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 REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): October 22, 2021 DISTRICT OFFICE, FILE NUMBER, FILE NAME Form 1 of 2; SAC-2018-00298 Sherwood Plantation C. PROJECT LOCATION AND BACKGROUND INFORMATION: State: South Carolina County/parish/borough: Jasper City: Hardeeville Center coordinates of site (lat/long in degree decimal format): Lat. 32.2411° N, Long. -81.0872 ° W. Universal Transverse Mercator: Name of nearest waterbody: Savannah River Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A Name of watershed or Hydrologic Unit Code (HUC): 3060110 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: October 21, 2021 Field Determination. Date(s): August 31, 2021 **SECTION II: SUMMARY OF FINDINGS** A. RHA SECTION 10 DETERMINATION OF JURISDICTION. There Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review 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. B. CWA SECTION 404 DETERMINATION OF JURISDICTION. There Are no "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): 1 TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (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: linear feet: width (ft) and/or acres. Wetlands: acres

c. Limits (boundaries) of jurisdiction based on: Pick List, Pick List, Pick List

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable): Including potentially jurisdictional features that upon assessment are NOT waters or wetlands

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: This 1438-acre site includes 19 wetlands that are isolated and non-jurisdictional. These wetlands (listed

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.

below) are depicted and labeled accordingly on the accompanying survey plat. These 19 wetlands are depressional wetlands, surrounded entirely by uplands, have no associated ditches or swales that would provide surface hydrologic connections to other wetlands or waters of the U.S., and have no evidence of discrete hydrologic flow through uplands to other wetlands or waters of the U.S. In addition, these wetlands have no apparent shallow subsurface hydrologic connection, and no apparent physical, chemical, or biological connection, to Waters of the U.S. The wetlands also have no apparent ecological interconnection to Waters of the U.S. Although Wetlands FF and Z are located along the property boundaries, they do not continue off the site. For these reasons, these 14 wetlands located within the project review area were determined to be isolated and non-jurisdictional; therefore, they are not regulated by Section 404 of the CWA.

B: 0.23 ac	E: 0.3 ac	I: 0.76 ac	R: 0.82 ac
BB: 6.4 ac	F: 1.19 ac	J: 3.96 ac	S: 0.74 ac
C: 0.67 ac	FF: 1.46 ac	K: 1.41 ac	T: 0.13 ac
CC: 1.76 ac	G: 0.37 ac	L: 6.67 ac	Z: 0.64 ac
D: 1.0 ac	H: 0.93 ac	Q: 0.42 ac	Total: 29.86 acres

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

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 waterbody⁴ 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: Pick List;
Drainage area: Pick List

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

		rage annual rainfall: inches rage annual snowfall: inches
(ii)		Relationship with TNW: Tributary flows directly into TNW. Tributary flows through Pick List tributaries before entering TNW. Project waters are Pick List river miles from RPW.
		Project waters are Pick List aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain: Identify flow route to TNW ⁵ : Tributary stream order, if known:
	(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
		Tributary properties with respect to top of bank (estimate): Average width: feet Average depth: feet Average side slopes: Pick List.
		Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
		Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Presence of run/riffle/pool complexes. Explain: Tributary geometry: Pick List. Tributary gradient (approximate average slope): %
	(c)	Flow: Tributary provides for: Pick List Estimate average number of flow events in review area/year: Pick List Describe flow regime: Other information on duration and volume:
		Surface flow is: Pick List. Characteristics: .
		Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting scour multiple observed or predicted flow events abrupt change in plant community

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. 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. It lid.

			High Tide Line indicated by: Gillow Service of the than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Gillow Service oil or scum line along shore objects Survey to available datum; Survey to a
	(iii)	Cha	emical Characteristics: uracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: httify specific pollutants, if known:
(iv) Bio			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:
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain: Surface flow is: Pick List Characteristics: Subsurface flow: Pick List. Explain findings:
			 □ Dye (or other) test performed: Wetland Adjacency Determination with Non-TNW: □ Directly abutting □ Discrete wetland hydrologic connection. Explain: □ Ecological connection. Explain: □ Separated by berm/barrier. Explain: Proximity (Relationship) to TNW
	(**)	Cl	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.
	(11)	Cha	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: artify specific pollutants, if known:
	(iii)	Biol	logical 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 divers	ity. Explain findings	»: .		
For	3.	Characteristics of all wetlands adj. All wetland(s) being considered Approximately () acres wetland, specify the following:	l in the cumulative ar		nalysis.	
<u>Directly abuts? (Y/N)</u> <u>Size (in acres)</u> <u>Directly abuts? (Y/N)</u> <u>Size (in acres)</u>						
		Summarize overall biologi	cal, chemical and ph	ysical functions being perfo	rmed: .	
C.	SIG	NIFICANT NEXUS DETERMINA	TION			
	by a of a wetl Con of w wetl trib	ny wetlands adjacent to the tributa TNW. For each of the following signals, has more than a speculative considerations when evaluating significater in the tributary and its proximands. It is not appropriate to deter	ry to determine if the tuations, a significal or insubstantial effecant nexus include, aity to a TNW, and the mine significant nexus tributary a	they significantly affect the nexus exists if the tribut of on the chemical, physical but are not limited to the withe functions performed by xus based solely on any spead the TNW). Similarly, the significant is the second the TNW).	ributary itself and the functions performed chemical, physical, and biological integrity ary, in combination with all of its adjacent al and/or biological integrity of a TNW. Folume, duration, and frequency of the flow by the tributary and all its adjacent ecific threshold of distance (e.g. between a the fact an adjacent wetland lies within or	
		Does the tributary, in combination w TNWs, or to reduce the amount of po Does the tributary, in combination w other species, such as feeding, nestin Does the tributary, in combination w support downstream foodwebs?	ok. Factors to consider the its adjacent wetland that its adjacent wetland its adjacent wetlang, spawning, or rearright its adjacent wetland its adjacent we	ler include, for example: nds (if any), have the capaciters reaching a TNW? nds (if any), provide habitating young for species that arinds (if any), have the capacit	dentified in the Rapanos Guidance and ity to carry pollutants or flood waters to and lifecycle support functions for fish and e present in the TNW? ity to transfer nutrients and organic carbon that tionships to the physical, chemical, or	
	Note belo		not inclusive and o	ther functions observed or	known to occur should be documented	
	1.	Significant nexus findings for non- findings of presence or absence of si			s directly or indirectly into TNWs. Explain elf, then go to Section III.D:	
	2.		e or absence of signi		n-RPW flows directly or indirectly into the tributary in combination with all of its	
	3.				ctly abut the RPW. Explain findings of a with all of its adjacent wetlands, then go to	
	Doc	umentation for the Record only: Si	gnificant nexus find	lings for seasonal RPWs a	nd/or wetlands abutting seasonal RPWs:	
D.		TERMINATIONS OF JURISDICT AT APPLY):	IONAL FINDINGS	. THE SUBJECT WATER	RS/WETLANDS ARE (CHECK ALL	
	1.	TNWs and Adjacent Wetlands. Clark TNWs: linear feet wetlands adjacent to TNWs:		d provide size estimates in acres.	review area:	

2. RPWs that flow directly or indirectly into TNWs.

Page 5 of 8

	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:
	Provide 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: .
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:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is 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.
5.	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.
6.	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.
7.	Impoundments of jurisdictional waters. ⁹ 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:
SUC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH 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.

E.

 ⁸See Footnote # 3.
 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 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.

		Other factors. Explai	ters. Explain: n:			
	Iden	tify water body and	summarize ration	ale supporting deteri	ination:	
		ide estimates for juri Fributary waters: Other non-wetland w Identify type(s) of Wetlands: acres	linear feet acres. waters: .	the review area (check width (ft).	all that apply):	
F.		If potential wetlands Wetland Delineation Review area included Prior to the Jan "Migratory Bird	were assessed within Manual and/or apput isolated waters wit 2001 Supreme Court Rule" (MBR). The "Significant Nexus	n the review area, the copriate Regional Supph no substantial nexus t decision in "SWANC"	es (CHECK ALL THAT APPLY): e areas did not meet the criteria in the 1987 lements. to interstate (or foreign) commerce. C," the review area would have been regular ch a finding is required for jurisdiction. Exp	ted based <u>solely</u> on the
	facto		nigratory birds, pres		area, where the <u>sole</u> potential basis of juriscies, use of water for irrigated agriculture),	
		Non-wetland waters Lakes/ponds:	(i.e., rivers, streams acres.		width (ft).	
		Other non-wetland v Wetlands: 29.86 acre		List type of aquatic re	ource: .	
		B: 0.23 ac BB: 6.4 ac C: 0.67 ac CC: 1.76 ac D: 1.0 ac	E: 0.3 ac F: 1.19 ac FF: 1.46 ac G: 0.37 ac H: 0.93 ac	I: 0.76 ac J: 3.96 ac K: 1.41 ac L: 6.67 ac Q: 0.42 ac	R: 0.82 ac S: 0.74 ac T: 0.13 ac Z: 0.64 ac Total: 29.86 acres	
	a find	ide acreage estimates ding is required for ju Non-wetland waters Lakes/ponds: Other non-wetland w Wetlands: acr	risdiction (check al (i.e., rivers, streams) acres. vaters: acres.	l that apply):	area that do not meet the "Significant Nextwidth (ft). source: .	is" standard, where such
SE(CTIO	N IV: DATA SOUF	RCES.			
	SUPP and r	PORTING DATA. If requested, appropriate Maps, plans, plots of Data sheets prepared ☐ Office concurs worder of Data sheets prepared Corps navigable wat U.S. Geological Surung USGS NHD data	Data reviewed for Jely reference sources plat submitted by or on ith data sheets/delinoncur with data sheet by the Corps: ers' study: vey Hydrologic Atla	s below): r on behalf of the appl behalf of the applican eation report. (Office ets/delineation report.	y - checked items shall be included in case a cant/consultant: Newkirk Environmental , /consultant. Concurs with conclusions. concurs with report conclusions.)	
		USDA Natural Reso National wetlands in State/Local wetland FEMA/FIRM maps: 100-year Floodplain Photographs: Aei	vey map(s). Cite sca urces Conservation ventory map(s). Cit inventory map(s): Elevation is:	Service Soil Survey. Ce name: SCDNR NW . (National Geodectic Digital Globe 2019.	S 7.5 Minute Hardeeville Quadrangle. itation: SCDNR soils layer overlaid on Dig layer overlaid on Digital Globe image. Vertical Datum of 1929)	ital Globe image.

Other information (please specify):		Applicable/supporting scientific literature: Other information (please specify):	٠
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B. ADDITIONAL COMMENTS TO SUPPORT JD: This form documents the isolated, non-jurisdictional status of 19 wetlands that were determined to be non-jurisdictional and not subject to regulation under Section 404 of the CWA. The jurisdictional status of remaining wetlands and waters on the site are discussed on Form 2 of 2.

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

REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): October 22, 2021

B.	DISTRICT OFFICE, FILE NUMBER, FILE NAME: JD Form 2 of 2; SAC-2018-00298 Sherwood Plantation
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: South Carolina County/parish/borough: Jasper County City: Hardeeville Center coordinates of site (lat/long in degree decimal format): Lat. 32.2411° N, Long81.0872 ° W. Universal Transverse Mercator: Name of nearest waterbody: Savannah River Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Savannah River
	Name of watershed or Hydrologic Unit Code (HUC): 3060110 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: October 22, 2021 Field Determination. Date(s): August 31, 2021
	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 waters² (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: linear feet: width (ft) and/or acres. Wetlands: A: 58.99 ac; B: 0.23 ac; E: 0.30 ac; F: 1.19 ac; K: 1.41 ac; L: 6.67 ac; M: 11.28 ac; N: 0.23 ac; O: 68.96 ac; P: 60.61 ac; U: 139.34 ac; V: 42.66 ac; W: 18.6 ac; X: 25.59 ac; Y: 78.43 ac; AA: 5.8 ac; DD: 14.42 ac; and EE: 0.02 ac; Total: 534.76 acres.
	c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, Pick List, Pick List Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³ [Including potentially jurisdictional features that upon

assessment are NOT waters or wetlands

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.

jurisdictional and not subject to regulation under Section 404 of the CWA. consist of open water and do not meet the wetland definition. For these reasons, the ponds were determined to be nonlocated between Wetlands O and P. These ponds were excavated from uplands for an unknown purpose. All four ponds of the United States" are generally not considered waters of the U.S. The other two ponds in the project review area are until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and ponds were excavated from uplands for the purpose of obtaining fill material. As stated in the Preamble to the November area. Two of the pond features located near Speedway Boulevard / US Hwy 17 are former borrow pits. These borrow pit determined non-jurisdictional. Explain: There are four non-jurisdictional pond features present within the project review 13, 1986, Regulations found on page 41217 (Federal Register vol. 51 No. 219) "waterfilled depressions created in dry land Potentially jurisdictional waters and/or wetlands were assessed within the review area and

from uplands. These features display no OHWMs and exhibited no evidence of relatively permanent flow. However, the ditches provide a continuous surface hydrologic connection from wetlands (Wetlands B and L) to other downstream waters. The jurisdictional status of Wetlands B and L are discussed in Section III of this basis form. The two linear features were determined to be non-jurisdictional and not subject to regulation under Section 404 of the CWA. There are also two linear features that were determined non-jurisdictional. Both features are ditches that were excavated

jurisdictional status of these wetlands is discussed in Section III of this basis form. continuous surface hydrologic connection from several wetlands (E, F, K and L) to other downstream waters. swales are non-jurisdictional and are not subject to regulation under Section 404 of the CWA. However, the swales provide There is also one road that goes through the project review area that has associated roadside swales. By definition, the

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

Identify TNW: Savannah River.

Summarize rationale supporting determination: The Savannah River is a tidal river and a Section 10 water; therefore, the Savannah River is considered a TNW

2. Wetland adjacent to TNW

above, Wetlands A, O, P, M, N, U, V, W, X, Y, DD and EE are considered to be adjacent to the Savannah River (TNW). Summarize rationale supporting conclusion that wetland is "adjacent": The Savannah River has an expansive wetland system that extends into the project review area. Wetlands A, O, P, M, N, U, V, W, X, Y, DD and EE are part of the larger wetland system that continues offsite and is contiguous with the Savannah River. Wetlands M, N, O, and P are separated from one another by roads that were constructed through the wetland. Wetlands U, V and W are separated from one another by roads that were constructed wetland. Additionally, Wetlands U, V and W, as identified on the depiction, are considered one wetland. For the reasons discussed divided portion of the subject wetland. Therefore, Wetlands M, N, O and P, as identified on the depiction, are considered one wetland which becomes divided by an artificial barrier, a road in this instance, maintains a single similar jurisdictional status in each through the wetland. Based on jurisdictional determination NWP-2007-428 (USEPA and Corps HQ, February 25, 2008), any

adjacent to the Savannah River (TNW). which is part of a larger wetland system that continues offsite and is contiguous with the Savannah River. Therefore, Wetland B is Wetland B has a direct continuous surface hydrologic connection through a non-jurisdictional ditch to and through wetland A,

Wetlands K, F, E and L are adjacent to the Savannah River (TNW). Wetland A, which is part of a larger wetland system that continues offsite and is contiguous with the Savannah River. Therefore, property to U.S. Hwy 17. Wetland L has a surface hydrologic connection through a non-jurisdictional ditch that flows to the Wetlands K, F, and E have a direct continuous surface hydrologic connection through a roadside swale that runs through the roadside swale that runs through the property to U.S. Hwy 17. The swale continues along U.S. Hwy 17 where it then flows into

system that is contiguous with the Savannah River. Therefore, Wetland AA is adjacent to the Savannah River (TNW). Wetland AA continues offsite and flows into an offsite roadside swale/ditch along I-95. The ditch flows into the larger offsite wetland

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

determine whether or not the standards for jurisdiction established under *Rapanos* have been met. This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps 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 waterbody⁴ 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)	Wat Drai Ave	teral Area Conditions: ershed size: Pick List; inage area: Pick List rage annual rainfall: inches rage annual snowfall: inches
(ii)	•	Relationship with TNW: Tributary flows directly into TNW. Tributary flows through Pick List tributaries before entering TNW. Project waters are Pick List river miles from TNW.
		Project waters are Pick List river miles from RPW. Project waters are Pick List aerial (straight) miles from TNW. Project waters are Pick List aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain:
		Identify flow route to TNW ⁵ : Tributary stream order, if known:
	(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
		Tributary properties with respect to top of bank (estimate): Average width: feet Average depth: feet Average side slopes: Pick List.
		Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
		Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Presence of run/riffle/pool complexes. Explain: Tributary geometry: Pick List. Tributary gradient (approximate average slope): %
	(c)	Flow:

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 provides for: Pick List Estimate average number of flow events in review area/year: Pick List Describe flow regime: Other information on duration and volume:
			Surface flow is: Pick List. Characteristics: .
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
			Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events 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:
	(iii)	Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: tify specific pollutants, if known:
(iv) Biol	logica	al Ch	aracteristics. 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:
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: .

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.

⁷Ibid.

		Dye (or other) test p	erformed: .		
	(c) <u>Y</u>	Wetland Adjacency Determ Directly abutting Not directly abutting Discrete wetland hy Ecological connecti Separated by berm/l	drologic connection on. Explain: .		
	I I I	Proximity (Relationship) to Project wetlands are Pick L Project waters are Pick Lis Flow is from: Pick List, Estimate approximate locati	ist river miles from t aerial (straight) mi		
(ii)	Chen	nical Characteristics:			
()	Chara		in: .	ar, brown, oil film on surface	; water quality; general watershed
(iii)		gical Characteristics. We Riparian buffer. Characteri Vegetation type/percent cov Habitat for: Federally Listed species Fish/spawn areas. Expla Other environmentally-s Aquatic/wildlife diversit	stics (type, average ver. Explain: Explain findings: in findings: ensitive species. Ex	width): cplain findings:	
3. Cha		ristics of all wetlands adja			
		retland(s) being considered oximately () acres in		alysis: Pick List sidered in the cumulative ana	lysis
For each wetla	• •	pecify the following:			9
	<u>I</u>	Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

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:

DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL

IH	AT 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: 534.76 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:
	Provide 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: .
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:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is

seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly

acres.

abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area:

D.

⁸See Footnote # 3.

	5.	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.
	6.	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.
	7.	Impoundments of jurisdictional waters.9 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:
E.	SUC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH 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:
	Ide	ntify water body and summarize rationale supporting determination:
		vide 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.
F.	are were Reg con con Sta We and to r	N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): 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): There are four non-jurisdictional pond features present within the project review a. Two of the pond features located near Speedway Boulevard / US Hwy 17 are former borrow pits. These borrow pit ponds excavated from uplands for the purpose of obtaining fill material. As stated in the Preamble to the November 13, 1986, gulations found on page 41217 (Federal Register vol. 51 No. 219) "waterfilled depressions created in dry land incidental to struction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the struction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United tes" are generally not considered waters of the U.S. The other two ponds in the project review area are located between thands O and P. These ponds were excavated from uplands for an unknown purpose. All four ponds consist of open water do not meet the wetland definition. For these reasons, the ponds were determined to be non-jurisdictional and not subject regulation under Section 404 of the CWA.
		ere are also two linear features that were determined non-jurisdictional. Both features are ditches that were excavated from

uplands. These features display no OHWMs and exhibited no evidence of relatively permanent flow. However, the ditches provide a continuous surface hydrologic connection from wetlands (Wetlands B and L) to other downstream waters. The

To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 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.

jurisdictional status of Wetlands B and L are discussed in Section III of this basis form. The two linear features were determined to be non-jurisdictional and not subject to regulation under Section 404 of the CWA.

There is also one road that goes through the project review area that has associated roadside swales. By definition, the swales are non-jurisdictional and are not subject to regulation under Section 404 of the CWA. However, the swales provide continuous surface hydrologic connection from several wetlands (E, F, K and L) to other downstream waters. The jurisdictional status of these wetlands is discussed in Section III of this basis form.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR

		ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply):
		Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres.
		Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such iding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
		Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below):
		Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Newkirk Environmental, Inc.
		Data sheets prepared/submitted by or on behalf of the applicant/consultant. Concurs with conclusions.
		Office concurs with data sheets/delineation report. (Office concurs with report conclusions.)
		Office does not concur with data sheets/delineation report.
		Data sheets prepared by the Corps:
		Corps navigable waters' study: .
		U.S. Geological Survey Hydrologic Atlas: .
		USGS NHD data.
		USGS 8 and 12 digit HUC maps.
		U.S. Geological Survey map(s). Cite scale & quad name: USGS 7.5 Minute Hardeeville Quadrangle.
		USDA Natural Resources Conservation Service Soil Survey. Citation: SCDNR soils layer overlaid on Digital Globe image.
	\bowtie	National wetlands inventory map(s). Cite name: SCDNR NWI layer overlaid on Digital Globe image.
	\vdash	State/Local wetland inventory map(s):
	\vdash	FEMA/FIRM maps: 100 years Florable in Floration in American Conduction Visiting I Determined 1020)
	H	100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: ☑ Aerial (Name & Date): Digital Globe 2019 .
	ш	or \(\sum \) Other (Name & Date): Site photographs.
	\boxtimes	Previous determination(s). File no. and date of response letter: 2018-00298 August 29, 2018.
		Applicable/supporting case law:
	Ħ	Applicable/supporting scientific literature:
		Other information (please specify):
	_	

B. ADDITIONAL COMMENTS TO SUPPORT JD: Wetlands A, B, E, F, K, L, M, N, O, P, U, V, W, X, Y, AA, DD, and EE are jurisdictional and subject to regulation under Section 404 of the CWA. The jurisdictional status of the remaining wetlands located within the project review area are discussed on Form 1 of 2.