foot lanes with a 24-foot raised concrete median and 10-foot shoulders (6.5 feet paved and 3.5 feet grassed) from CR 256/Old Berlin Road to CR 485/Cannon Road in the community of Berlin. From CR 485/Cannon Road to CR 256/N. Langford Street, through the community of Berlin, an urban typical section consisting of four 12-foot travel lanes, a 14-foot flush two-way center turn lane and rural 10-foot shoulders (6.5 feet paved and 3.5 feet grassed) would be utilized. At CR 256/N. Langford Street to CR 111/Edmondson Road, the proposed typical section transitions back to a rural typical section consisting of four 12-foot lanes with a 24-foot raised concrete median and 10-foot shoulders (6.5 feet paved and 3.5 feet grassed). From CR 111/Edmondson Road, through

the end of Project STP00-0000-00(546) at CR 516/Hawthorne Road, a typical section consisting of four 12-foot lanes, a 14-foot flush two-way center turn lane and rural 10-foot shoulders (6.5 feet paved and 3.5 feet grassed) would be utilized. The required right of way varies from 130 to 225 feet along this section of the project corridor.

The proposed structures and fill that would impact waters of the US within this segment are included in the following table. Stream 80, Stream 83, and Stream 92 are perennial streams within this section.

Resource	STA. (Road)	Permanent Impact	Clearing Impact	Impact Type	Structure Dimensions
Stream 65a Intermittent	506+56 to 506+73 RT	64 ft		Pipe/Bank Armor	46 ft for culvert replacement and 18 ft of bank armor
W/L 66 PFO	473+19 to 475+60	0.06	0.08	Fill/Clear	
Stream 67 Intermittent	474+68 to 475+52	111 ft		Pipe/Bank Armor	93 ft for culvert replacement and 18 ft of bank armor
W/L 68 PFO	435+46 to 438+29	0.08 ac	0.10 ac	Fill/Clear	30 in diameter pipe
Stream 69 Intermittent	436+58 to 437+91	110 ft		Pipe/Bank Armor/Channel Loss	89 ft for culvert replacement, 14 ft of bank armor, and 7 ft of channel loss
W/L 72 PFO	414+56 to 418+38 RT	0.50 ac	0.10 ac	Fill/Clear	Two 36 in diameter pipes
W/L 76 PFO	335+64 to 341+06	0.19 ac	0.17 ac	Fill/Clear	Two 24 in diameter pipes
Stream 77 Intermittent	339+04 to 339+39	95 ft		Pipe/Bank Armor	75 ft for culvert replacement and 20 ft of bank armor
W/L 79 PFO	293+50 to 296+86	0.08 ac	0.14 ac	Fill/Clear	24 in diameter
Stream 80 Perennial	294+25 to 294+57	103 ft		Pipe/Bank Armor	89 ft for culvert extension and 14 ft of bank armor
W/L 82 PFO	270+33 to 278+02	0.37 ac	0.25 ac	Fill/Clear	

Resource	STA. (Road)	Permanent Impact	Clearing Impact	Impact Type	Structure Dimensions
Stream 83 Perennial	272+25 to 273+76	89 ft		Pipe/Bank Armor	69 ft for culvert replacement and 20 ft of bank armor
W/L 86 PFO	227+08 to 228+28 LT	0.06 ac	0.04 ac	Fill/Clear	
W/L 91 PFO	183+80 to 197+88	0.45 ac	0.45 ac	Fill/Clear	Two 18 in diameter pipes
Stream 92 Perennial	194+37 to 194+99	120 ft		Pipe/Bank Armor	70 ft for culvert replacement and 50 ft of bank armor
W/L 94 PFO	112+42 to 112+92	0.01 ac	0.02 ac	Fill/Clear	

PROJECT STP00-0032-02(028), PI 431780

GDOT Project STP00-0032-02(028), Colquitt County begins at CR 516/Hawthorne Road and ends at SR 35/East Moultrie Bypass for an approximate distance of 4.6 miles. The existing typical section consists of four 12-foot lanes with 10-foot shoulders (2 feet paved and 8 feet grassed). The proposed typical section would be an urban section consisting of four 12-foot travel lanes with a 14-foot flush two-way center turn lane, curb and gutter and sidewalk. The required right of way varies from 100 to 200 feet along this section of the project corridor.

The proposed structures and fill that would impact waters of the US within this segment are included in the following table. No perennial streams are located within this section.

Resource	STA. (Road)	Permanent Impact	Temporary Impact	Impact Type	Structure Dimensions
Stream 97 Intermittent	329+70 to 332+60 RT	10 ft		Pipe	10 ft for culvert replacement
W/L 98 PEM	277+ 40 to 292+75 LT	0.26 ac	0.07 ac	Fill/Clear	24 in diameter pipe
Stream 99 Intermittent	291+65 to 293+75 RT	80 ft		Pipe/Bank Armor	68 ft for culvert replacement and 12 ft of bank armor
W/L 105 PFO	247+75 to 252+75 RT	0.04 ac	0.02 ac	Fill/Clear	24 in diameter pipe
W/L 108 PSS	237+45 to 238+10 LT	0.02 ac	0.01 ac	Fill/Clear	36 in diameter pipe

Resource	STA. (Road)	Permanent Impact	Temporary Impact	Impact Type	Structure Dimensions
Stream 114 Intermittent	124+70 to 125+10 RT	80 ft		Pipe/Bank Armor	60 ft for culvert replacement and 20 ft of bank armor

2.0 NEED AND PURPOSE OF PROPOSED WORK

SR 133 is a major north-south corridor in South Georgia and provides a vital connection between Valdosta on the south with Albany to the north. For its entire length between Valdosta and Albany, SR 133 is identified for eventual widening due to its inclusion on the Governor's Road Improvement Program (GRIP). The GRIP was initiated in the 1980's to address the importance of stimulating economic growth via an improved transportation network. SR 133 was added to the GRIP by the State Legislature and approved by the Governor prior to the concept report approval in 2006. The improvement would aid in the economic development of sparsely populated rural areas and small towns along this route. Traffic carrying capacity would be increased; safety and operational characteristics.

3.0 DISCUSSION OF IMPACTS

3.1 Water Quality

All land clearing activities would be performed in a manner to minimize turbidity within the streams and wetlands located along the proposed project corridor. Best Management Practices (BMPs) would be developed and implemented to control oils or other pollutants from reaching the streams and wetlands to the maximum extent possible. All work performed during construction would be done so in a manner to prevent interference with any legitimate water uses.

3.2 Jurisdictional Waters of the US

Biologist with Edwards-Pitman Environmental, Inc. (EPEI) delineated the wetland, open water, and stream boundaries during original field visits from June-August 2003. Subsequent surveys were conducted during November 2009; March, April, and June 2010; January, February, and June 2011; and February and June 2012. During these surveys additional resources were observed: Pond 1a, Pond 3a, Wetland 4a, Pond 14a, Stream 14b, Wetland 15a, Stream 19a, Pond 22a, Stream 22b, Stream 22c, Stream 22d, Stream 23a, Pond 24a, Stream 27a, Pond 27b, Stream 28a, Wetland 28b, Pond 56a, Pond 58a, Pond 59a, Stream 65a, and Stream 91a. Resources characteristics that had changed were noted. Wetland 114 had been excavated and therefore relabeled Stream 114; a portion of Wetland 48 and all of Wetland 100 were filled by the landowners; and portion of Pond 15 became silted in and was colonized with early successional plants; therefore, this area was relabeled as Wetland 15a.

The proposed project is located within the Withlacoochee River watershed [Hydrologic Unit Code (HUC) 03110203] and Little River watershed (Hydrologic Unit Code 03110204).

Jurisdictional wetlands were delineated according to the routine on-site determination as described in the US Army Corps of Engineers (USACE) 1987 wetland delineation manual. The wetland status of the vegetation was classified using the *National List of Plant Species that Occur in Wetlands: Southeast Region*.

Additional information regarding the resource descriptions and proposed impacts is found in the approved ecology addendum (see Appendix A) and Table 1 – Stream, Wetland and Open Waters Summary Table.

3.3 Federally Protected Species

Background information regarding known occurrences and potential occurrences of federal and state protected species was obtained from the USFWS Information, Planning, and Conservation (IPaC) and the GADNR NCS websites. Table 1 lists federal listed species in Brooks and Colquitt Counties by USFWS IPaC and GADNR NCS websites, federal candidate species are also included. The proposed project would have no effect on red-cockaded woodpeckers (*Picoides borealis*) and American chaffseed (*Schwalbea americana*).

Wood storks (*Mycteria americana*) were observed foraging within the Wetland 22 during the winter of 2004 surveys. During the construction phase of the proposed project, GDOT would implement Special Provision 107.23G to prevent impacts to federally protected species. Informal Section 7 Consultation under the Endangered Species Act (ESA) was initiated with the USFWS on September 8, 2005 and completed on July 6, 2006. While conducting surveys for frosted flatwoods salamander February 21-24, 2012 and March 14-16, 2012 and for the greenfly orchid on June 27-29, 2012, no woods storks were observed within the project corridor. The proposed project may affect, but not likely to adversely affect wood storks.

The federally threatened Frosted flatwoods salamander's (*Ambystoma cingulatum*) preferred habitat was observed within Wetland 5, 6, 35, 40, and 41. Based upon coordination with USFWS, GDOT has sampled/surveyed for frosted flatwoods salamanders twice per annum for a minimum of 4 years or until a construction contract is awarded whichever is sooner. Previous surveys were conducted on March 15-19, 2010 and March 24-26, 2010, February 23-25, 2011, March 23-25, 2011, February 21-24, 2012 and March 14-16 2012. The surveys have failed to find any frosted flatwoods salamanders; however, this does not rule out the presence of frosted flatwoods salamanders in Wetlands 5, 6, 35, 40, and 41. Even in known breeding sites, frosted flatwoods salamanders do not breed every year. Informal Section 7 Consultation under the ESA was initiated with the USFWS in October 2010 and completed in October 2010. The proposed project may affect, but is not likely to adversely affect frosted flatwoods salamander.

The federal candidate species: striped newt (*Notophthalmus perstriatus*) and gopher tortoise (*Gopherus polyphemus*), were also assessed during the surveys. The proposed project has no gopher tortoise habitat. The proposed project would have no effect on gopher tortoise. The proposed project has potential striped newt habitat. Dipnet surveys for the stripe newt were conducted for along with the frosted flatwoods salamander on February 21-24, 2012 and March

14-16, 2012 in Wetlands 5, 6, 35, 40, and 41. No striped newts were observed during the protected species surveys. The proposed project would have no significant adverse effect on striped newts.

The bald eagle (*Haliaeetus leucocephalus*) has been delisted under the Endangered Species Act. However, it is still federally protected under the Bald and Golden Eagle Protection Act. Habitat for these protected species is not present, nor were the species observed. Therefore, the proposed project would have not result in a “take” and have no effect on the protected species.

Fish and Wildlife Coordination Act (FWCA) consultation would be required for Streams 14b, 19a, 22d, 23, 23a, 26, 32, 37, 46, 49, 50, 55, 67, 69, 80, and 92. Previous FWCA concurrence was received for streams 23a, 49, 55, and 92 on March 29, 2011.

Based on the current design, FWCA coordination with USFWS has been reinitiated (January 2013). It is required for Stream 14b (107 linear feet), Stream 19a (127 linear feet and 40 feet channel loss), Stream 23 (125 linear feet), Stream 26 (133 linear feet and 35 feet channel loss), Stream 32 (100 linear feet and 64 feet channel loss), Stream 37 (146 linear feet), Stream 46 (146 linear feet), Stream 50 (146 linear feet), Stream 67 (111 linear feet), Stream 69 (103 linear feet and 7 feet channel loss), and Stream 80 (103 linear feet). Construction of the proposed project would result in channel loss for a total of 541 linear feet. FWCA consultation has been reinitiated for streams 23a, 49, 55, and 92. The impacts to these streams have increased from the previous addendum. Previously, Stream 23a impacts have increased from 77 linear feet of pipe impacts and no bank armor to 100 linear feet of pipe impacts and 30 feet of bank armor, an increase of 53 feet. Stream 23a, intermittent side channel, was remeasured. Previously, 250 linear feet of fill was reported and the recalculated length is 350 linear feet, an increase of 100 feet. Stream 49 was reassessed. Stream 49 impacts have increased from 78 linear feet of pipe, 208 linear feet of stream relocation, and 39 linear feet of bank armor to 78 linear feet of pipe, 248 linear feet of stream relocation, and 40 feet of bank armor, an increase of 41 feet. Stream 55 has increased impacts from 78 linear feet of pipe and no bank armor to 105 linear feet of pipe and 30 linear feet of bank armor. Stream 92 impacts have increased from 70 linear feet of pipe and no bank armor to 70 linear feet of pipe and 50 feet of bank armor, a difference of 50 feet.

As reported in the *Ecology Addendum IV* (December 2012), migratory birds and their nesting habitat are protected under the Migratory Bird Treaty Act of 1918. Migratory birds which include cliff swallows (*Petrochelidon pyrrhonota*), barn swallows (*Hirundo rustica*), and eastern phoebes (*Sayornis phoebe*) may use bridges and culverts for nesting habitat. During the November 2009 survey eastern phoebe (*Sayornis phoebe*) nests were observed within the culverts at Stream 23, Stream 23A, and Stream 32. During the construction phase of the proposed project, GDOT would implement Special Provision 107.23G to prevent the potential for impacts to migratory birds. The construction, involving large culverts, would take place outside of the breeding and nesting season, which begins April 1st and extends through August 31st, unless exclusionary barriers are placed outside of this period.

3.4 Cultural Resources

In compliance with Section 106 of the National Historic Preservation Act of 1966 and amendments thereto, the preferred alternative has been surveyed by the Georgia Department of

Transportation (GDOT) for historic and archaeological resources, especially those on or eligible for inclusion in the National Register of Historic Places (NRHP). The survey limits and methodology were established using the GDOT/Federal Highway Administration (FHWA) Cultural Resource Survey Guidelines. These guidelines have been agreed upon by FHWA and the State Historic Preservation Office (SHPO).

Historic Structures

The Assessment of Effects Report for the proposed widening projects was approved by Georgia Department of Transportation (GDOT) on August 4, 2005 and by the Georgia State Historic Preservation Office (GASHPO) on September 27, 2005 (see Correspondence in Appendix D). The document consisted of a Finding of No Adverse Effect to 19 eligible historic properties located within the proposed projects' area of potential effect (APE). Due to the age of the original historic resources field survey and Historic Resources Survey Report, as well as changes in the design of all five of the proposed projects, an updated historic resources survey was undertaken in November 2009. As a result of this survey, three additional eligible historic properties were identified within the proposed projects' APE. An Addendum to the Approved Assessment of Effects was submitted to the GASHPO and the Federal Highway Administration (FHWA) in April 2010. The Addendum was approved by GDOT on April 27, 2010 and by the GASHPO on May 18, 2010 (refer to Correspondence in Appendix D).

Subsequent to the approval of the Addendum to the Approved Assessment of Effects Report in May 2010, new survey data establishing the construction limits for the proposed projects became available. A Re-Evaluation Memo addressing changes in the level of effects to the 22 eligible historic properties based on this new survey data was submitted to GDOT and the GASHPO on February 15, 2011. The Re-Evaluation Memo established that there would be no changes in the proposed projects' designs or level of effects to 17 of the 22 eligible properties. The existing Special Provisions to the Construction Contract for the two historic pine trees located along the existing right-of-way line in front of one of the eligible properties (Johnson House) also would not be changed. However, it was determined that there would be minor changes in the construction limits in the area of five of the eligible properties. The Re-Evaluation Memo discussed these changes and determined that project implementation would still result in a Finding of No Adverse Effect to all five of the eligible properties (refer to Correspondence in Appendix D).

At this time, final construction and right-of-way plans for all five projects have been prepared. Based on a review of these plans, there would be no changes in the proposed projects' designs in the area of the following 13 properties: the Carlton House, the Barnes House, the Wainer House, the South Georgia Railroad, the Williams Farmstead, the Graham House, the Gay Multiple Property, the Barber Property, the Tompkins Barn, the Hart Farmstead, the Ladson Farmstead, Sunset Body Shop and the J.H. Tillman House. For the above noted properties, all work would continue to occur within existing right-of-way as previously assessed, and there would be no changes to the assessment of effects in the areas of physical damage or destruction, continued use of the property, alteration of setting, visual, audible, atmospheric or indirect effects. However, because there have been minor changes in the construction limits in the area of nine of the eligible properties, the effects of these changes are being addressed. The nine properties are the Coker-Medders Farm, the Johnson House, the Morven Rosenwald School, the Webb Farm, the

Rill Property, the Goble Property, the Tillman Farmstead, the Matthews Farmstead and the Smith House.

In addition to the above noted properties, there is one additional property that has been determined to be within the proposed projects' APE as the result of the recent design changes. This property is the Evans Farmstead. The Evans Farmstead is located on the north side of CR 272/May Road east of SR 133 in Colquitt County, and was identified during the original historic resources survey in 2004 (refer to Figure 1D). This property was determined eligible for the National Register; however, given its location east of the project corridor, it was determined to be outside the proposed projects' APE. As such, none of the previous Assessment of Effects documents or Re-evaluations included the Evans Farmstead. Because current design plans have been changed to include improvements to CR 272/May Road, which borders the Evans Farmstead to the south, this property is presently located within the proposed projects' APE. The proposed changes to the project plans would not result in any adverse effects to the eligible historic properties: the Coker-Medders Farm, Johnson House, Morven Rosenwald School, Webb Farm, Rill Property, Goble Property, Tillman Farmstead, Matthews Farmstead, Smith House, and the Evans Farmstead, the 2010 Section 106 documentation and the 2011 Re-Evaluation remains valid.

A copy of all correspondence with SHPO is located in Appendix D.

Archaeological Resources

A Phase I archeological survey of the proposed APE for the preferred alternative was conducted in 2005. The APE for the 2005 survey was a corridor along the entire project length that extended 41 meters (134 feet) from the existing centerline of SR 133. The 2005 survey located and recorded 42 archeological sites, the vast majority of which were late nineteenth to mid-twentieth century houses and farmstead sites. All were recommended as not eligible for inclusion in the National Register of Historic Places. In December 2010 project engineers determined that many right-of-way and easements needed for sediment basins, driveway improvements, and intersections extended more than 41 meters (134 feet) from the existing centerline, and thus were not part of the APE surveyed in 2005. In consultation with GDOT archeologist, it was established that a zone extending 15 meters beyond the original survey corridor (half the distance of a 30 meters shovel test interval) could be considered as having been surveyed. To ensure full archeological survey of the entire revised APE, the archeologist returned to the field in January 2011 to survey those areas of new easement and right-of-way that were not surveyed during the 2005 work. No new sites were recorded and the findings were included in the January 2011 Addendum. In 2012, the project design had been finalized and it was noted that there were some new, generally small parcels that extended beyond the previously surveyed corridors. In October 2012, the archeologist surveyed these areas and no new sites were recorded. These findings were included in the December 2012 Addendum 2.

A copy of all correspondence with SHPO is located in Appendix D.

4.0 404(b)(1) ANALYSIS

404(b)(1) ANALYSIS

In accordance with Section 404(b)(1) guidelines, alternatives were considered in order to avoid and minimize impacts to jurisdictional waters of the US. NEPA, along with other acts and regulations, require that a number of additional environmental factors are taken into account when selecting the preferred alternative.

All environmental considerations were included as a part of the location investigation prior to laying out the proposed alignment. Basic data of the corridor were gathered and studies. Data for this project included aerial photography, topographic maps, traffic (existing and projected), previous studies, wetland inventory maps, soil survey maps, floodplain maps, and historic resource survey maps.

Any existing wetland or hydric soil boundaries, open water bodies, stream corridors, floodplains, parks and recreational facilities, known or suspected historical or archaeological sites, existing rights-of-way, possible UST/landfill/hazardous waste sites, and known protected species locations were delineated on aerial photography prior to laying out an alignment. Also identified on aerial photography were other "controls" such as homes, churches, cemeteries, schools, hospitals and any other sensitive sites. Only at this point was the proposed right-of-way corridor developed with every attempt being made to avoid sensitive social, ecological, historical and archaeological areas. In the event that avoidance was not possible, every attempt was made to minimize harm to such resources. The proposed right-of-way corridor, once laid out on aerial photography, was then evaluated during field surveys and additional refinements were made to further minimize harm to both the natural and built environment.

4.1 Alternatives

A Practical Alternatives Report (PAR) was prepared and approved in 2005 for the project (see Appendix F). Where possible the proposed project alignment was shifted to avoid and/or minimize impacts to jurisdictional waters of the US that were located outside of the construction limits but within the existing and/or proposed right-of-way. Where possible, slopes associated with the roadway shoulder would be reduced to minimize impacts to jurisdictional wetlands and open waters. The best fit alternative was discussed in the PAR. The Concept Report discussed Alternatives considered for each of the PI numbers.

Alternative 1 – The No-Build Alternative (all five PI numbers)

Alternative 1 was rejected due to not meeting the need and purpose of the proposed project.

Alternative 2 –

PI 0000543 – This alternative would allow for urban typical section through the residential area near the southern end of project between CR 276/Troupeville Road to Fellowship Lane. The proposed urban section would consist of a 24-foot raised median, sidewalks within the densely populated areas, curb and gutter, and 10 feet of additional pavement between the face of the curb and travel lane to allow for a 65 mph design speed. The 24-foot raised median will transition to

the standard GRIP 44-foot depressed median typical section at Fellowship Lane. This alternative would be posted at 55 mph and it is proposed to minimize right-of-way impacts along the densely populated areas. There is still a greater amount of waters of the US and number of displacements impacted with this alternative compared to the chosen alternative; and therefore, was eliminated.

PI 0000544 – This alternative would maintain the same typical section throughout the project corridor to the City of Morven. This alternative would split traffic through the City of Morven with the use of 2 lane one-way pairs. The one-way pair would maintain 2 lanes of traffic along the existing SR 133 changing it from two-way to one-way while taking the opposite traffic along the alternate route through town either to the east or west of the existing SR 133 corridor. This alternative was eliminated because it would result in significant right-of-way impacts as well as route either the northbound or southbound SR 133 traffic around the City of Morven.

PI 0000545 – This alternative would construct a new location bypass alignment to the east of the existing SR 133 corridor from 1,200 feet south of McAllister Road to 1,000 feet south of W.F. Hart Road. This alternative would maintain a GRIP typical section (44-foot depressed median with 10-foot shoulders (6.5 feet paved and 3.5 feet grassed) throughout the project corridor. This alternative was eliminated because it would result in significant right-of-way impacts as well as increased construction costs, impacts to viable farmland, and increased impacts to waters of the US.

PI 0000546 – This alternative would construct a new location bypass alignment to the east of the existing SR 133 corridor from approximately 1,200 feet north of Peachtree Road to approximately 700 feet south of Jerusalem Church Road. This alternative was eliminated because it would result in significant right-of-way impacts as well as increased construction costs, impacts to viable farmland, and increased impacts to waters of the US.

PI 431780 – Maintain a rural typical section through the southern end of the project between CR 388/Hawthorne Road and Norman Estates Road. The proposed typical section would consist of a 24-foot raised median, sidewalks where appropriated within the densely populated areas, curb and gutter, and 10 feet of additional pavement between the face of the curb and the outside travel lane to allow for a 65 mph design speed clear zone. The 24-foot raised median would transition to a 20-foot raised median at Norman Estates Road and maintain this typical section to the end of the project at SR 35/E. Moultrie Bypass. This alternative was eliminated because it would have resulted in more right-of-way impacts and would also allow for fewer median openings through this densely populated area due to the higher design speed of 65 mph. Local residents expressed concern over the safety of the 65 mph design speed as well as access points which would have been eliminated with this alternative.

Alternative 3

PI 0000543 – This alternative would consist of 44-foot depressed median typical section along the existing SR 133 throughout the project limits. This alternative was considered because this typical section is the standard GRIP typical section and provides the clear zone for 65 mph design speed. Efforts were taken to minimize right-of-way by widening the existing road either to the west or the east. There is still a greater amount of wetland and number of displacements impacted with this alternate compared to the chosen alternative; therefore, this alternative was eliminated.

PI 0000544 – This alternative would maintain the same typical section throughout the project corridor to the City of Morven. This alternative would construct a Morven bypass. The typical section would have a 44-foot depressed median section posted at 55 mph that would completely bypass the City of Morven, either to the east or the west. This alternative would require a bridge crossing at the railroad. This alternative was eliminated because of the right-of-way impacts, cost of a bridge, and economic effects it would have to the City of Morven.

PI 0000545 – This alternative would construct a new location bypass alignment to the west of the existing SR 133 corridor from 1,200 feet south of McAllister Road to 1,000 feet south of W.F. Hart Road. This alternative would maintain a GRIP typical section (44-foot depressed median with 10-foot shoulders (6.5 feet paved and 3.5 feet grassed) throughout the project corridor. This alternative was eliminated because it would result in significant right-of-way impacts as well as increased construction costs, impacts to viable farmland, and increased impacts to waters of the US.

PI 0000546 – This alternative is a new location bypass alignment to the west of the existing SR 133 corridor from approximately 880 feet north of Langford Street to Stripling Road. This alternative was eliminated because it would result in significant right-of-way impacts as well as construction costs, impacts to viable farmland, and increased impacts to waters of the US.

PI 431780 – This alternative would maintain a rural typical section with a 44-foot depressed median through the southern end of the project between CR 388/Hawthorne Road and Norman Estates Road. The proposed typical section would allow for a 65 mph design speed clear zone. The 44-foot raised median would transition to a 20-foot raised median at Norman Estates Road and maintain this typical section to the end of the project at SR 35/E. Moultrie Bypass. This alternative was eliminated because it would have resulted in significant right-of-way impacts and would also allow for fewer median openings through this densely populated area due to the higher design speed of 65 mph. Local residents expressed concern over the safety of the 65 mph design speed as well as access points which would have been eliminated with this alternative.

4.2 Avoidance and Minimization

During the field surveys, 35 streams, 43 ponds, 60 wetlands were identified. The proposed project would impact 29 streams and avoid 6 streams. The proposed project would impact 39 wetlands and avoid 21 wetlands. The proposed project would impact 5 ponds and avoid 38 ponds.

Alignment shifts, 2:1 slopes and other design elements were used where possible to minimize unavoidable impacts. As per the USACE 2007 Regional Conditions, proposed culverts within stream channels were designed to match natural channel width. For replacement culverts on perennial streams, the culverts would be embedded 20 percent. Longitudinal profiles, cross-sections are provided in Appendix J for perennial streams that are replacing existing culverts (Stream 23a, Stream 55, Stream 83, and Stream 92). Below is a discussion for each impacted waters of the US.

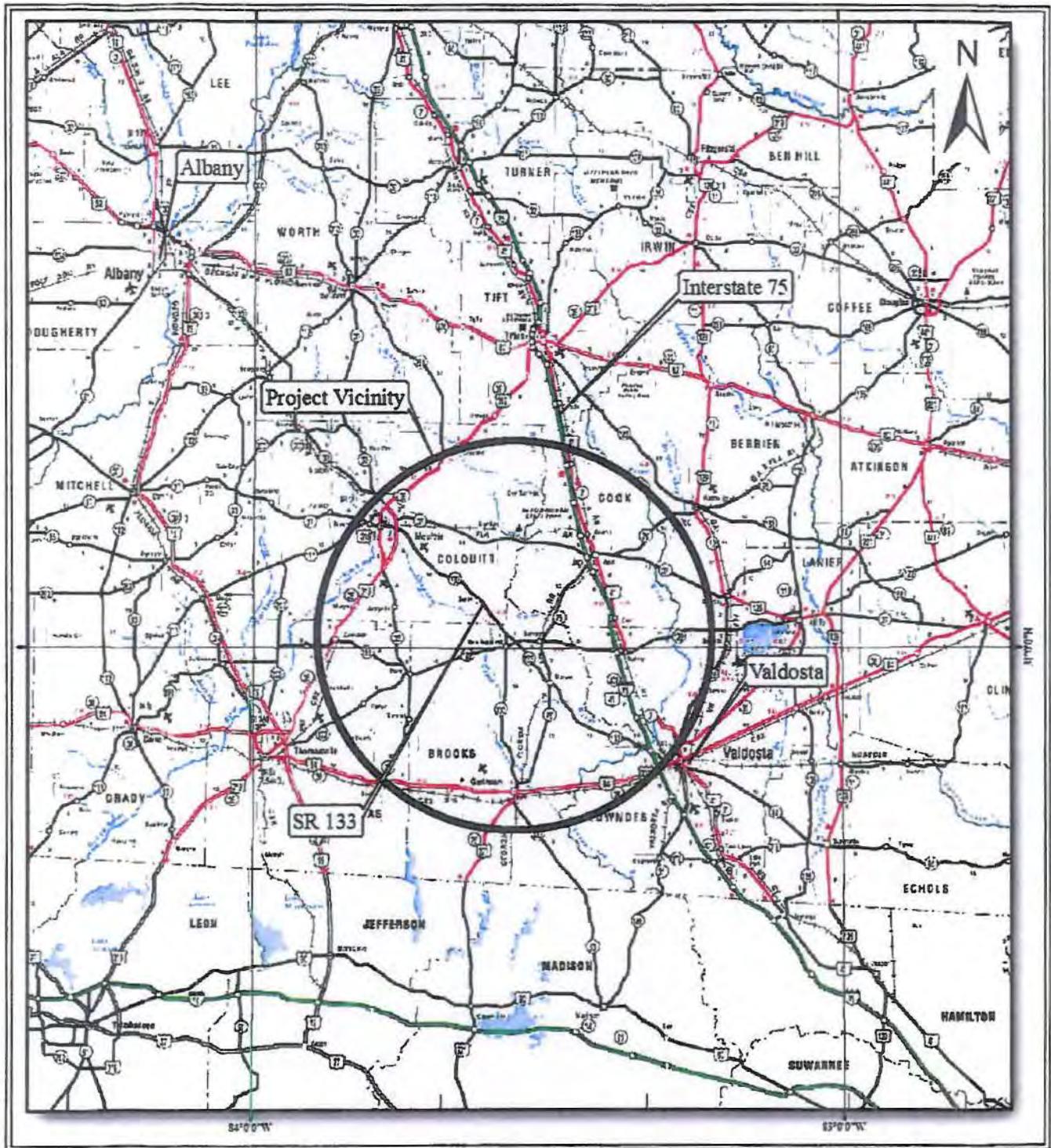


Figure 1. Project Vicinity

SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.I. = 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia

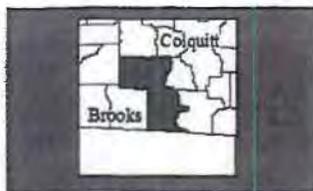
0 5 10 20 30 Miles



1:840,000



Projection: Lambert Conformal Conic



Source: GDOT Highway and Transportation Map

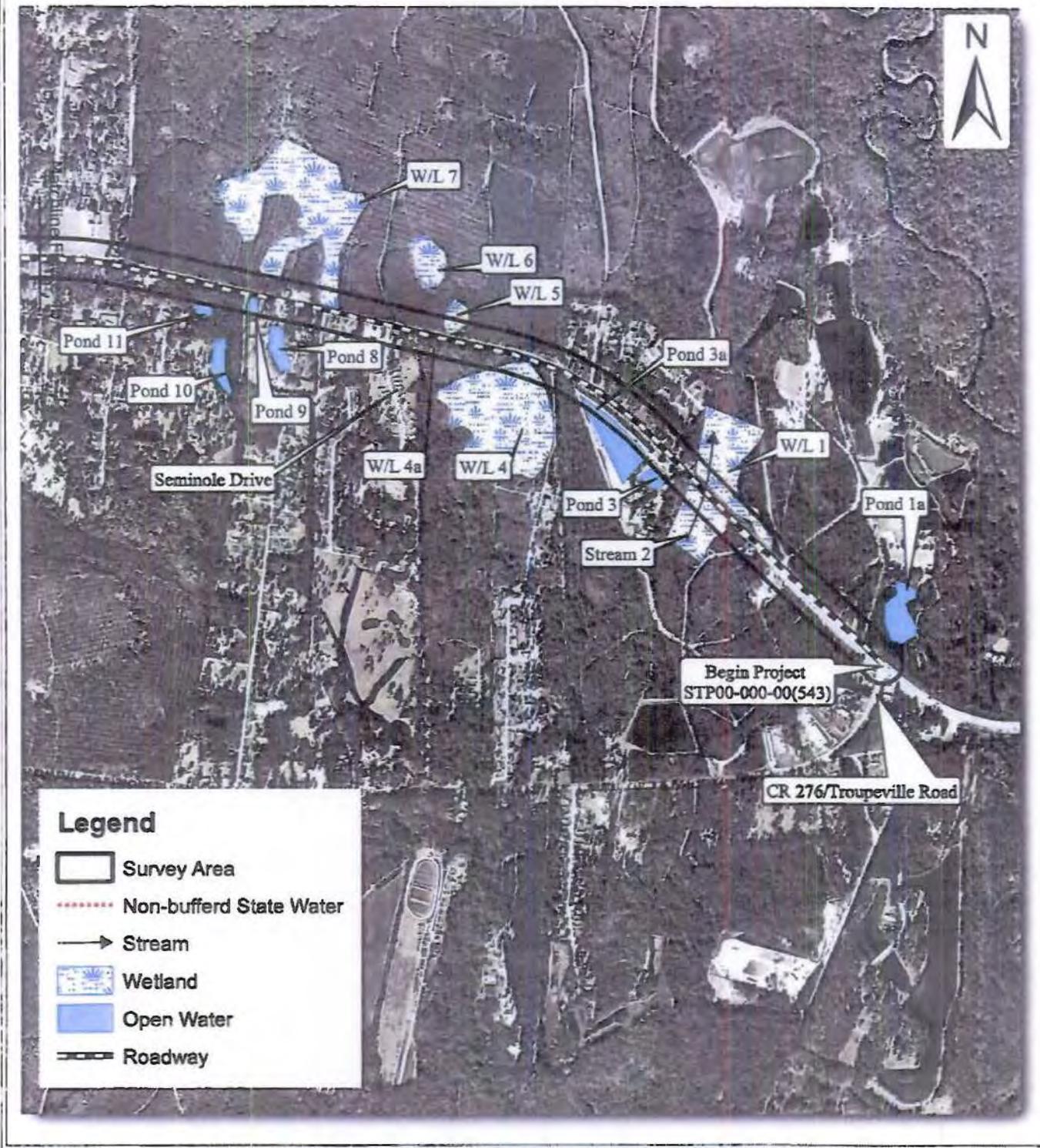


Figure 5a. State and Federal Waters

1:16,000



Source: NAIP DOQQ - Brooks and Colquitt Counties

SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.L. # 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia

0 500 1,000 2,000 3,000 Feet



Projection: NAD 83 UTM 17 North

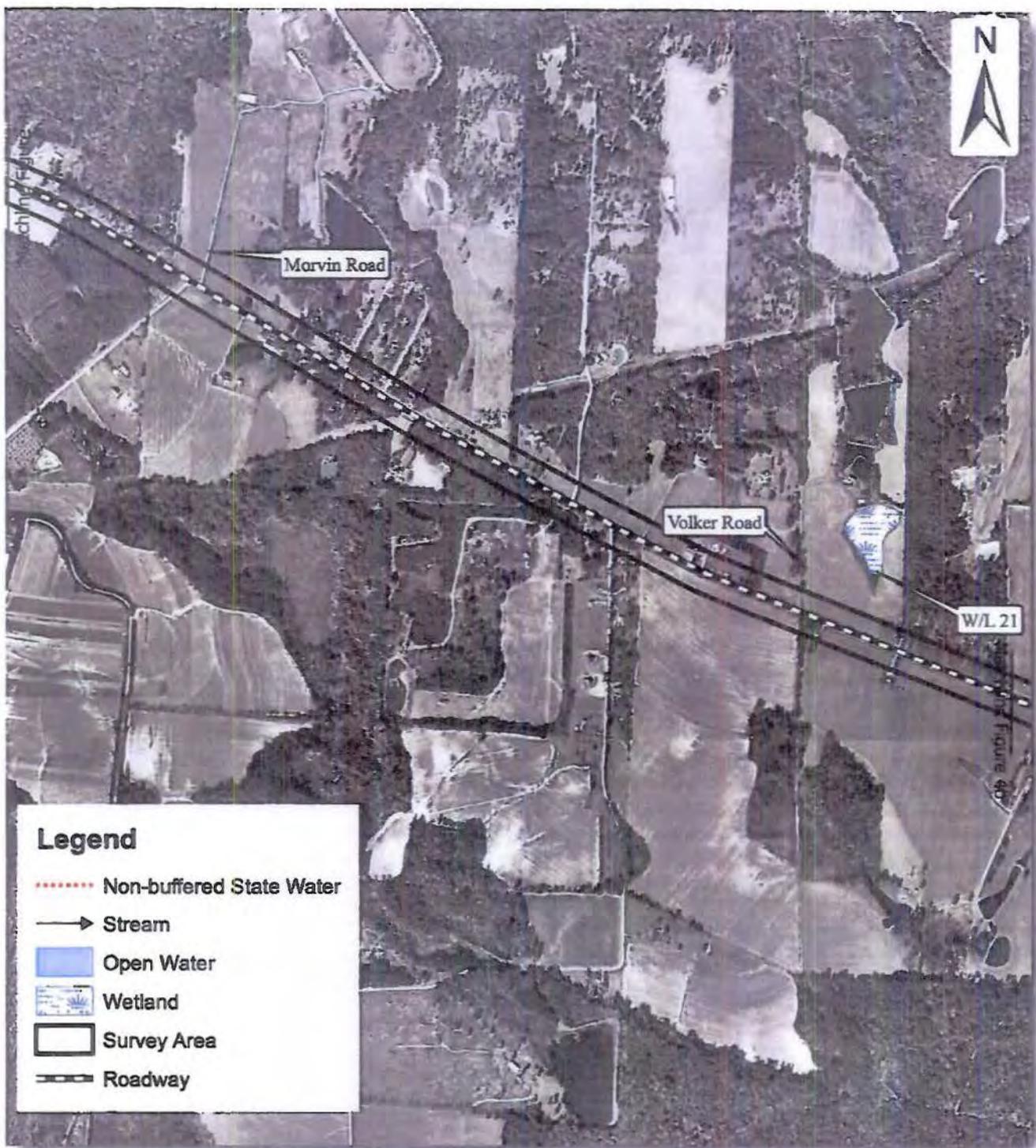


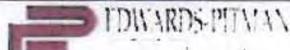
Figure 5c. State and Federal Waters

1:16,000



SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.I. # 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia

0 500 1,000 2,000 3,000
 Feet



Projection: NAD 83 UTM 17 North

Source: NAIP DOQQ - Brooks and Colquitt Counties

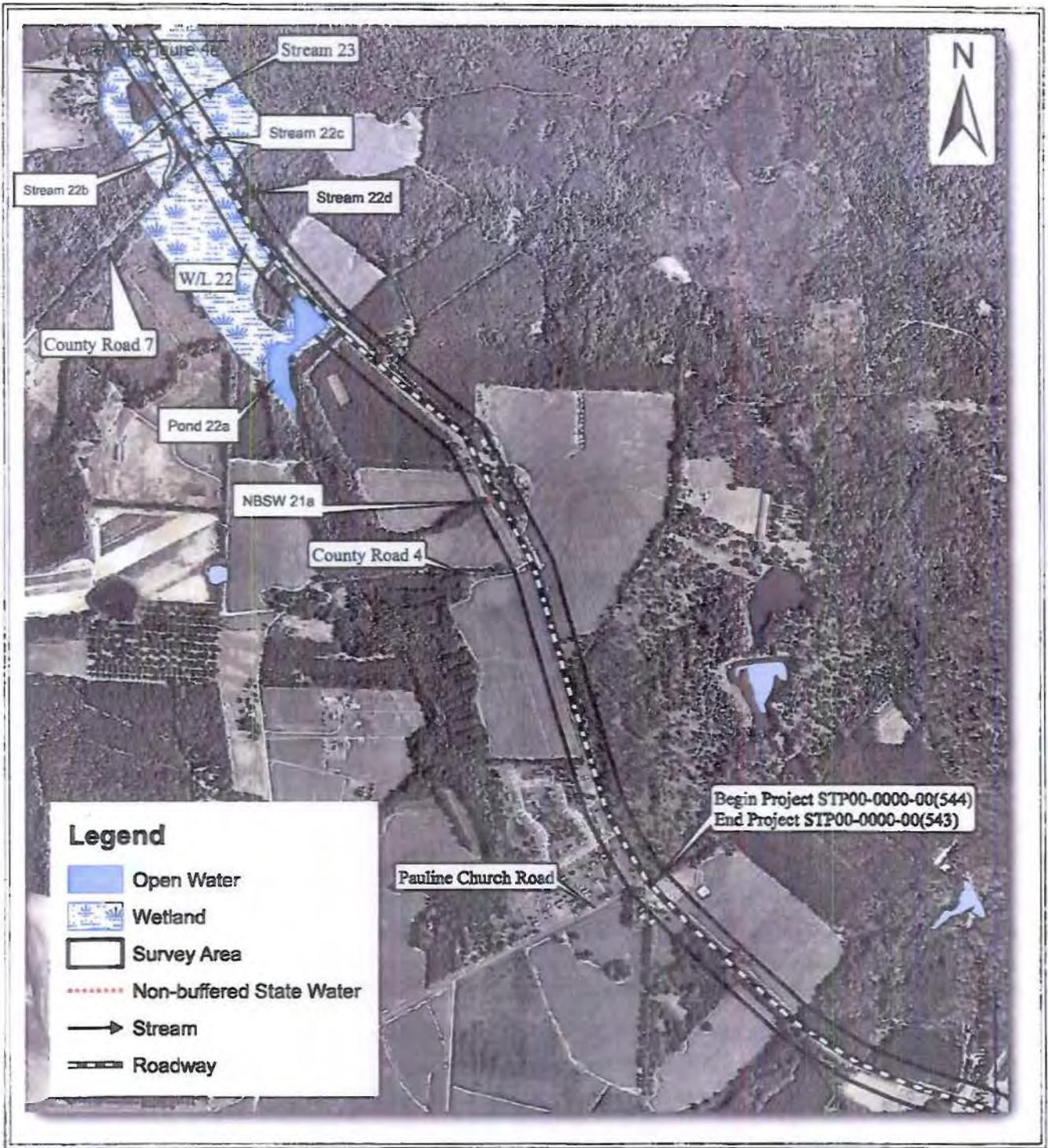


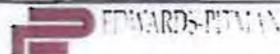
Figure 5d. State and Federal Waters



Source: NAIP DOQQ - Brooks and Colquitt Counties

SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.L. # 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia

0 500 1,000 2,000 3,000 Feet



1:16,000



Projection: NAD 83 UTM 17 North

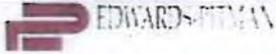


Figure 5e. State and Federal Waters



Source: NAIF DOQQ - Brooks and Colquitt Counties

SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.I. # 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia



1:16,000



Projection: NAD 83 UTM 17 North

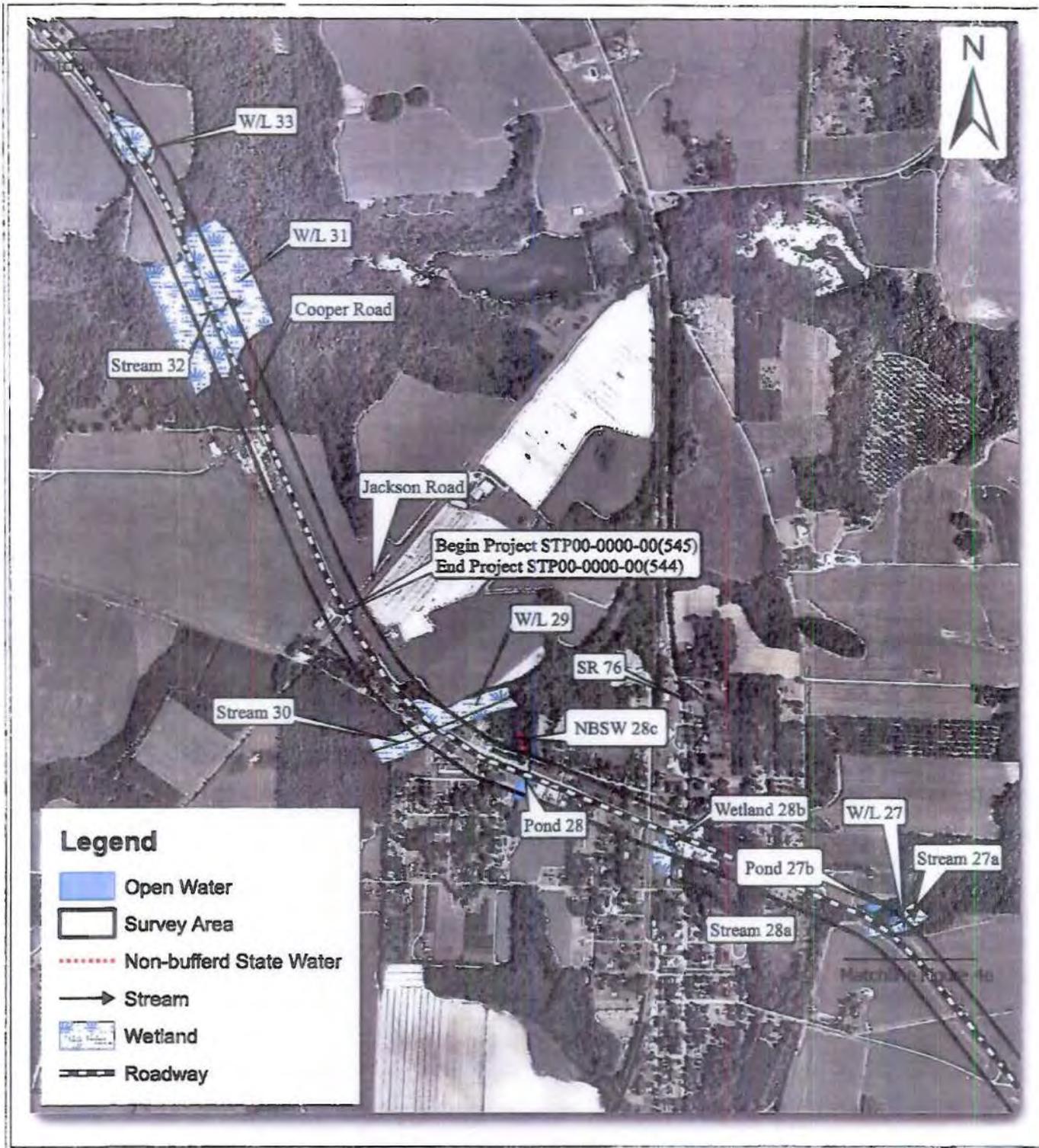


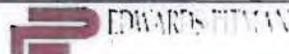
Figure 5f. State and Federal Waters



Source: NAIP DOQQ - Brooks and Colquitt Counties

SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.I. # 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia

0 500 1,000 2,000 3,000 Feet



1:16,000



Projection: NAD 83 UTM 17 North

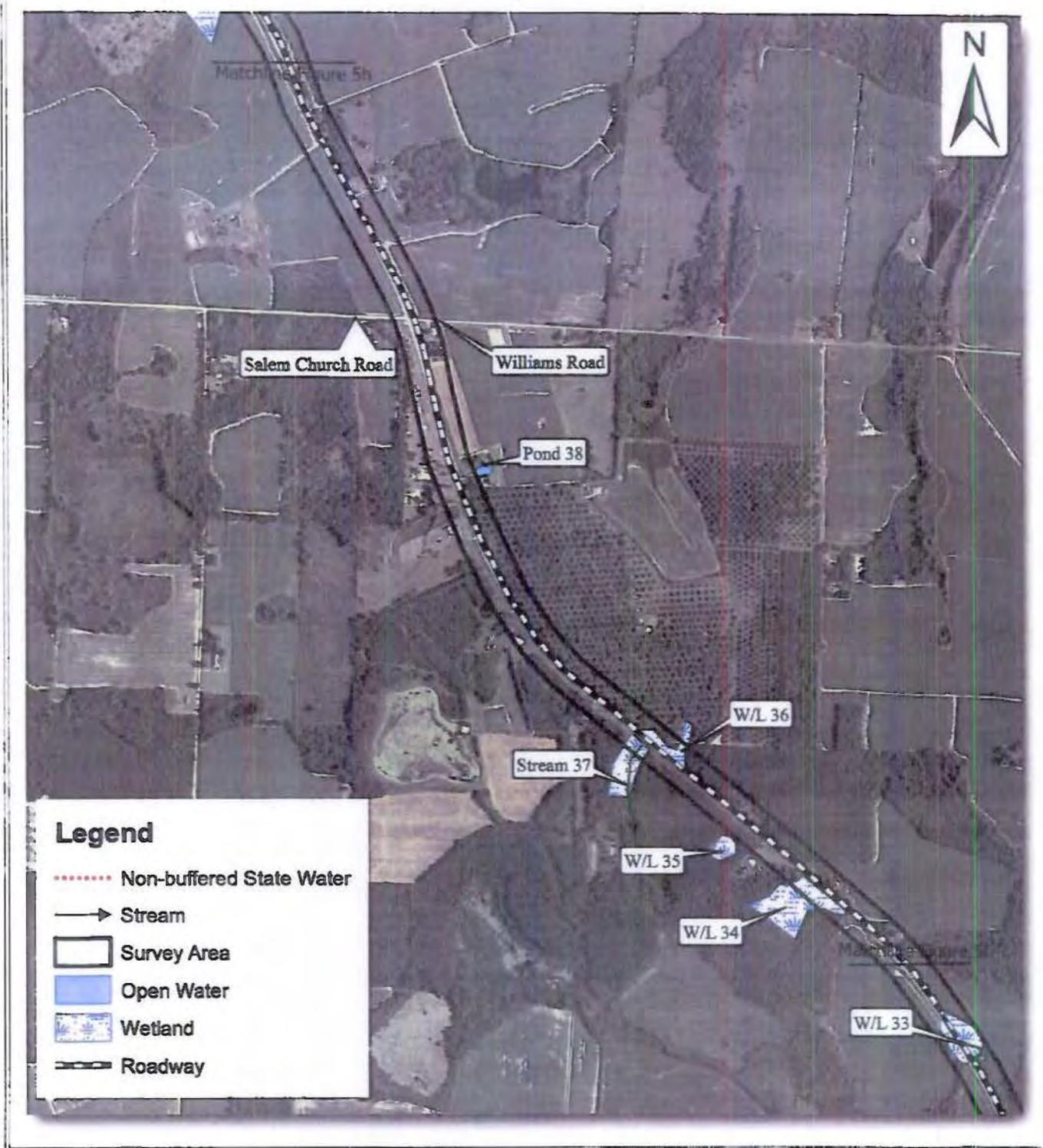


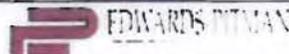
Figure 5g. State and Federal Waters

1:16,000



SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.I. # 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia

0 500 1,000 2,000 3,000 Feet



Projection: NAD 83 UTM 17 North

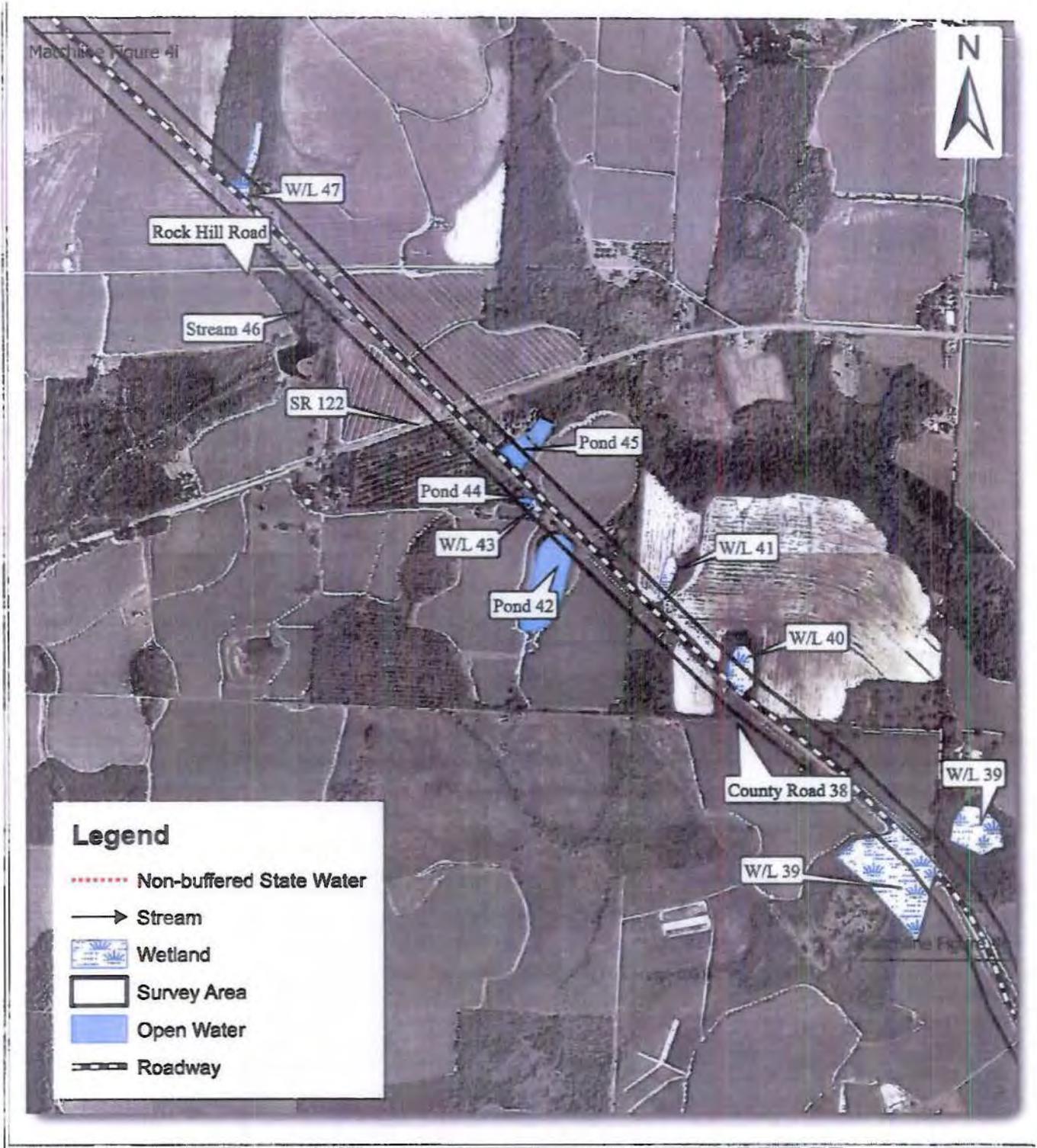


Figure 5h. State and Federal Waters

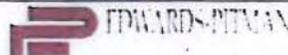
1:16,000



Source: NAIP DOQQ - Brooks and Colquitt Counties

SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.I. # 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia

0 500 1,000 2,000 3,000 Feet



Projection: NAD 83 UTM 17 North

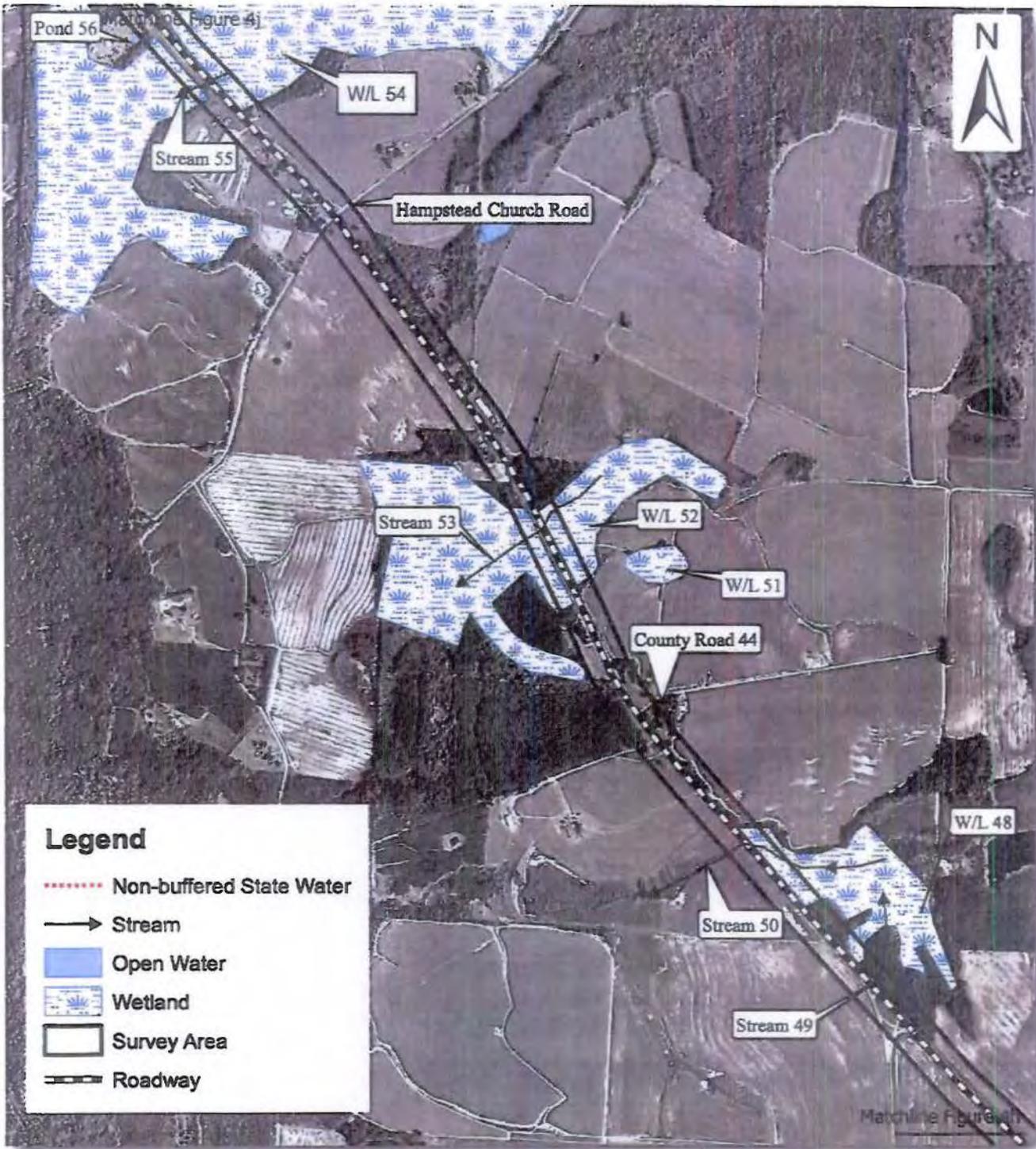
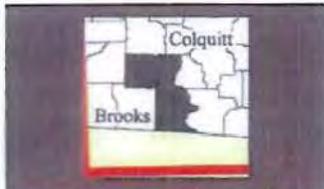


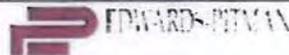
Figure 5i. State and Federal Waters



Source: NAIP DOQQ - Brooks and Colquitt Counties

SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.I. # 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia

0 500 1,000 2,000 3,000 Feet



1:16,000



Projection: NAD 83 UTM 17 North

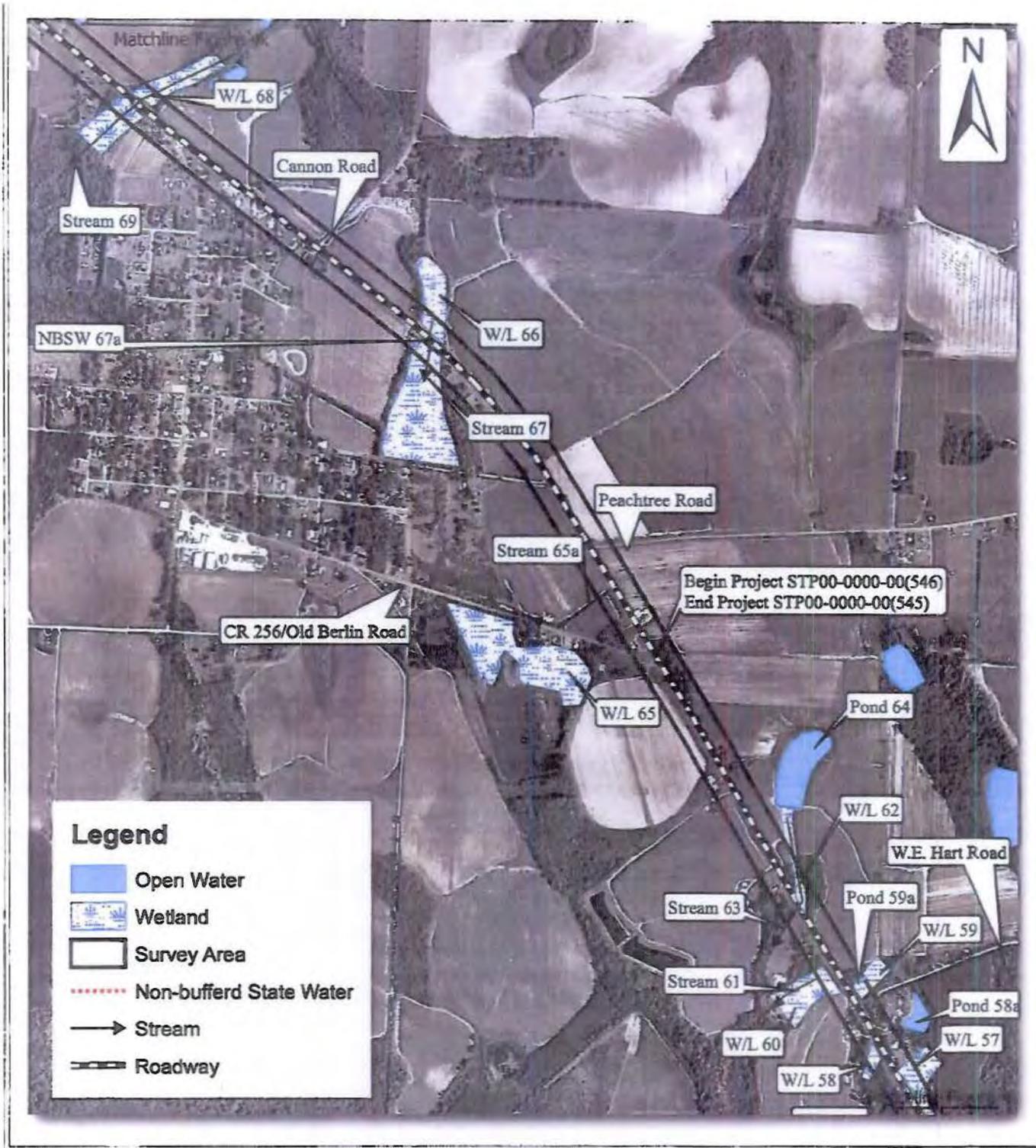
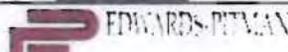


Figure 5j. State and Federal Waters



Source: NAIP DOQQ - Brooks and Colquitt Counties

SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.I. # 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia



1:16,000



Projection: NAD 83 UTM 17 North

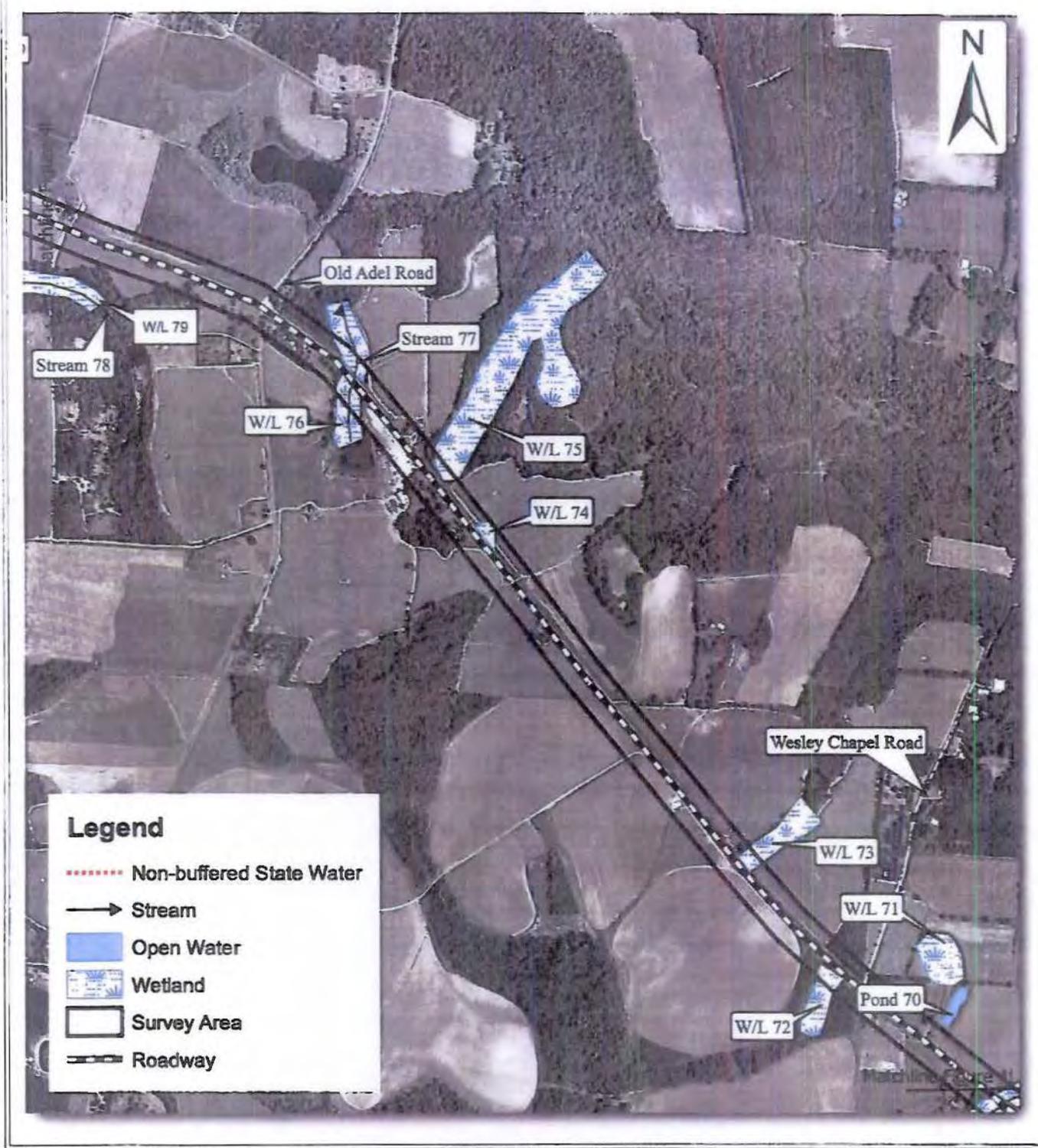


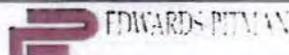
Figure 5k. State and Federal Waters

1:16,000



SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.I. # 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia

0 500 1,000 2,000 3,000 Feet



Projection: NAD 83 UTM 17 North

Source: NAIP DOQQ - Brooks and Colquitt Counties

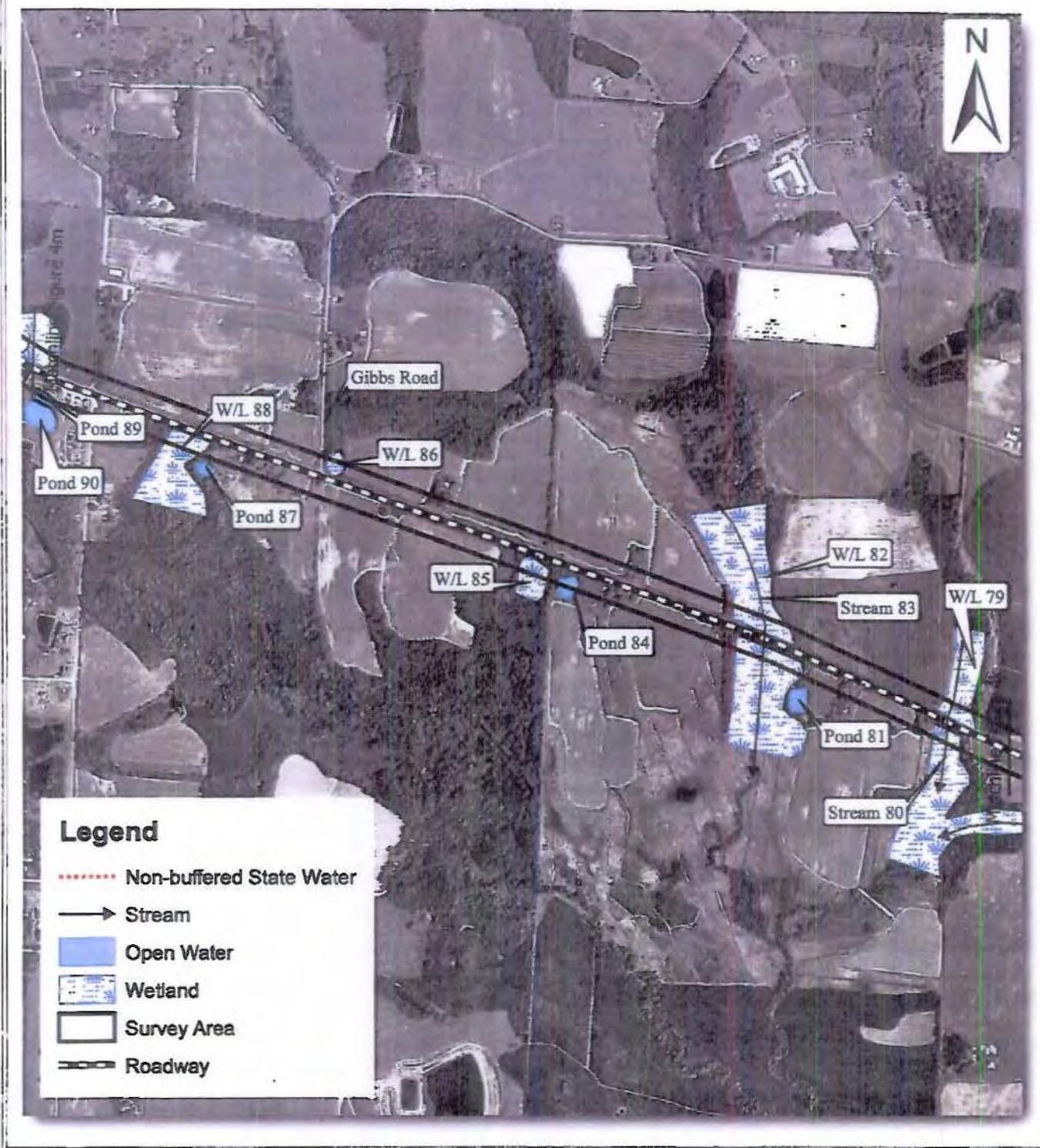
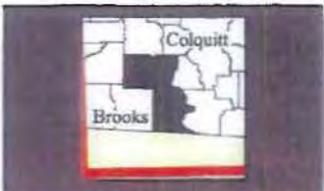


Figure 51. State and Federal Waters

1:16,000



Source: NAIP DOQQ - Brooks and Colquitt Counties

SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.L. # 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia

0 500 1,000 2,000 3,000 Feet



Projection: NAD 83 UTM 17 North

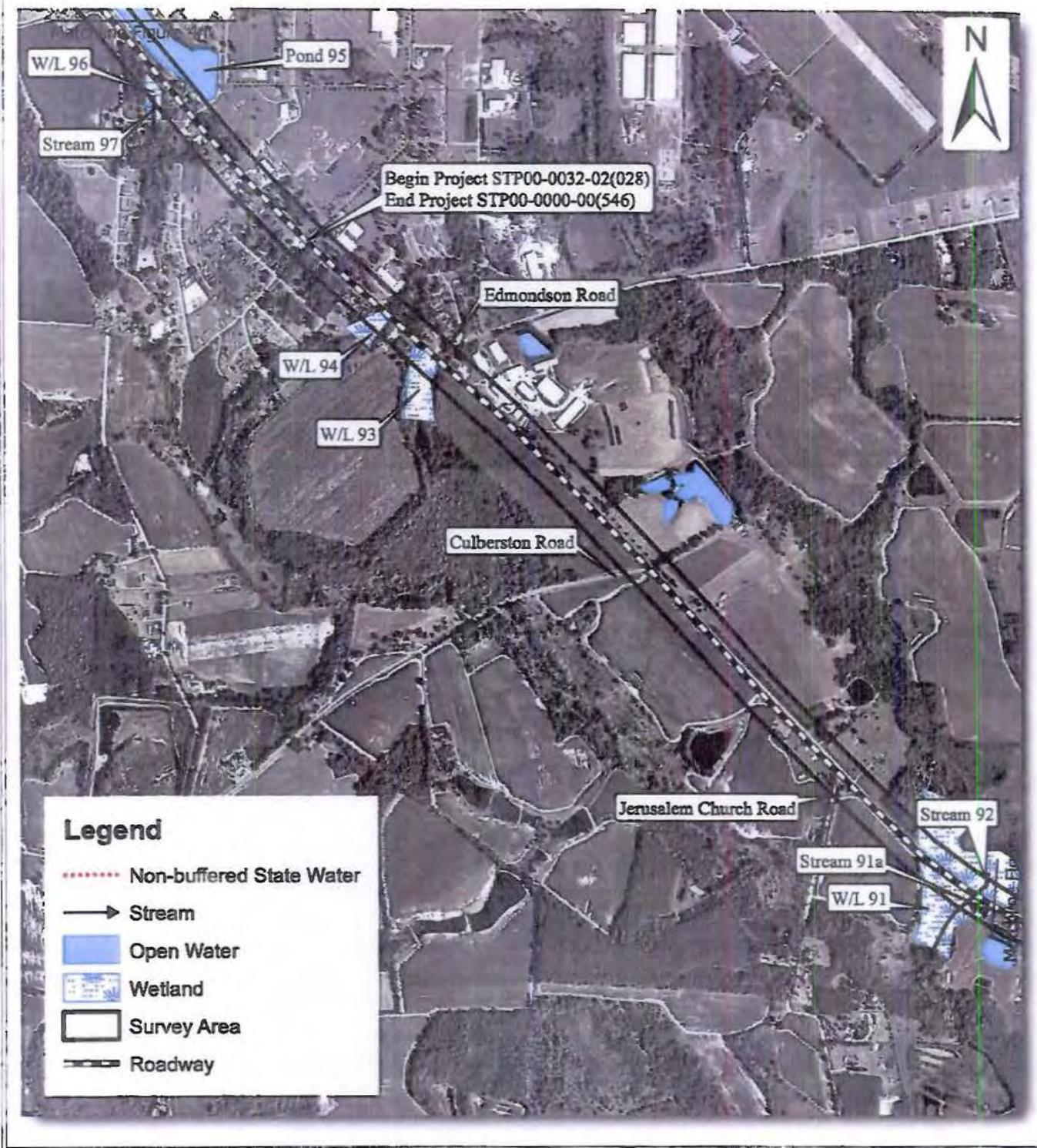


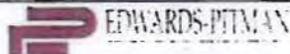
Figure 5m. State and Federal Waters

1:16,000



Source: NAIP DOQQ - Brooks and Colquitt Counties

SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.I. # 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia



Projection: NAD 83 UTM 17 North

Matchline Figure 4a

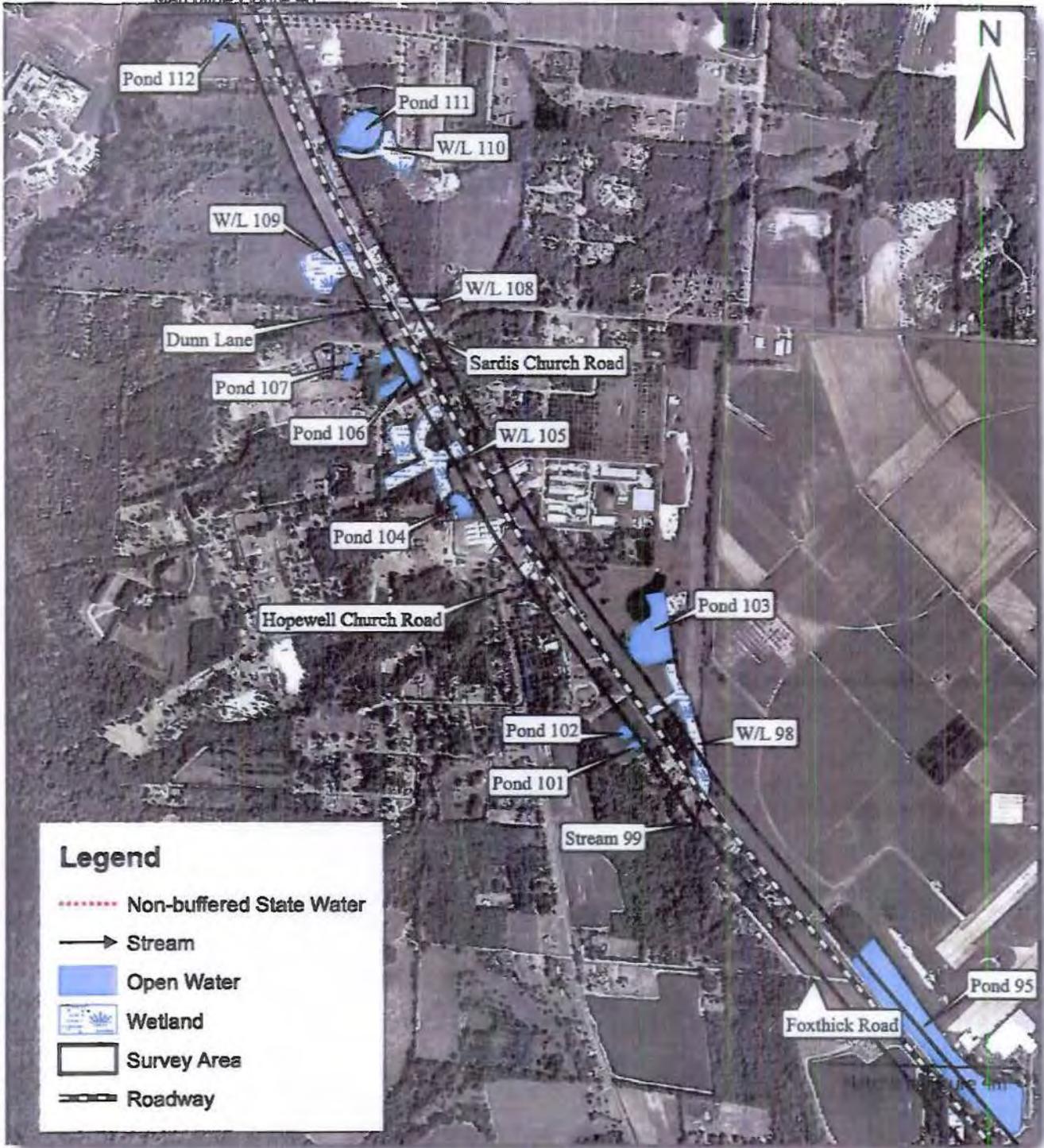
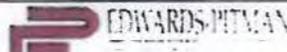
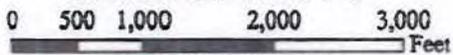


Figure 5a. State and Federal Waters

1:16,000



SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.I. # 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia



Source: NAIP DOQQ - Brooks and Colquitt Counties

Projection: NAD 83 UTM 17 North

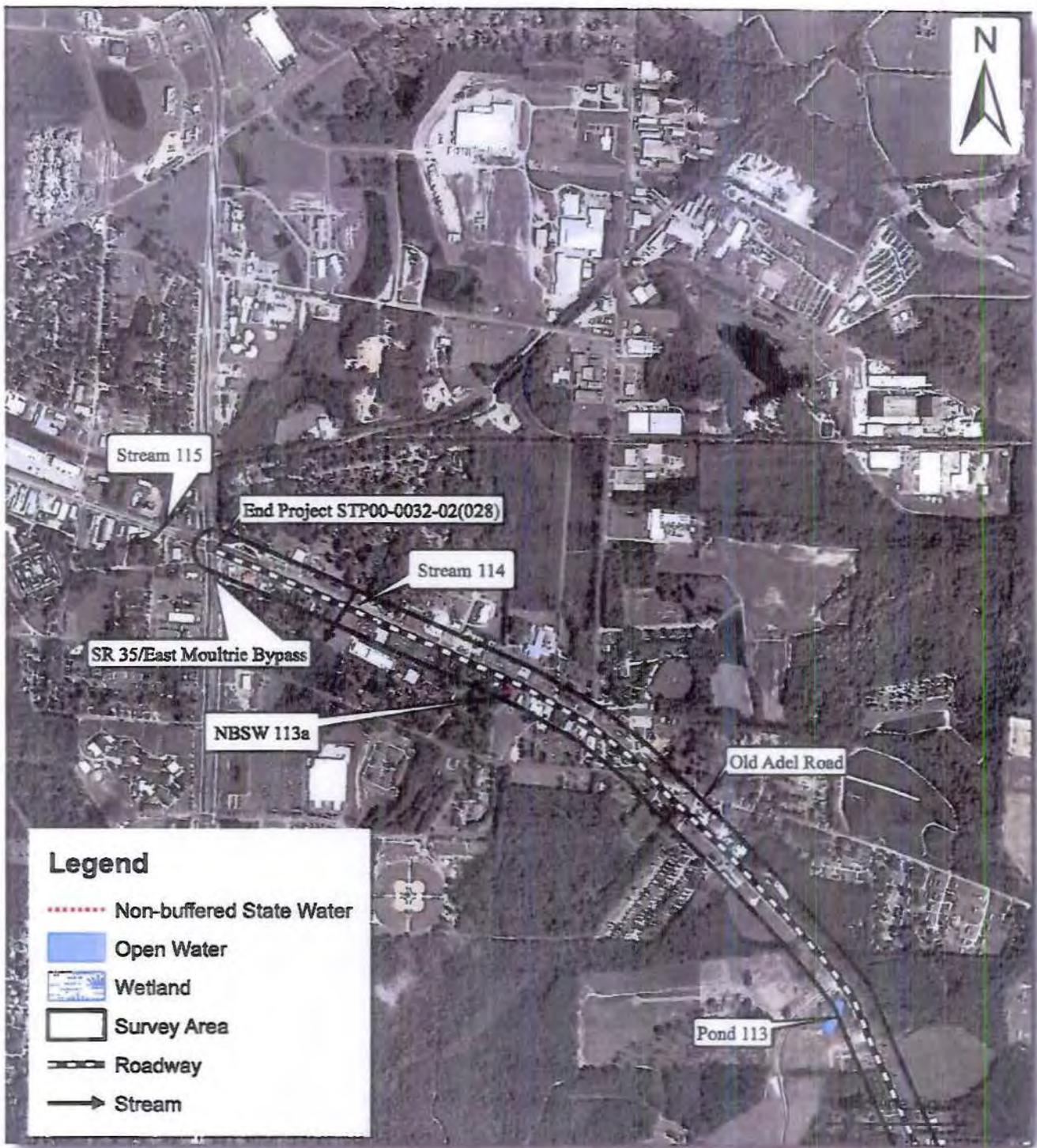


Figure 50. State and Federal Waters

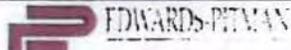
1:16,000



Source: NAIP DOQQ - Brooks and Colquitt Counties

SR 133 GOVERNOR'S ROAD IMPROVEMENT PROJECT
 STP00-0000-00(543)(544)(545)(546) and STP00-0032-02(028)
 P.I. # 0000543, 0000544, 0000545, 0000546, & 431780
 Brooks and Colquitt Counties, Georgia

0 500 1,000 2,000 3,000 Feet



Projection: NAD 83 UTM 17 North

Stream, Wetland, and Open Waters Impacts Summary Table
STP00-0000-00(543), (544), (545), (546) & STP00-0032-02(028), Brooks and Colquitt Counties
PI# 0000543, 0000544, 0000545, 0000546, & 431780

PI Number	Resource Type	HUC	Impacts	
			Length (lf)	Area (ac)
0000543	Streams	03110204	336	0.05
	Wetlands/Open Waters	03110204	---	1.89
0000544	Streams	03110204	1067	0.29
	Wetlands/Open Waters	03110204	---	9.34
0000545	Streams	03110204	310	0.03
		03110203	954	0.20
	Wetlands/Open Waters	03110204	---	3.12
		03110203	---	3.25
0000546	Streams	03110203	692	0.19
	Wetlands/Open Waters	03110204	---	0.36
		03110203	---	2.78
431780	Streams	03110203	170	0.02
	Wetlands/Open Waters	03110204	---	0.03
		03110203	---	0.39

Stream Summary Table
STP00-0000-00(543), (544), (545), (546) & STP00-0032-02(028), Brooks and Colquitt Counties
PI# 0000543

Resource Label	Cowardin Class	Existing Condition	HUC8	Location - Station		Coordinates		Total WL/OW Area (ac)	Existing Structure		Proposed			FWCA
				Begin	End	Lat (°N)	Long (°W)		Type	Length (ft)	Type	Length (ft)	Area (ac)	
Stream 2	Intermittent	FF	03110204	822+25	822+61	30.747774	-83.363086	---	24" RCP	52	Pipe	46	0.013	No
											Bank Armor	16	0.004	
Stream 14b	Intermittent	FF	03110204	717+21 RT	717+25 RT	30.866110	-83.394158	---	54" RCP	52	Pipe	79	0.007	Yes
											Bank Armor	28	0.003	
Stream 16	Intermittent	SI	03110204	707+55 LT	716+55 LT	30.866343	-83.395788	---	18" RCP	22 & 24	Replace	0	0	No
Stream 19a	Intermittent	FF	03110204	680+25 RT	681+95 RT	30.866343	-83.395788	---	36" RCP	50	Pipe	102	0.012	Yes
											Bank Armor	25	0.003	
											Channel Loss	40	0.005	
TOTAL STREAM IMPACTS FOR HUC 03110204												336	0.047	

FF = Fully Functional
SI = Somewhat Impaired
I = Impaired

RCP = Reinforced concrete pipe
CBC = Concrete box culvert
PVC = Polyvinyl chloride pipe

Wetland and Open Waters Summary Table
STP00-0000-00(543), (544), (545), (546) & STP00-0032-02(028), Brooks and Colquitt Counties
PI# 0000543

Resource Label	Cowardin Class	Existing Condition	HUC8	Location - Station		Coordinates		Total WL/OW Area (ac)	Existing Structure		Proposed			FWCA
				Begin	End	Lat (°N)	Long (°W)		Type	Length (ft)	Type	Length (lf)	Area (ac)	
Pond 1a	POW	Class 5	03110204	841.25 RT	846.25RT	30.855059	-83.356436	2.5	None		None	--	--	--
W/L 1	PFO1	Class 3	03110204	818+00	830+40	30.859375	-83.362141	>3	24" RCP	52	Fill	--	0.10	--
											Clear	--	0.02	
Pond 3	POW	Class 5	03110204	815+25 RT	817+55 RT	30.859178	-83.364333	0.1	None		None	--	---	--
Pond 3a	POW	Class 5	03110204	806+35 RT	814+00 RT	30.860218	-83.365410	4.5	None		None	--	---	--
W/L 4	PFO1	Class 3	03110204	791+00 RT	803+50 RT	30.861223	-83.369371	2.0	18" RCP	41	Clear	--	0.02	--
W/L 4a	PEM1	Class 3	03110204	789+00 RT	789+75 RT	30.862596	-83.371449	0.06	None		None	--	--	--
W/L 5	PFO1	Class 3	03110204	791+40 LT	794+25 LT	30.863357	-83.370331	0.12	None		Fill	--	0.03	--
											Clear	--	0.03	
W/L 6	PFO1	Class 3	03110204	787+75 LT	789+75 LT	30.864818	-83.371474	2.6	None		None	--	--	--
W/L 7	PFO1	Class 3	03110204	772+25 LT	780+50 LT	30.864162	-83.374612	>3	42" RCP	44	Fill	--	0.56	--
											Clear	--	0.07	
Pond 8	POW	Class 5	03110204	773+25 RT	775+25 RT	30.862475	-83.376437	0.15	None		None	--	--	--
Pond 9	POW	Class 5	03110204	770+50 RT	771+50 RT	30.863459	-83.377155	0.40	24" RCP	40	Temp Drain	--	0.33	--
Pond 10	POW	Class 5	03110204	Beyond limits of plan		30.861801	-83.378254	0.13	None		None	--	--	--
Pond 11	POW	Class 5	03110204	764+75 RT	766+50 RT	30.863414	-83.378839	0.40	None		None	--	---	--
W/L 12	PFO1	Class 3	03110203	741+80 RT	744+90 RT	30.864085	-83.386001	>2	30" RCP	40	Fill	--	0.06	--
											Clear	--	0.02	
Pond 13	POW	Class 5	03110204	729+65 LT	735+65 LT	30.865558	-83.389608	0.5	None		None	--	---	--
W/L 14	PSS1	Class 4	03110204	715+10 RT	717+75 LT	30.865471	-83.394323	0.25	None		None	--	--	--
Pond 14a	POW	Class 5	03110204	715+85 RT	707+35 RT	30.865673	-83.394158	0.13	None		None	--	---	--
Pond 15	POW	Class 5	03110204	715+15 LT	717+65 LT	30.867244	-83.393602	>9	None		None	--	---	--
W/L 15a	PSS1	Class 4	03110204	715+15 LT	717+65 LT	30.867244	-83.393602		None		Fill	--	0.04	---
Pond 17	POW	Class 5	03110204	702+00 LT	703+45 LT	30.867711	-83.398077	0.36	18" RCP	41	Fill	--	0.21	--
											Temp Drain	--	0.36	
Pond 18	POW	Class 5	03110204	690+75 RT	692+00 RT	30.867673	-83.401873	0.60	None		None	--	--	--
W/L 19	PFO1	Class 3	03110204	687+25 LT	689+50 LT	30.869611	-83.402204	>7	36" RCP	50	Fill	--	0.01	--
											Clear	--	0.03	
Pond 20	POW	Class 5	03110204	680+25 RT	681+95 RT	30.86681	-83.40494	0.26	None		None	--	--	--
W/L 21	PSS1	Class 4	03110204	Beyond limits of plan		30.876334	-83.419523	4.60	None		None	--	---	--
TOTAL WETLANDS AND OPEN WATERS IMPACTS FOR HUC 03110204												1.89		

PSS1 = Palustrine shrub/scrub wetland RCP = Reinforced concrete pipe
PFO1 = Palustrine forested wetland CBC = Concrete box culvert
PEM1 = Palustrine emergent wetland PVC = Polyvinyl chloride pipe
POW = Palustrine open water

Stream Summary Table
STP00-0000-00(543), (544), (545), (546) & STP00-0032-02(028), Brooks and Colquitt Counties
PI# 0000544

Resource Label	Cowardin Class	Existing Condition	HUC8	Location - Station		Coordinates		Total WL/OW Area (ac)	Existing Structure		Proposed			FWCA
				Begin	End	Lat (°N)	Long (°W)		Type	Length (ft)	Type	Length (lf)	Area (ac)	
Stream 22b	Intermittent	FF	03110204	367+75 RT	371+00 RT	30.912878	-83.473728	---	Unknown		None	--	--	No
Stream 22c	Intermittent	FF	03110204	369+25 LT	371+75 LT	30.912491	-83.472009	---	(3) 42-inch RCP	42	Pipe	74	0.008	No
											Bank Armor	25	0.003	
Stream 22d	Intermittent	FF	03110204	377+40 RT	378+40 RT	30.910994	-83.471244	---	(3) 42-inch RCP	74	Channel Loss	45	0.010	No
											Bank Armor	15	0.003	
Stream 23 (Downing)	Perennial	FF	03110204	362+85	368+65	30.913345	-83.473045	---	(5) 7'X6' Box	60	Pipe	95	0.046	Yes
											Bank Armor	30	0.014	
Stream 23a (Jones Creek)	Perennial	FF	03110204	348+10	348+50	30.917277	-83.476338	---	(3) 8'X7' Box	48	Pipe	100	0.08	Yes
											Bank Armor	30	0.024	
Stream 23b side channel	Intermittent	FF	03110204	346+50 LT	351+00 LT	30.917277	-83.476338	---	None		Fill	350	0.069	Yes
Stream 26	Intermittent	FF	03110204	288+25	291+35	30.932260	-83.482811	---	(2) 42-inch RCP	32	Pipe	108	0.013	Yes
											Bank Armor	25	0.003	
											Channel Loss	35	0.004	
Stream 27a	Intermittent	FF	03110204	237+00 LT	237+29 LT	30.855059	-83.356436	---	4'X6' Box	66	Pipe	36	0.004	No
											Bank Armor	24	0.003	
Stream 28a	Intermittent	FF	03110204	214+75 RT	218+50 RT	30.866343	-83.395788	---	None		None	--	--	
Stream 30	Intermittent	FF	03110204	185+65	188+95	30.94909	-83.50784	---	(2) 30-inch RCP	74	Pipe	50	0.003	No
											Bank Armor	25	0.002	
TOTAL STREAM IMPACTS FOR HUC 03110204												1067	0.289	

FF = Fully Functional
SI = Somewhat Impaired
I = Impaired

RCP = Reinforced concrete pipe
CBC = Concrete box culvert
PVC = Polyvinyl chloride pipe

Wetland and Open Waters Summary Table
STP00-0000-00(543), (544), (545), (546) & STP00-0032-02(028), Brooks and Colquitt Counties
PI# 0000544

Resource Label	Cowardin Class	Existing Condition	HUC8	Location - Station		Coordinates		Total WL/OW Area (ac)	Existing Structure		Proposed			FWCA
				Begin	End	Lat (°N)	Long (°W)		Type	Length (ft)	Type	Length (lf)	Area (ac)	
Pond 22a	POW	Class 5	03110204	388+00 RT	393+00 RT	30.907605	-83.468675	2.8	None		Fill	--	0.24	--
											Temp Drain	--	2.83	
W/L 24	PEM1/PSS1	Class 5	03110204	343+50	374+80	30.915919	-83.474619	0.3	None		Fill	--	2.35	--
											Clear	--	1.52	
Pond 24a	POW	Class 5	03110204	349+75 RT	350+50 RT	30.916974	-83.476598	0.06	None		None	--	--	--
W/L 25	PFOI	Class 3	03110204	286+35	295+40	30.931937	-83.482437	>3	(2) 42-inch RCP	32	Fill	--	1.02	--
											Clear	--	0.22	
W/L 27	PFOI	Class 3	03110204	235+75 LT	240+90 LT	30.943980	-83.492197	>2	24-inch RCP	69	Fill	--	0.19	--
											Clear	--	0.16	
Pond 27b	POW	Class 5	03110204	233+50 LT	235+65 LT	30.944020	-83.492940	0.06	None		None	--	--	--
Pond 28	POW	Class 5	03110204	196+56 RT	197+75 RT	30.947498	-83.504610	0.04	None		Fill	--	0.05	--
W/L 28b	PSS1	Class 3	03110204	211+40 RT	214+75 RT	30.945695	-83.499768	1.5	18-inch RCP	61	Fill	--	0.01	--
											Clear	--	0.02	
W/L 29	PFOI	Class 3	03110204	182+60	190+20	30.949276	-83.506733	>3	(2) 30-inch RCP	74	Fill	--	0.34	--
											Clear	--	0.39	
TOTAL WETLANDS AND OPEN WATERS IMPACTS FOR HUC 03110204												9.338		

PSS1 = Palustrine shrub/scrub wetland RCP = Reinforced concrete pipe
PFOI = Palustrine forested wetland CBC = Concrete box culvert
PEM1 = Palustrine emergent wetland PVC = Polyvinyl chloride pipe
POW = Palustrine open water

Stream Summary Table
STP00-0000-00(543), (544), (545), (546) & STP00-0032-02(028), Brooks and Colquitt Counties
PI# 0000545

Resource Label	Cowardin Class	Existing Condition	HUC8	Location - Station		Coordinates		Total WL/OW Area (ac)	Existing Structure		Proposed			FWCA
				Begin	End	Lat (°N)	Long (°W)		Type	Length (ft)	Type	Length (lf)	Area (ac)	
Stream 32	Perennial	FF	03110204	587+68	587+84	30.96042	-83.51512	---	(2) 9'x5' CBC	56	Pipe	90	0.010	Yes
											Bank Armor	10	0.001	
											Channel Loss	64	0.007	
Stream 37	Intermittent	FF	03110204	528+00	528+12	30.97247	-83.52723	---	42" RCP	58	Pipe	127	0.013	Yes
											Bank Armor	19	0.002	
Stream 46	Intermittent	FF	03110203	351+34 RT	351+63 RT	31.01006	-83.56216	---	30" RCP	70	Pipe	108	0.017	Yes
											Bank Armor	38	0.009	
Stream 49	Intermittent	FF	03110203	299+04 LT	301+91 LT	31.01994	-83.57380	---	(2) 36" RCP	61	Morphological Change	248	0.017	Yes
											Pipe	78	0.004	
											Bank Armor	40	0.003	
Stream 50	Intermittent	FF	03110203	276+59	277+64	31.01994	-83.57380	---	(3) 8'x5' CBC	51	Pipe	114	0.024	Yes
											Bank Armor	32	0.007	
Stream 53	Perennial	FF	03110203	239+59	240+19	31.03237	-83.58523	---	(2) 4'x4' CBC	51	Pipe	76	0.014	No
											Bank Armor	20	0.004	
Stream 55	Perennial	FF	03110203	186+03	186+92	31.04392	-83.59607	---	(5) 10'x5' CBC	50	Pipe	105	0.07	Yes
											Bank Armor	30	0.021	
Stream 61	Intermittent	FF	03110203	150+54 RT	150+87 RT	31.05211	-83.60268	---	24" RCP	76	Pipe	7	0.001	No
											Bank Armor	12	0.002	
Stream 63	Intermittent	FF	03110203	141+97 RT	142+13 RT	31.05410	-83.60402	---	4'x3' CBC	48	Pipe	28	0.003	No
											Bank Armor	18	0.002	
TOTAL STREAM IMPACTS FOR HUC 03110204											310	0.033		
TOTAL STREAM IMPACTS FOR HUC 03110203											954	0.2001		
OVERALL STREAM IMPACTS											1264	0.233		

FF = Fully Functional
SI = Somewhat Impaired
I = Impaired

RCP = Reinforced concrete pipe
CBC = Concrete box culvert
PVC = Polyvinyl chloride pipe

Wetland and Open Waters Summary Table
STP00-0000-00(543), (544), (545), (546) & STP00-0032-02(028), Brooks and Colquitt Counties
PI# 0000545

Resource Label	Cowardin Class	Existing Condition	HUC8	Location - Station		Coordinates		Total WL/OW Area (ac)	Existing Structure		Proposed			FWCA
				Begin	End	Lat (°N)	Long (°W)		Type	Length (ft)	Type	Length (lf)	Area (ac)	
W/L 31	PFO1	Class 3	03110204	579+23	592+76	30.96109	-83.51455	>3	(2) 9'x5' CBC	56	Fill	--	0.24	--
											Clear	--	0.46	
W/L 33	PSS1	Class 4	03110204	566+65	571+71	30.96504	-83.51705	1.0	18" RCP	69	Fill	--	0.50	--
											Clear	--	0.38	
W/L 34	PSS1	Class 4	03110204	546+96	551+90	30.96872	-83.52241	>2	None		Fill	--	0.05	--
											Clear	--	0.16	
W/L 35	PEM1	Class 4	03110204	536+90 RT	538+20 RT	30.97107	-83.52558	0.1	None		None	--	--	--
W/L 36	PSS1	Class 4	03110204	526+40	529+37	30.97276	-83.52646	>1	42" RCP	58	Fill	--	0.49	--
											Clear	--	0.17	
Pond 38	POW	Class 5	03110204	489+96 LT	491+43 LT	30.98147	-83.53396	0.6	None		Fill	--	0.03	--
											Temp Drain	--	0.64	
W/L 39	PFO1	Class 3	03110203	432+60	437+42	30.99491	-83.54058	>3	36" RCP	86	Fill	--	0.26	--
											Clear	--	0.18	
W/L 40	PFO1	Class 3	03110204	404+40 LT	410+25 LT	30.999951	-83.548126	0.5	None		None	--	--	--
W/L 41	PFO1	Class 3	03110204	395+80 LT	397+50 LT	31.002479	-83.550028	0.3	None		None	--	--	--
Pond 42	POW	Class 5	03110203	383+60 RT	387+80 RT	31.002336	-83.554249	0.4	None		None	--	--	--
W/L 43	PSS1	Class 4	03110203	379+00 RT	380+50 RT	31.004403	-83.555274	0.3	None		None	--	--	--
Pond 44	POW	Class 5	03110203	373+61 RT	374+12 RT	31.00463	-83.55570	0.1	None		None	--	--	--
Pond 45	POW	Class 5	03110203	374+84 LT	377+70 LT	31.00565	-83.55559	1.0	None		Fill	--	0.10	--
											Temp Drain	--	1.00	
W/L 47	PSS1	Class 4	03110203	338+21 LT	339+76 LT	31.01252	-83.56439	0.5	4'x6' CBC	50	Fill	--	0.07	--
											Clear	--	0.03	
W/L 48	PFO1	Class 3	03110203	279+73 LT	286+06 LT	31.02152	-83.57489	>3	(3) 8'x5' CBC	51	Fill	--	0.04	--
											Clear	--	0.06	
Pond 50a	POW	Class 5	03110203	275+00 RT	276+50 RT	31.023211	-83.580833	>1	None		None	--	--	--
W/L 51	PFO1	Class 4	03110203	Beyond limits of plan sheet		31.03159	-83.58150	0.4	None		None	--	--	--
W/L 52	PFO1	Class 3	03110203	235+43	246+23	31.03246	-83.58419	>7	(2) 4'x4' CBC	51	Fill	--	0.41	--
											Clear	--	0.37	
W/L 54	PFO1	Class 3	03110203	173+41	187+97	31.04547	-83.59608	>14	(5) 10'x5' CBC	50	Fill	--	0.02	--
											Clear	--	0.22	
Pond 56	POW	Class 5	03110203	Beyond limits of plan sheet		31.04467	-83.59713	0.4	None		None	--	--	--
Pond 56a	POW	Class 5	03110203	178+75 LT	179+20 LT	31.04783	-83.50455	0.6	None		None	--	--	--
W/L 57	PSS1	Class 4	03110203	160+42 LT	164+45 LT	31.04980	-83.59997	>1	None		Clear	--	0.16	--
W/L 58	PSS1	Class 4	03110203	156+74 RT	158+40 RT	31.05008	-83.60126	0.3	None		Fill	--	0.06	--
											Clear	--	0.06	
Pond 58a	POW	Class 5	03110203	151+20 LT	151+70 LT	31.05103	-83.59787	2.0	None		None	--	--	--
W/L 59	PSS1	Class 4	03110203	151+47 LT	152+44 LT	31.05207	-83.60149	0.5	None		Fill	--	0.01	--
											Clear	--	0.03	
Pond 59a	POW	Class 5	03110203	151+40 LT	151+80 LT	31.05223	-83.60169	0.1	None		None	--	--	--
W/L 60	PFO1	Class 3	03110203	147+04 RT	151+20 RT	31.05240	-83.60299	>1	24" RCP	76	Fill	--	0.01	--
											Clear	--	0.02	

Stream Summary Table
STP00-0000-00(543), (544), (545), (546) & STP00-0032-02(028), Brooks and Colquitt Counties
PI# 0000546

Resource Label	Cowardin Class	Existing Condition	HUC8	Location - Station		Coordinates		Total WL/OW Area (ac)	Existing Structure		Proposed			FWCA
				Begin	End	Lat (°N)	Long (°W)		Type	Length (ft)	Type	Length (lf)	Area (ac)	
Stream 65a	Intermittent	FF	03110203	506+56 RT	506+73 RT	31.06288	-83.61017	---	42" RCP	58	Pipe	46	0.004	No
											Bank Armor	18	0.002	
Stream 67	Intermittent	FF	03110203	474+68	475+52	31.06950	-83.61619	---	36" RCP	59	Pipe	93	0.015	Yes
											Bank Armor	18	0.003	
Stream 69	Intermittent	FF	03110203	436+58	437+91	31.07593	-83.62618	---	36" RCP	54	Pipe	89	0.008	Yes
											Bank Armor	14	0.001	
											Channel Loss	7	0.001	
Stream 77	Intermittent	FF	03110203	339+04	339+39	31.09597	-83.64678	---	36" RCP	63	Pipe	75	0.010	No
											Bank Armor	20	0.003	
Stream 78	Intermittent	FF	03110203	Beyond limits of plan sheet		31.09747	-83.65609	---	None		None	--	--	No
Stream 80	Perennial	FF	03110203	294+25	294+57	31.10115	-83.65962	---	(2) 36" RCP	55	Pipe	89	0.016	Yes
											Bank Armor	14	0.003	
Stream 83	Perennial	FF	03110203	272+25	273+76	31.10354	-83.66576	---	(3) 8'x3' CBC	62	Pipe	69	0.032	No
											Bank Armor	20	0.009	
Stream 91a	Intermittent	FF	03110203	194+00 RT	196+50 RT	31.11044	-83.68960	---	None		None	--	--	--
Stream 92	Perennial	FF	03110203	194+37	194+99	31.11044	-83.68960	---	(4) 8'x3' CBC	78	Pipe	70	0.048	Yes
											Bank Armor	50	0.034	
TOTAL STREAM IMPACTS FOR HUC 03110203											692	0.189		

FF = Fully Functional
SI = Somewhat Impaired
I = Impaired

RCP = Reinforced concrete pipe
CBC = Concrete box culvert
PVC = Polyvinyl chloride pipe

Wetland and Open Waters Summary Table
STP00-0000-00(543), (544), (545), (546) & STP00-0032-02(028), Brooks and Colquitt Counties
PI# 0000546

Resource Label	Cowardin Class	Existing Condition	HUC8	Location - Station		Coordinates		Total WL/OW Area (ac)	Existing Structure		Proposed			FWCA
				Begin	End	Lat (°N)	Long (°W)		Type	Length (ft)	Type	Length (lf)	Area (ac)	
W/L 65	PFO1	Class 3	03110203	Beyond limits of plan sheet		31.05756	-83.60413	>2	None		None	--	--	--
W/L 66	PFO1	Class 3	03110203	473+19	475+60	31.07096	-83.61600	1.6	36" RCP	59	Fill	--	0.06	--
											Clear	--	0.08	
W/L 68	PFO1	Class 3	03110203	435+46	438+29	31.07628	-83.62533	>1	36" RCP	54	Fill	--	0.08	--
											Clear	--	0.10	
Pond 70	POW	Class 5	03110203	426+50 LT	428+20 LT	31.07842	-83.62750	0.1	None		None	--	--	--
W/L 71	PFO1	Class 4	03110203	Beyond limits of plan sheet		31.07988	-83.62765	0.5	None		None	--	--	--
W/L 72	PFO1	Class 4	03110203	414+56 RT	418+38 RT	31.07908	-83.63147	>1	36" RCP	50	Fill	--	0.50	--
											Clear	--	0.10	
W/L 73	PFO1	Class 3	03110203	400+30 LT	402+60 LT	31.08285	-83.63380	>1	None		None	--	--	--
W/L 74	PSS1	Class 4	03110203	358+50 LT	361+00 LT	31.09162	-83.64246	0.1	None		None	--	--	--
W/L 75	PFO1	Class 3	03110203	349+40 LT	353+40 LT	31.09372	-83.64363	>3	None		None	--	--	--
W/L 76	PFO1	Class 3	03110204	335+64	341+06	31.09514	-83.64706	>1	36" RCP	63	Fill	--	0.19	--
											Clear	--	0.17	
W/L 79	PFO1	Class 3	03110203	293+50	296+86	31.10147	-83.65972	>3	(2) 36" RCP	55	Fill	--	0.08	--
											Clear	--	0.14	
Pond 81	POW	Class 5	03110203	376+70 RT	278+75 RT	31.10214	-83.66487	0.1	None		None	--	--	--
W/L 82	PFO1	Class 3	03110203	270+33	278+02	31.10395	-83.66641	>3	(3) 8'x3' CBC	62	Fill	--	0.37	--
											Clear	--	0.25	
Pond 84	POW	Class 5	03110203	251+75 RT	254+75 RT	31.10425	-83.67214	0.1	None		None	--	--	--
W/L 85	PFO1	Class 3	03110203	248+60 RT	251+75 RT	31.10453	-83.67319	0.5	None		None	--	--	--
W/L 86	PFO1	Class 4	03110203	227+08 LT	228+28 LT	31.10761	-83.67976	0.1	18" RCP	79	Fill	--	0.06	--
											Clear	--	0.04	
Pond 87	POW	Class 5	03110203	214+90 RT	216+20 RT	31.10753	-83.68377	0.4	None		None	--	--	--
W/L 88	PFO1	Class 3	03110203	210+50 RT	214+50 RT	31.10801	-83.68483	>1	None		None	--	--	--
Pond 89	POW	Class 5	03110203	196+40 RT	199+20 RT	31.10930	-83.68916	0.4	None		None	--	--	--
Pond 90	POW	Class 5	03110203	196+50 RT	199+70 RT	31.10879	-83.68915	0.1	None		None	--	--	--
W/L 91	PFO1	Class 3	03110203	183+80	197+88	31.11039	-83.69089	>2	(4) 8'x3' CBC	78	Fill	--	0.45	--
											Clear	--	0.45	
W/L 93	PFO1	Class 3	03110203	116+40 RT	121+00 RT	31.12414	-83.70806	>1	18" RCP	63	None	--	--	--
W/L 94	PFO1	Class 3	03110203	112+42	112+92	31.12531	-83.70938	0.3	18" RCP	62	Fill	--	0.01	--
											Clear	--	0.02	
TOTAL WETLANDS AND OPEN WATERS IMPACTS FOR HUC 03110204													0.36	
TOTAL WETLANDS AND OPEN WATERS IMPACTS FOR HUC 03110203													2.78	
TOTAL WETLANDS AND OPEN WATERS IMPACTS													3.13	

PSS1 = Palustrine shrub/scrub wetland RCP = Reinforced concrete pipe
PFO1 = Palustrine forested wetland CBC = Concrete box culvert
PEM1 = Palustrine emergent wetland PVC = Polyvinyl chloride pipe

Stream Summary Table
STP00-0000-00(543), (544), (545), (546) & STP00-0032-02(028), Brooks and Colquitt Counties
PI# 431780

Resource Label	Cowardin Class	Existing Condition	HUC8	Location - Station		Coordinates		Total WL/OW Area (ac)	Existing Structure		Proposed			FWCA
				Begin	End	Lat (°N)	Long (°W)		Type	Length (ft)	Type	Length (lf)	Area (ac)	
Stream 97	Intermittent	FF	03110203	329+70 RT	332+60 RT	31.13146	-83.71687	---	(3) 18" RCP	80, 76, 76	Pipe	10	0.001	No
Stream 99	Intermittent	FF	03110203	291+65 RT	293+75 RT	31.14390	-83.72733	---	(3) 24" RCP	72, 73, 72	Pipe	68	0.009	No
											Bank Armor	12	0.002	
Stream 114	Intermittent	SI	03110203	124+70 RT	125+10 RT	30.86611	-83.39416	---	2-48" RCP	74	Pipe	60	0.006	No
											Bank Armor	20	0.002	
Stream 115	Intermittent	FF	03110203	106+00 LT	106+25 LT	30.86611	-83.39416	---	4x6 box culvert	113	None	--	--	No
TOTAL STREAM IMPACTS FOR HUC 03110203											170	0.020		

FF = Fully Functional
SI = Somewhat Impaired
I = Impaired

RCP = Reinforced concrete pipe
CBC = Concrete box culvert
PVC = Polyvinyl chloride pipe

Wetland and Open Waters Summary Table
STP00-0000-00(543), (544), (545), (546) & STP00-0032-02(028), Brooks and Colquitt Counties
PI# 431780

Resource Label	Cowardin Class	Existing Condition	HUC8	Location - Station		Coordinates		Total WL/OW Area (ac)	Existing Structure		Proposed			FWCA
				Begin	End	Lat (°N)	Long (°W)		Type	Length (ft)	Type	Length (ft)	Area (ac)	
Pond 95	POW	Class 5	03110203	308+75 LT	334+25 LT	31.13443	-83.71813	18.0	None	None	None	--	--	--
W/L 96	PFO1	Class 3	03110203	330+20 RT	333+50 RT	31.13189	-83.71695	0.2	(3) 18" RCP	80, 76, 76	None	--	---	--
W/L 98	PEM1	Class 4	03110203	277+25 LT	292+75 LT	31.14085	-83.72484	0.3	(3) 24" RCP	73, 73, 72	Fill	--	0.26	--
											Clear	--	0.07	
W/L 100	Filed by Landowner			--	--	--	--	--	--	--	None	--	--	--
Pond 101	POW	Class 5	03110203	Beyond limits of plan sheet		31.14262	-83.72853	0.1	None		None	--	--	--
Pond 102	POW	Class 5	03110203	Beyond limits of plan sheet		31.14315	-83.72861	0.1	None		None	--	--	--
Pond 103	POW	Class 5	03110203	Beyond limits of plan sheet		31.14539	-83.72705	0.4	None		None	--	--	--
Pond 104	POW	Class 5	03110203	Beyond limits of plan sheet		31.14793	-83.73250	0.1	None		None	--	--	--
W/L 105	PFO1	Class 4	03110203	247+75 RT	252+75 RT	31.14923	-83.73302	0.6	18" RCP	73	Fill	--	0.04	--
											Clear	--	0.02	
Pond 106	POW	Class 5	03110203	241+65 RT	243+87 RT	31.15154	-83.73402	0.2	(3) 8" PVC	20	None	--	--	--
Pond 107	POW	Class 5	03110203	Beyond limits of plan sheet		31.15173	-83.73402	0.1	None		None	--	--	--
W/L 108	PSS1	Class 4	03110204	237+45 LT	238+10 LT	31.15300	-83.73413	0.1	None		Fill	--	0.02	--
											Clear	--	0.01	
W/L 109	PSS1	Class 4	03110203	228+75 RT	231+25 RT	31.15453	-83.73653	0.5	None		None	--	--	--
W/L 110	PSS1	Class 4	03110204	Beyond limits of plan sheet		31.15754	-83.73516	0.2	None		None	--	--	--
Pond 111	POW	Class 5	03110204	Beyond limits of plan sheet		31.15791	-83.73597	0.2	None		None	--	--	--
Pond 112	POW	Class 5	03110203	204+70 RT	205+90 RT	31.16048	-83.74010	0.1	24" RCP	81	None	--	--	--
Pond 113	POW	Class 5	03110203	189+22.30 RT	189+92.58 RT	31.16430	-83.74188	0.1	(1) 6" PVC, (1) 12" PVC	69, 68	None	--	--	--
TOTAL WETLANDS AND OPEN WATERS IMPACTS FOR HUC 03110204													0.03	
TOTAL WETLANDS AND OPEN WATERS IMPACTS FOR HUC 03110203													0.39	
TOTAL WETLANDS AND OPEN WATERS IMPACTS													0.42	

PSS1 = Palustrine shrub/scrub wetland RCP = Reinforced concrete pipe
PFO1 = Palustrine forested wetland CBC = Concrete box culvert
PEM1 = Palustrine emergent wetland PVC = Polyvinyl chloride pipe