APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 2011-11-08

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: JD Form 1 of 1; SAC 2011-00528-4M Atkinson Knowlton Prop

C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: South Carolina County/parish/borough: Sumter City: Sumter Center coordinates of site (lat/long in degree decimal format): Lat. 33.936323° N, Long80.431133° W. Universal Transverse Mercator: NAD83 Name of nearest waterbody: Mush Swamp Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Black River Name of watershed or Hydrologic Unit Code (HUC): 3040205 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: Field Determination. Date(s): 2011-06-30, 2011-09-08
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: 985.0 linear feet: 8.0 width (ft) and/or 0.18 acres. Wetlands: acres.
	c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, Established by OHWM., Pick List Elevation of established OHWM (if known):N/A.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: A site visit was conducted during a period of drought on June 30, 2011. A data point was taken within an area shown on NWI maps as PSS1Bd, Palustrine Forest. The three parameter approach was utilized in accordance with the 1987 Delineation Manual, and no hydrology indicators were discovered. Hydric soils were not encountered. A

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

3 Supporting documentation is presented in Section III.F.

prevalence of hydrophtic vegetation was also not discovered. No other areas were identified on-site and the entire site was determined to be uplands. Four man-made features (Linear Feature #1, #2, #3, #4) were evaluated within the property boundary. Linear Feature #1 was determined to be a seasonal RPW and is described in other sections. Linear Features #2, #3, and #4 were determined to be non-jurisdictional ditches. No other potentially jurisdictional aquatic features were observed on-site.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1.	TNW
	T 1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 692 acres;

Drainage area: 111 acres

Average annual rainfall: **51.0** inches Average annual snowfall: inche

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 4 tributaries before entering TNW.

Project waters are 5-10 river miles from TNW.

Project waters are 1-2 river miles from RPW.

Project waters are 2-5 aerial (straight) miles from TNW.

Project waters are 1-2 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: N/A.

Identify flow route to TNW⁵: The on-site tributary (sRPW#1) flows in a northerly direction until it intercepts a stormwater management system for a commercial-residential subdivisio located to the north across Patriot Parkway. A hydrologic connection was maintained through multiple culverts and ponds until it intercepts the

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known: 1. (b) General Tributary Characteristics (check all that apply): Natural Tributary is: Artificial (man-made). Explain: T. Manipulated (man-altered). Explain: The tributary is shown on USGS topo maps and has been deepened, widened, and straightened. A natural channel exists within the bed of the manipulated canal. **Tributary** properties with respect to top of bank (estimate): Average width: 8 feet Average depth: 8 feet Average side slopes: Vertical (1:1 or less). Primary tributary substrate composition (check all that apply): Silts Sands Concrete ☐ Cobbles ☐ Gravel ☐ Muck ▼ Vegetation. Type/% cover: Grass, 20% Bedrock Other. Explain: loamy sub-surface soils. Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Minimal signs of erosion. Presence of run/riffle/pool complexes. Explain: None. Tributary geometry: Relatively straight. Entirely straight with no bends or turns. Tributary gradient (approximate average slope): 2-5 % (c) Flow: Tributary provides for: Seasonal flow Estimate average number of flow events in review area/year: 11-20 Describe flow regime: Due to the increase of impervious area on the properties which drain to this feature, indicators of flow were noted which were consistent with a duration of flow at least seasonally. These indicators are listed below.. Other information on duration and volume: Surface flow is: Confined. Characteristics: Subsurface flow: Yes. Explain findings: Saturated soils at 6"within a long period of drought conditions. Dye (or other) test performed: Tributary has (check all that apply): Bed and banks $\overline{\boxtimes}$ OHWM⁶ (check all indicators that apply): □ clear, natural line impressed on the bank
 □ the presence of litter and debris changes in the character of soil destruction of terrestrial vegetation shelving the presence of wrack line vegetation matted down, bent, or absent sediment sorting leaf litter disturbed or washed away \boxtimes scour sediment deposition multiple observed or predicted flow events water staining abrupt change in plant community other (list): ☐ Discontinuous OHWM. 7 Explain: . If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings; physical markings/characteristics vegetation lines/changes in vegetation types. tidal gauges other (list): (iii) Chemical Characteristics:

OHWM of Loring Mill Pond. Loring Mill Pond continues into Mush Swamp (pRPW). Mush Swamp flows into Green Swamp (pRPW), which flows into the Pocotaligo River (pRPW), which flows into the Black River, a TNW.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: No water was present in the tributary at the time of the site visit. Identify specific pollutants, if known: N/A.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Man-alteredseasonal tributary with limited habitat value.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	(a)	Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: 0 acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
			General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List . Explain findings:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
			Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Char	mical Characteristics: cacterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)		ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All v	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Troximately (55.81) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:



Summarize overall biological, chemical and physical functions being performed: The similarly situated wetlands contribute vital biological, chemical, and physical functions to the downstream TNW. This wetland system enhances wildlife diversity, acts as catch basins filtering sediment and pollutants from surrounding urban and rural development and silvicultural practices, supports the downstream food web, and provides nutrient fixation, flood attenuation, and flow maintenance functions. See "Documentation for the Record only" below for more details.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

Documentation for the Record only: Significant nexus findings for seasonal RPWs and/or wetlands abutting seasonal RPWs: Linear Feature #1 was determined to be a seasonal RPW. During an off-site investigation, a hydrologic connection was discovered between the wetland system to the south of the subject property from which this feature flows and a perennial RPW to the north called Mush Swamp which flows through other perennial RPWs into the Black River (TNW). This feature was evaluated at Patriot Parkway and an OHWM was present within the culvert and within the bed and banks. Many other indicators of hydrology were noted and are referenced in a previous section. The forested wetlands adjacent and abutting the seasonal RPW (unnamed tributary of Mush Swamp) include mixed hardwood/pine palustrine forested depressional wetlands which are located south of the subject property. The wetlands which are similarly situated and adjacent to the seasonal RPW are collectively performing functions consistent with the following: Biological - A variety of biological functions are being

performed which include providing breeding grounds, shelter, foraging, nesting, and travel corridors for aquatic and wetland-dependent speciest. They enhance wildlife diversity through timber type changes and the transition between upland and aquatic systems. The wetlands are essential in providing collective primary productivity to downstream waters by supplying organic carbon, resulting in the nourishment of the downstream food web. Chemical - The wetlands and tributary within the review area are providing the important collective functions of removal of excess nutrients which are contributed by runoff from surrounding urban and rural and silvicultural areas, reducing nitrogen and phosphorus loading downstream, and effectively preventing oxygen depletion that can result from eutrophication. Physical - The wetlands and tributary in the review area are collectively filtering sediments and pollutants carried by stormwater runoff from roads, urban and rural development, and silviculture areas. They are providing flood attenuation and flow maintenance functions by retaining runoff and releasing it slowly, which results in the reduction of downstream peak flows (discharge and volumes) and lower continuous flow volumes. Wetlands such as the ones identified in this reach are actively storing stormwater runoff from adjacent development and silvicultural areas. Based on the collective functions described above and their importance to the biological, chemical, and physical integrity of the traditional navigable waters of the Black River, it has been determined that there is a significant nexus between the relevant reach of the tributary and adjacent wetlands to the downstream TNW.

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area: TNWs: linear feet width (ft), Or, acres. Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: Flow of the onsite tributary sRPW#1 (unnamed tributary of Mush Swamp) was determined to have indicators of continuous flow during the wetter months and in response to precipitation events throughout the remainder of the year under normal climatic conditions. The onsite tributary is a man-altered canal which begins off property within wetlands and continues onto the subject property, then continues under Patriot Parkway, through the stormwater management system of a commercial-residential subdivision, and into Mush Swamp, a perennial RPW. Stream geomorphic indicators of seasonal flow were a continuous sinuous channel within bed and banks and the presence of an continuous OHWM above the bottom elevation of the canal. The onsite tributary was saturated within the upper 12" throughout the reach during an extreme drought period. At all observation points, the bottom channel was clear of vegetation and debris with some scouring of the banks adjacent to the channel which is evidence of seasonal flow as well as hydrologic indicators observed. In some areas, last season's leaves were present and waterstained. Very little debris was observed within the channel due to washing downstream and water flowing at increased velocities during and after rainfall events. Topographic maps depict this reach as a blue line stream. It is evident on in all available aerial photographs. Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 985.0 linear feet 8.0 width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

⁸See Footnote # 3.

seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:				
Provide acreage estimates for jurisdictional wetlands in the review area: acres.				
. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.				
Provide acreage estimates for jurisdictional wetlands in the review area: acres.				
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C. 				
Provide estimates for jurisdictional wetlands in the review area: acres.				
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below). Explain:				
ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY): 10 which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
dentify water body and summarize rationale supporting determination:				
rovide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above): A site visit was conducted during a period of drought on June 30, 2011. A data point alken within an area shown on NWI maps as PSS1Bd, Palustrine Forest. The three parameter approach was utilized in dance with the 1987 Delineation Manual, and no hydrology indicators were discovered. Hydric soils were not encountered. A lence of hydrophtic vegetation was also not discovered. No other areas were identified on-site and the entire site was mined to be uplands. One man-altered feature (Linear Feature #1) and three man-made features (Linear Features #2, #3, #4) evaluated within the property boundary. Linear Feature #1 was determined to be a seasonal RPW and is described in other ness. Linear Features #2, #3, and #4 were determined to be non-jurisdictional ditches. No other potentially jurisdictional aquatic res were observed on-site.				

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

factor judgn		irds, presence of endangered	. ,	
a find	ide acreage estimates for non-ju ding is required for jurisdiction of Non-wetland waters (i.e., rivers Lakes/ponds: acres. Other non-wetland waters: Wetlands: acres.	(check all that apply):		where such
SECTION	N IV: DATA SOURCES.			
and re Cons Cons	equested, appropriately reference Maps, plans, plots or plat submistrations, LLC. Data sheets prepared/submitted office concurs with data sheets prepared by the Corpostal as sheets as sheets as sheets prepared by the Corpostal as sheets prepared	by or on behalf of the applicated by or on behalf of the applicated details and the special by or on behalf of the applicated sheets/delineation report. data sheets/delineation report. data sheets/delineation report. Black River. ogic Atlas: maps. Cite scale & quad name: Sustervation Service Soil Survey. ap(s). Cite name: PSS1Bd, Umap(s): Sumter County. is: (National Geodect: & Date): 1989 (1365-067), 1 & Date): Site Photography of the control of the special better of the special between the special be	tt. 011. umter West. c. Citation: Sheet 69, Pantego. U42P. tic Vertical Datum of 1929) 1994 (7465-200), 1999 (11204:115), 2006. dated 2011-06-30 by USACE. ter: SAC 2001-34321 fka SAC-81-2001-0026 (expired, in ry 21, 2008 (current, contains downstream information, il-98-0724 dated February 18, 2010 (current, contains inf	enPond cludes negative

B. ADDITIONAL COMMENTS TO SUPPORT JD: A site visit was conducted during a period of drought on June 30, 2011. A data point was taken within an area shown on NWI maps as PSS1Bd, Palustrine Forest. The three parameter approach was utilized in accordance with the 1987 Delineation Manual, and no hydrology indicators were discovered. Hydric soils were not encountered. A prevalence of hydrophtic vegetation was also not discovered. No other areas were identified on-site and the entire site was determined to be uplands. One man-altered feature (Linear Feature #1) and three man-made features (Linear Features #2, #3, #4) were evaluated within the property boundary. Linear Feature #1 was determined to be a seasonal RPW. Linear Feature #1 enters the property from the south where it begins in off-site wetlands. An OHWM and bed and banks approximately 8' deep by 8' wide were noted throughout this feature. Also, some scouring, water stained leaves, absence of vegetation in bottom channel, and some drift deposits were noted. At another viewpoint near the south property line where Linear Feature #1 receives water from off-property, a continuous OHWM and sinuousity were noted in addition to the other flow indicators mentioned above. It was determined due to the presence of these indicators that Linear Feature #1 is a seasonal RPW. Flow of the onsite tributary sRPW#1 (unnamed tributary of Mush Swamp) was determined to have indicators of continuous flow during the wetter months and in response to precipitation events throughout the remainder of the year under normal climatic conditions. The onsite tributary is a man-altered canal which begins off property within wetlands and continues onto the subject property, then continues under Patriot Parkway, through the stormwater management system of a commercial-residential subdivision, and into Loring Mill Pond, a perennial RPW. Loring Mill Pond continues into Mush Swamp (pRPW). Mush Swamp flows into Green Swamp (pRPW), which flows into the Pocotaligo River (pRPW), which flows into the Black River, a TNW. Linear Feature #2 is also man-made and was discovered to begin off-property to the west and continue in a southeasterly direction until it intercepts Linear Feature #1.

Linear Feature #2 had no OHWM and was 5' x 3' and was determined to be a non-jurisdictional ditch. Linear Feature #3 is also man-made and was discovered to begin in uplands on the property, continuing in a southeasterly direction until it intercepts Linear Feature #1 near the south property line. Linear Feature #3 had a discontinous OHWM and bed and banks 6' x 6'. Indicators of hydrology were present, such as water stained leaves, aquatic vegetation in the bottom channel, and sub-surface saturation at 6'' but these indicators quickly disappeared before the feature ended in uplands. It was determined that Linear Feature #3 is a non-jurisdictional ditch. Linear Feature #4 is also man-made and was discovered to begin off-property to the east and continue in a southwesterly direction until it intercepts Linear Feature #1. Linear Feature #4 had no OHWM and was 5' x 3' and was determined to be a non-jurisdictional ditch. Linear Features #2, #3, and #4 were determined to be non-jurisdictional ditches. No other potentially jurisdictional aquatic features were observed on-site.