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): September 23, 2019

B. DISTRICT OFFICE, FILE NUMBER, FILE NAME: JD Form 1 of 4; CESAC-RDE SAC-2000-34105; Pocotaligo Industrial Park;

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **South Carolina** County/parish/borough: **Sumter County** City: **Sumter**
Center coordinates of site (lat/long in degree decimal format): Lat. **33.8581 °N**, Long. **-80.3161 °W**.
Universal Transverse Mercator: **17S 563195 3746304**
Name of nearest waterbody: **Pocotaligo River (RPW)**
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Black River**
Name of watershed or Hydrologic Unit Code (HUC): **0304020504 (Pocotaligo River)**
☒ 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): **August 5, 2019.**

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.
Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **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):** [1]
      ☐ 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: **(JT2) 3,521** linear feet: **3.96** width (ft) and/or **0.32** acres.
      Wetlands: **15.25 (JW-C) + 20.63 (JW-D) = 35.88** acres.

   c. **Limits (boundaries) of jurisdiction** based on: **1987 Delineation Manual**, **Established by OHWM.**, **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.

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **On-site are Six (6) upland excavated ditches totaling ~6,341 linear feet (1,405 LF + 235 LF + 765 LF + 1,856 LF + 315 LF + 1,765 LF [all approx.]). These ditches where excavated to provide a means for storm-water storage and off-site conveyance. Of the six ditches only one ditch is shown as a blue line feature on the USGS topography map, Brogdon Quadrangle; the depicted ditch is the largest (~1,856 LF) of the six on-site ditches and is located in the southern portion of the site. All of the ditches can be clearly seen on LiDAR as manmade linear features that have been, at least partially, maintained for storm-water conveyance. All but one of the on-site ditches, were excavated out of NWI mapped uplands. The smallest ditch (235 LF), which is located in the far northeast corner of the site, was excavated out of NWI palustrine forested wetlands; this ditch is hardly discernable on LiDAR data, does not connect multiple wetlands, and does not feature the physical attributes of a tributary.**

The six (6) ditches were assessed during an August 5, 2019, site visit and found be the same extent and size as the depicted non-jurisdictional features shown on the waters map provided by the applicant's consultant, S&ME, Incorporated. Additionally, these ditches were deemed non-jurisdictional in a previously issued approved jurisdictional determination, issued on October 2, 2009.

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: **Black River**. **Summarize rationale supporting determination: According to the USACE 1977 Navigability Study Report No. 06, regarding the watershed encompassing the Black River, presently classifies the Black River as navigable water of the U.S. between its mouth on the Great Pee Dee River and its confluence with Black River Swamp and Pocotaligo River at R.M. 107.7 (0-107.7 River Miles). On-site aquatic resources (5 wetlands / 2 tributaries) flow have a direct hydrological and physical connection to the Pocotaligo River (RPW), which provides conveyance to the Black River (TNW) via a direct confluence of the two waterbodies at R.M. 107.7 of the Black River.**

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[4] 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 ;**

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

Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:

(a) 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:

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	☐ 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	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

[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.
[6] A 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.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- ☒ High Tide Line indicated by:
  - ☐ oil or scum line along shore objects
  - ☐ fine shell or debris deposits (foreshore)
  - ☐ physical markings/characteristics
  - ☐ tidal gauges
  - ☐ other (list):
- ☒ Mean High Water Mark indicated by:
  - ☐ survey to available datum;
  - ☐ physical markings;
  - ☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .

Identify specific pollutants, if known: .

(iv) Biological 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: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) 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: .

(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: .

(d) 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) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological 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: .

[7]Ibid.

☐ Fish/spawn areas. Explain findings: .
☐ Other environmentally-sensitive species. Explain findings: .
☐ Aquatic/wildlife diversity. Explain findings: .

3. **Characteristics of all wetlands adjacent to the tributary (if any)**
   All wetland(s) being considered in the cumulative analysis: **Pick List**
   Approximately ( ) acres in total are being considered in the cumulative analysis.
   For each wetland, specify the following:

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:
.

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: **Within the site are two unnamed tributaries of the Pocotaligo River, these tributaries feature multiple attributes of RPWs including an OHWM, sinuosity, and historical presence on USGS topographic maps. Additionally, these tributaries support a broad swath of seasonal to semi-permanently flooded wetland habitat.**

This form covers only one of the two unnamed tributaries within the site. The tributary this form covers, JT-2, is located in the northern section of the site and provides recharge to two out of the five jurisdictional wetlands within the project site.

☐ 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: **(JT-2) 3,521** linear feet **3.96** 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: **On site wetlands are a portion of a contiguous wetland ecosystem that directly abuts the Pocotaligo River (off-site) and two of its (on-site) unnamed tributaries.**

This form covers only two out of the five jurisdictional wetlands within the project site, including the following wetlands depicted on the site map: JW-C and JW-D.

☐ 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: **15.25 (JW-C) + 20.63 (JW-D) = 35.88** 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

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

☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

Explain:

E. 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: .

Identify water body and summarize rationale supporting determination: .

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: .
☐ Wetlands: acres.

F. NON-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): **On-site are Six (6) upland excavated ditches totaling ~6,341 linear feet (1,405 LF + 235 LF + 765 LF + 1,856 LF + 315 LF + 1,765 LF [all approx.]). These ditches where excavated to provide a means for storm-water storage and off-site conveyance. Of the six ditches only one ditch is shown as a blue line feature on the USGS topography map, Brogdon Quadrangle; the depicted ditch is the largest (~1,856 LF) of the six on-site ditches and is located in the southern portion of the site. All of the ditches can be clearly seen on LiDAR as manmade linear features that have been, at least partially, maintained for storm-water conveyance. All but one of the on-site ditches, were excavated out of NWI mapped uplands. The smallest ditch (235 LF), which is located in the far northeast corner of the site, was excavated out of NWI palustrine forested wetlands; this ditch is hardly discernable on LiDAR data, does not connect multiple wetlands, and does not feature the physical attributes of a tributary.**

The six (6) ditches were assessed during an August 5, 2019, site visit and found be the same extent and size as the depicted non-jurisdictional features shown on the waters map provided by the applicant's consultant, S&ME, Incorporated. Additionally, these ditches were deemed non-jurisdictional in a previously issued approved jurisdictional determination, issued on October 2, 2009.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (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.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding 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.

SECTION IV: DATA SOURCES.

[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.*

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: **Maps, data sheets, and site information provided by the applicant's consultant, S&ME, Incorporated. Map titled: "Aerial Exhibit /** Pocotaligo Industrial Park Site +/- 319.45 Acres / Sumter County, South Carolina**", dated August 5, 2019.**

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
- ☒ Office concurs with data sheets/delineation report.
- ☐ 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: **0304020504 (Pocotaligo River).**
- ☐ USGS NHD data.
- ☒ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: **USGS topographic map, Brogdon quadrangle, depicts the Pocotaligo River, and unnamed tributaries thereof, bounding three sides of the project site; the river and its adjacent wetlands bound the project sites western boundary, while the north and south boundaries are bounded by unnamed tributaries of the river. The location and extent of the unnamed tributaries correlates to the locations of jurisdictional tributaries "JT-1" (see form 2 of 4) and "JT-2", as shown on the provided waters map. Additionally, within the site are multiple ditches depicted as solid blue line features (see section II B.2 for additional details), and three oval shaped blue line features that are labeled "Bays" to denote the features as Carolina Bays.**

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: **NRCS Sumter County Soil Survey, Sheet 99, depicts 9 individual soil types and a matrix of soil complexes within the project site, including: Rains sandy loam, Norfolk loamy sand, Noboco loamy sand, Osier loamy sand (shown as Johnson mucky sandy soil on the 2018 newer survey), Rembert loam, Lynchburg sandy loam, Wagram sand, Goldsboro loamy sand, and Ruthlege loamy sand. All on-site soils, outside of Rembert loam, Ruthlege loamy sand, and Wagram sand are depicted as hydric on the 2017 NRCS South Carolina hydric soils list for Sumter County.**

☒ National wetlands inventory map(s). Cite name: N**ational Wetland Inventory maps depict a broad swath of wetlands from the western project boundary to the northern project boundary, correlating with the general location and extent of the on-site five (5) wetland areas; this swath includes a matrix of wetland types including palustrine forested and scrub/shrub wetlands of both evergreen and deciduous growth patterns and multiple hydrology regimes ranging from seasonally flooded to semi-permanently flooded.**

☐ State/Local wetland inventory map(s): .

☐ FEMA/FIRM maps: .

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): **Sumter 1999 Aerial Index (11204:96; 11203:9); SC DNR 2006; Google Earth 2004-2018**

or ☒ Other (Name & Date): **Site pictures 1-12, provided by the applicant's consultant.**

☒ Previous determination(s). File no. and date of response letter: **SAC-2000-34105 (AJD), dated October 2, 2009.**

☐ Applicable/supporting case law: .

☐ Applicable/supporting scientific literature: .

☒ Other information (please specify): **On August 5, 2019, the Corps performed a site visit to verify the extent and location of on-site resources.**

LiDAR Digital Elevation Model depicts a predominately flat site bounded by the Pocotaligo River drainage basin on three sides. Additionally, within the project site the following can be identified: the remnants of three partially filled in Carolina Bays, six excavated ditches, one isolated wetland depression (see SAC-2000-34105 AJD Form 3 of 4, section II B.2 for additional details).

B. ADDITIONAL COMMENTS TO SUPPORT JD: <u>Jurisdictional waters assessed in SAC-2000-34105 AJD Forms 1, 2, and 4, of 4; Non-jurisdictional waters assessed in SAC-2000-34105 AJD Form 3 of 4</u>;

On August 5, 2019, the Corps performed a site visit on this 319.45 acre property to spot check the delineation of the on-site aquatic resources. All aquatic features delineated on the provided site maps appeared to be accurate in scope and placement of the provided WOUS maps and site pictures 1-12. Additionally, this site was previously delineated by an approved jurisdictional determination on October 2, 2009, by this office. The previous JD matches the scope and placement of the current on-site resources and should serve as additional justification on the Corps legal jurisdiction over these on-site aquatic resources.

CWA Analysis: According to the USACE 1977 Navigability Study Report No. 06, regarding the watershed encompassing the Black River, presently classifies the Black River as navigable water of the U.S. between its mouth on the Great Pee Dee River and its confluence with Black River Swamp and Pocotaligo River at R.M. 107.7 (0-107.7 River Miles). On-site aquatic resources (5 wetlands / 2 tributaries) flow have a direct hydrological and physical connection to the Pocotaligo River (RPW), which provides conveyance to the Black River (TNW) via a direct confluence of the two waterbodies at R.M. 107.7 of the Black River.

Non-regulated waters/wetlands: On-site are Six (6) upland excavated ditches totaling ~6,341 linear feet (1,405 LF + 235 LF + 765 LF + 1,856 LF + 315 LF + 1,765 LF [all approx.]). These ditches where excavated to provide a means for storm-water storage and off-site conveyance. Of the six ditches only one ditch is shown as a blue line feature on the USGS topography, Brogdon Quadrangle; the depicted ditch is the largest (~1,856 LF) of the six on-site ditches and is located in the southern portion of the site. All of the ditches can be clearly seen on LiDAR as manmade linear features that have been, at least partially, maintained for storm-water conveyance. All but one of the on-

site ditches, were excavated out of NWI mapped uplands. The smallest ditch (235 LF), which is located in the far northeast corner of the site, was excavated out of NWI palustrine forested wetlands; this ditch is hardly discernable on LiDAR data, does not connect multiple wetlands, and does not feature the physical attributes of a tributary. The six (6) ditches were assessed during an August 5, 2019, site visit and found be the same extent and size as the depicted non-jurisdictional features shown on the waters map provided by the applicant's consultant, S&ME, Incorporated. Additionally, these ditches were deemed non-jurisdictional in a previously issued approved jurisdictional determination, issued on October 2, 2009.

Data source information: Maps, data sheets, and site information provided by the applicant's consultant, S&ME, Incorporated. Map titled: "**Aerial Exhibit** / Pocotaligo Industrial Park Site +/- 319.45 Acres / Sumter County, South Carolina", dated August 5, 2019; HUC: 0304020504 (Pocotaligo River); USGS topographic map, Brogdon quadrangle, depicts the Pocotaligo River, and unnamed tributaries thereof, bounding three sides of the project site; the river and its adjacent wetlands bound the project sites western boundary, while the north and south boundaries are bounded by unnamed tributaries of the river. The location and extent of the unnamed tributaries correlates to the locations of jurisdictional tributaries "JT-1" and "JT-2", as shown on the provided waters map. Additionally, within the site are multiple ditches depicted as solid blue line features (see section II B.2 for additional details), and three oval shaped blue line features that are labeled "Bays" to denote the features as Carolina Bays.; NRCS Sumter County Soil Survey, Sheet 99, depicts 9 individual soil types and a matrix of soil complexes within the project site, including: Rains sandy loam, Norfolk loamy sand, Noboco loamy sand, Osier loamy sand (shown as Johnson mucky sandy soil on the 2018 newer survey), Rembert loam, Lynchburg sandy loam, Wagram sand, Goldsboro loamy sand, and Ruthlege loamy sand. All on-site soils, outside of Rembert loam, Ruthlege loamy sand, and Wagram sand are depicted as hydric on the 2017 NRCS South Carolina hydric soils list for Sumter County.; National Wetland Inventory maps depict a broad swath of wetlands from the western project boundary to the northern project boundary, correlating with the general location and extent of the on-site five (5) wetland areas; this swath includes a matrix of wetland types including palustrine forested and scrub/shrub wetlands of both evergreen and deciduous growth patterns and multiple hydrology regimes ranging from seasonally flooded to semi-permanently flooded.; LiDAR Digital Elevation Model depicts a predominately flat site bounded by the Pocotaligo River

Total on-site resources analyzed within this form: Two (2) jurisdictional wetlands totaling 35.88 acres (15.25 + 20.63); One jurisdictional tributary totaling 3,521 LF long x ~3.96 LF wide (0.32 acres).

Total on-site resource summary (see forms 1-4, of 4): Five (5) jurisdictional wetlands totaling 39.51 acres (2.88 + 0.01 + 15.25 + 20.63 + 0.74); Two jurisdictional tributaries totaling 3,771 linear feet (JT1: 250 LF long x ~1.75 LF wide / 0.01 acre + JT2: 3,521 LF long x ~3.96 LF wide / 0.32 acres); Six non-jurisdictional upland excavated ditches totaling ~6,341 (~1,405 + ~235 + ~765 + ~1,856 + ~315 + ~1,765); One non-jurisdictional (isolated) wetland totaling 0.88 acres. Total site acreage: 319.45 acres.

This site was assessed on four forms per the provided site maps and information.

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): September 23, 2019

B. DISTRICT OFFICE, FILE NUMBER, FILE NAME: JD Form 2 of 4; CESAC-RDE SAC-2000-34105; Pocotaligo Industrial Park;

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **South Carolina** County/parish/borough: **Sumter County** City: **Sumter**
Center coordinates of site (lat/long in degree decimal format): Lat. **33.8581 °N**, Long. **-80.3161 °W**.
Universal Transverse Mercator: **17S 563195 3746304**
Name of nearest waterbody: **Pocotaligo River (RPW)**
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Black River**
Name of watershed or Hydrologic Unit Code (HUC): **0304020504 (Pocotaligo River)**
☒ 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): **August 5, 2019.**

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.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **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):** [1]
      ☐ 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: **(JT-1) 250** linear feet: **~1.75** width (ft) and/or **0.01** acres.
      Wetlands: **(JW-A) 2.88** acres.

   c. **Limits (boundaries) of jurisdiction** based on: **1987 Delineation Manual**, **Established by OHWM.**, **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.

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **On-site are Six (6) upland excavated ditches totaling ~6,341 linear feet (1,405 LF + 235 LF + 765 LF + 1,856 LF + 315 LF + 1,765 LF [all approx.]). These ditches where excavated to provide a means for storm-water storage and off-site conveyance. Of the six ditches only one ditch is shown as a blue line feature on the USGS topography, Brogdon Quadrangle; the depicted ditch is the largest (~1,856 LF) of the six on-site ditches and is located in the southern portion of the site. All of the ditches can be clearly seen on LiDAR as manmade linear features that have been, at least partially, maintained for storm-water conveyance. All but one of the on-site ditches, were excavated out of NWI mapped uplands. The smallest ditch (235 LF), which is located in the far northeast corner of the site, was excavated out of NWI palustrine forested wetlands; this ditch is hardly discernable on LiDAR data, does not connect multiple wetlands, and does not feature the physical attributes of a tributary.**

The six (6) ditches were assessed during an August 5, 2019, site visit and found be the same extent and size as the depicted non-jurisdictional features shown on the waters map provided by the applicant's consultant, S&ME, Incorporated. Additionally, these ditches were deemed non-jurisdictional in a previously issued approved jurisdictional determination, issued on October 2, 2009.

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: **Black River**. **Summarize rationale supporting determination: According to the USACE 1977 Navigability Study Report No. 06, regarding the watershed encompassing the Black River, presently classifies the Black River as navigable water of the U.S. between its mouth on the Great Pee Dee River and its confluence with Black River Swamp and Pocotaligo River at R.M. 107.7 (0-107.7 River Miles). On-site aquatic resources (5 wetlands / 2 tributaries) flow have a direct hydrological and physical connection to the Pocotaligo River (RPW), which provides conveyance to the Black River (TNW) via a direct confluence of the two waterbodies at R.M. 107.7 of the Black River.**

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[4] 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 ;**

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

Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:

(a) 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:

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	☐ 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	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

[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.
[6] A 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.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- ☒ High Tide Line indicated by:
  - ☐ oil or scum line along shore objects
  - ☐ fine shell or debris deposits (foreshore)
  - ☐ physical markings/characteristics
  - ☐ tidal gauges
  - ☐ other (list):
- ☒ Mean High Water Mark indicated by:
  - ☐ survey to available datum;
  - ☐ physical markings;
  - ☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .

Identify specific pollutants, if known: .

(iv) Biological 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: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) 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: .

(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: .

(d) 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) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological 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: .

[7]Ibid.

☐ Fish/spawn areas. Explain findings: .
☐ Other environmentally-sensitive species. Explain findings: .
☐ Aquatic/wildlife diversity. Explain findings: .

3. **Characteristics of all wetlands adjacent to the tributary (if any)**
   All wetland(s) being considered in the cumulative analysis: **Pick List**
   Approximately ( ) acres in total are being considered in the cumulative analysis.
   For each wetland, specify the following:

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:
.

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: **Within the site are two unnamed tributaries of the Pocotaligo River, these tributaries feature multiple attributes of RPWs including an OHWM, sinuosity, and historical presence on USGS topographic maps. Additionally, these tributaries support a broad swath of seasonal to semi-permanently flooded wetland habitat.**

This form covers only one of the two unnamed tributaries within the site. The tributary this form covers, JT-1, is located in the southern section of the site and provides recharge to one out of the five jurisdictional wetlands within the project site.

☐ 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: **250** linear feet **1.75** 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: **On site wetlands are a portion of a contiguous wetland ecosystem that directly abuts the Pocotaligo River (off-site) and two of its (on-site) unnamed tributaries.**

This form covers only one out of the five jurisdictional wetlands within the project site, Wetland JW-A.

☐ 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: **2.88** 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).

[8]See Footnote # 3.

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

Explain:

E. 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: .

Identify water body and summarize rationale supporting determination: .

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: **.**
☐ Wetlands: acres.

F. NON-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): **.**

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (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.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding 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.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: **Maps, data sheets, and site information provided by the applicant's consultant, S&ME, Incorporated. Map titled: "Aerial Exhibit /** Pocotaligo Industrial Park Site +/- 319.45 Acres / Sumter County, South Carolina**", dated August 5, 2019.**
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report.
☐ 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: **0304020504 (Pocotaligo River).**
☐ USGS NHD data.
☒ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name: **USGS topographic map, Brogdon quadrangle, depicts the Pocotaligo River, and unnamed tributaries thereof, bounding three sides of the project site; the river and its adjacent wetlands bound the**

[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.***

project sites western boundary, while the north and south boundaries are bounded by unnamed tributaries of the river. The location and extent of the unnamed tributaries correlates to the locations of jurisdictional tributaries "JT-1" and "JT-2" (see form 1 of 4), as shown on the provided waters map. Additionally, within the site are multiple ditches depicted as solid blue line features (see section II B.2 for additional details), and three oval shaped blue line features that are labeled "Bays" to denote the features as Carolina Bays.

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: **NRCS Sumter County Soil Survey, Sheet 99, depicts 9 individual soil types and a matrix of soil complexes within the project site, including: Rains sandy loam, Norfolk loamy sand, Noboco loamy sand, Osier loamy sand (shown as Johnson mucky sandy soil on the 2018 newer survey), Rembert loam, Lynchburg sandy loam, Wagram sand, Goldsboro loamy sand, and Ruthlege loamy sand. All on-site soils, outside of Rembert loam, Ruthlege loamy sand, and Wagram sand are depicted as hydric on the 2017 NRCS South Carolina hydric soils list for Sumter County.**

☒ National wetlands inventory map(s). Cite name: N**ational Wetland Inventory maps depict a broad swath of wetlands from the western project boundary to the northern project boundary, correlating with the general location and extent of the on-site five (5) wetland areas; this swath includes a matrix of wetland types including palustrine forested and scrub/shrub wetlands of both evergreen and deciduous growth patterns and multiple hydrology regimes ranging from seasonally flooded to semi-permanently flooded.**

☐ State/Local wetland inventory map(s): .

☐ FEMA/FIRM maps: .

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): **Sumter 1999 Aerial Index (11204:96; 11203:9); SC DNR 2006; Google Earth 2004-2018**

or ☒ Other (Name & Date): **Site pictures 1-12, provided by the applicant's consultant.**

☒ Previous determination(s). File no. and date of response letter: **SAC-2000-34105 (AJD), dated October 2, 2009.**

☐ Applicable/supporting case law: .

☐ Applicable/supporting scientific literature: .

☒ Other information (please specify): **On August 5, 2019, the Corps performed a site visit to verify the extent and location of on-site resources.**

LiDAR Digital Elevation Model depicts a predominately flat site bounded by the Pocotaligo River drainage basin on three sides. Additionally, within the project site the following can be identified: the remnants of three partially filled in Carolina Bays, six excavated ditches, one isolated wetland depression (see SAC-2000-34105 AJD Form 3 of 4, section II B.2 for additional details).

B. ADDITIONAL COMMENTS TO SUPPORT JD: Jurisdictional waters assessed in SAC-2000-34105 AJD Forms 1, 2, and 4 of 4; Non-jurisdictional waters assessed in SAC-2000-34105 AJD Form 3 of 4;

On August 5, 2019, the Corps performed a site visit on this 319.45 acre property to spot check the delineation of the on-site aquatic resources. All aquatic features delineated on the provided site maps appeared to be accurate in scope and placement of the provided WOUS maps and site pictures 1-12. Additionally, this site was previously delineated by an approved jurisdictional determination on October 2, 2009, by this office. The previous JD matches the scope and placement of the current on-site resources and should serve as additional justification on the Corps legal jurisdiction over these on-site aquatic resources.

CWA Analysis: According to the USACE 1977 Navigability Study Report No. 06, regarding the watershed encompassing the Black River, presently classifies the Black River as navigable water of the U.S. between its mouth on the Great Pee Dee River and its confluence with Black River Swamp and Pocotaligo River at R.M. 107.7 (0-107.7 River Miles). On-site aquatic resources (5 wetlands / 2 tributaries) flow have a direct hydrological and physical connection to the Pocotaligo River, which provides conveyance to the Black River via a direct confluence of the two waterbodies at R.M. 107.7 of the Black River.

Non-regulated waters/wetlands: On-site are Six (6) upland excavated ditches totaling ~6,341 linear feet (1,405 LF + 235 LF + 765 LF + 1,856 LF + 315 LF + 1,765 LF [all approx.]). These ditches where excavated to provide a means for storm-water storage and off-site conveyance. Of the six ditches only one ditch is shown as a blue line feature on the USGS topography, Brogdon Quadrangle; the depicted ditch is the largest (~1,856 LF) of the six on-site ditches and is located in the southern portion of the site. All of the ditches can be clearly seen on LiDAR as manmade linear features that have been, at least partially, maintained for storm-water conveyance. All but one of the on-site ditches, were excavated out of NWI mapped uplands. The smallest ditch (235 LF), which is located in the far northeast corner of the site, was excavated out of NWI palustrine forested wetlands; this ditch is hardly discernable on LiDAR data, does not connect multiple wetlands, and does not feature the physical attributes of a tributary. The six (6) ditches were assessed during an August 5, 2019, site visit and found be the same extent and size as the depicted non-jurisdictional features shown on the waters map provided by the applicant's consultant, S&ME, Incorporated. Additionally, these ditches were deemed non-jurisdictional in a previously issued approved jurisdictional determination, issued on October 2, 2009.

Data source information: Maps, data sheets, and site information provided by the applicant's consultant, S&ME, Incorporated. Map titled: "**Aerial Exhibit** / Pocotaligo Industrial Park Site +/- 319.45 Acres / Sumter County, South Carolina", dated August 5, 2019; HUC: 0304020504 (Pocotaligo River); USGS topographic map, Brogdon quadrangle, depicts the Pocotaligo River, and unnamed tributaries thereof, bounding three sides of the project site; the river and its adjacent wetlands bound the project sites western boundary, while the north and south boundaries are bounded by unnamed tributaries of the river. The location and extent of the unnamed tributaries correlates to the locations of jurisdictional tributaries "JT-1" and "JT-2", as shown on the provided waters map. Additionally, within the site are multiple ditches depicted as solid blue line features (see section II B.2 for additional details), and three oval shaped blue line features that are labeled "Bays" to denote the features as Carolina Bays.; NRCS Sumter County Soil Survey, Sheet 99, depicts 9 individual soil types and a matrix of

soil complexes within the project site, including: Rains sandy loam, Norfolk loamy sand, Noboco loamy sand, Osier loamy sand (shown as Johnson mucky sandy soil on the 2018 newer survey), Rembert loam, Lynchburg sandy loam, Wagram sand, Goldsboro loamy sand, and Ruthlege loamy sand. All on-site soils, outside of Rembert loam, Ruthlege loamy sand, and Wagram sand are depicted as hydric on the 2017 NRCS South Carolina hydric soils list for Sumter County.; National Wetland Inventory maps depict a broad swath of wetlands from the western project boundary to the northern project boundary, correlating with the general location and extent of the on-site five (5) wetland areas; this swath includes a matrix of wetland types including palustrine forested and scrub/shrub wetlands of both evergreen and deciduous growth patterns and multiple hydrology regimes ranging from seasonally flooded to semi-permanently flooded.; LiDAR Digital Elevation Model depicts a predominately flat site bounded by the Pocotaligo River

Total on-site resources analyzed within this form: One (1) jurisdictional wetland totaling 2.88 acres; One jurisdictional tributary totaling 250 LF long x ~1.75 LF wide (0.01 acres).

Total on-site resource summary (see forms 1-4, of 4): Five (5) jurisdictional wetlands totaling 39.51 acres (2.88 + 0.01 + 15.25 + 20.63 + 0.74); Two jurisdictional tributaries totaling 3,771 linear feet (JT1: 250 LF long x ~1.75 LF wide / 0.01 acre + JT2: 3,521 LF long x ~3.96 LF wide / 0.32 acres); Six non-jurisdictional upland excavated ditches totaling ~6,341 (~1,405 + ~235 + ~765 + ~1,856 + ~315 + ~1,765); One non-jurisdictional (isolated) wetland totaling 0.88 acres. Total site acreage: 319.45 acres.

This site was assessed on four forms per the provided site maps and information.

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): September 23, 2019

B. DISTRICT OFFICE, FILE NUMBER, FILE NAME: JD Form 3 of 4; CESAC-RDE SAC-2000-34105; Pocotaligo Industrial Park;

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **South Carolina** County/parish/borough: **Sumter County** City: **Sumter**
Center coordinates of site (lat/long in degree decimal format): Lat. **33.8581 °N**, Long. **-80.3161 °W**.
Universal Transverse Mercator: **17S 563195 3746304**
Name of nearest waterbody: **Pocotaligo River (RPW)**
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **On-site jurisdictional resources assessed on SAC-2000-34105 AJD Forms 1, 2, and 4, of 4.**
Name of watershed or Hydrologic Unit Code (HUC): **0304020504 (Pocotaligo River)**
☒ 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): **August 5, 2019.**

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.
Explain: .

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 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: 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):**[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.

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **On-site is one (1) 0.88 acre isolated depressional wetland that has been cut off from the adjacent contiguous (on-site) wetlands due to anthropogenic land manipulation. This low laying wetland was historically manipulated to provide a means for storm-water storage; adjacent to this wetland is ~740 linear feet of excavated ditching that historically provided off-site conveyance of storm-water, but currently does not perform this function due to a lack of maintenance. All water contained within the wetland is retained within the wetland boundary and percolates to an unknown depth. Because of the lack of discernable outfall, topography grades, and lack of evidence of chemical or biological connection, the wetland was determined to be isolated non-jurisdictional and not connected to any other waters of the U.S. The onsite isolated wetland was also determined to have NO substantial nexus to interstate (or foreign) commerce.**

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 waterbody[4] 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**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:
(a) 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.

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

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:
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 ☐ 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 ☐ 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):

[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.
[6] A 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.
[7] Ibid.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .

Identify specific pollutants, if known: .

(iv) Biological 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: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) 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: .

(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: .

(d) 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) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological 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. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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:
.

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: .

     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:

E. 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: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.

[8]See Footnote # 3.
[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.*

Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-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): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (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: **(NJW-F) 0.88** acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding 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.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: **Maps, data sheets, and site information provided by the applicant's consultant, S&ME, Incorporated. Map titled: "Aerial Exhibit /** Pocotaligo Industrial Park Site +/- 319.45 Acres / Sumter County, South Carolina**", dated August 5, 2019.**

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☒ Office concurs with data sheets/delineation report.

☐ 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: **0304020504 (Pocotaligo River).**

☐ USGS NHD data.

☒ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: **USGS topographic map, Brogdon quadrangle, depicts the Pocotaligo River, and unnamed tributaries thereof, bounding three sides of the project site; the river and its adjacent wetlands bound the project sites western boundary, while the north and south boundaries are bounded by unnamed tributaries of the river. The location and extent of the unnamed tributaries correlates to the locations of jurisdictional tributaries "JT-1" and "JT-2", as shown on the provided waters map (assessed in SAC-2000-34105 AJD Forms 1, 2, and 4, of 4 for additional details). Additionally, within the site are multiple ditches depicted as solid blue line features (see SAC-2000-34105 AJD Forms 1, 2, and 4, of 4, section II B.2 for additional details), and three oval shaped blue line features that are labeled "Bays" to denote the features as Carolina Bays.**

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: **NRCS Sumter County Soil Survey, Sheet 99, depicts 9 individual soil types and a matrix of soil complexes within the project site, including: Rains sandy loam, Norfolk loamy sand, Noboco loamy sand, Osier loamy sand (shown as Johnson mucky sandy soil on the 2018 newer survey), Rembert loam, Lynchburg sandy loam, Wagram sand, Goldsboro loamy sand, and Ruthlege loamy sand. All on-site soils, outside of Rembert loam, Ruthlege loamy sand, and Wagram sand are depicted as hydric on the 2017 NRCS South Carolina hydric soils list for Sumter County.**

☒ National wetlands inventory map(s). Cite name: **National Wetland Inventory maps depict a broad swath of wetlands from the western project boundary to the northern project boundary, correlating with the general location and extent of the on-site five (5) wetland areas (assessed in SAC-2000-34105 AJD Forms 1, 2, and 4 of 4); this swath includes a matrix of wetland types including palustrine forested and scrub/shrub wetlands of both evergreen and deciduous growth patterns and multiple hydrology regimes ranging from seasonally flooded to semi-permanently flooded.**

☐ State/Local wetland inventory map(s): .

☐ FEMA/FIRM maps: .

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): **Sumter 1999 Aerial Index (11204:96; 11203:9); SC DNR 2006; Google Earth 2004-2018**

or ☒ Other (Name & Date): **Site pictures 1-12, provided by the applicant's consultant.**

☒ Previous determination(s). File no. and date of response letter: **SAC-2000-34105 (AJD), dated October 2, 2009.**

☐ Applicable/supporting case law: .

☐ Applicable/supporting scientific literature: .

☒ Other information (please specify): **On August 5, 2019, the Corps performed a site visit to verify the extent and location of on-site resources.**

LiDAR Digital Elevation Model depicts a predominately flat site bounded by the Pocotaligo River drainage basin on three sides. Additionally, within the project site the following can be identified: the remnants of three partially filled in Carolina Bays, six excavated ditches, one isolated wetland depression (see section II B.2 for additional details).

B. ADDITIONAL COMMENTS TO SUPPORT JD: Jurisdictional waters assessed in SAC-2000-34105 AJD Forms 1, 2, and 4 of 4; Non-jurisdictional waters assessed in SAC-2000-34105 AJD Form 3 of 4;

On August 5, 2019, the Corps performed a site visit on this 319.45 acre property to spot check the delineation of the on-site aquatic resources. All aquatic features delineated on the provided site maps appeared to be accurate in scope and placement of the provided WOUS maps and site pictures 1-12. Additionally, this site was previously issued an approved jurisdictional determination (JD) on October 2, 2009, by this office. The previous JD matches the scope and placement of the current on-site resources and should serve as additional justification on the Corps' legal jurisdiction over these on-site aquatic resources.

Non-regulated waters/wetlands: On-site is one (1) 0.88 acre isolated depressional wetland that has been cut off from the adjacent contiguous (on-site) wetlands due to anthropogenic land manipulation. This low laying wetland was historically manipulated to provide a means for storm-water storage; adjacent to this wetland is ~740 linear feet of excavated ditching that historically provided off-site conveyance of storm-water, but currently does not perform this function due to a lack of maintenance. All water contained within the wetland is retained within the wetland boundary and percolates to an unknown depth. Because of the lack of discernable outfall, topography grades, and lack of evidence of chemical or biological connection, the wetland was determined to be isolated non-jurisdictional and not connected to any other waters of the U.S. The onsite isolated wetland was also determined to have NO substantial nexus to interstate (or foreign) commerce.

Data source information: Maps, data sheets, and site information provided by the applicant's consultant, S&ME, Incorporated. Map titled: "**Aerial Exhibit** / Pocotaligo Industrial Park Site +/- 319.45 Acres / Sumter County, South Carolina", dated August 5, 2019; HUC: 0304020504 (Pocotaligo River); USGS topographic map, Brogdon quadrangle, depicts the Pocotaligo River, and unnamed tributaries thereof, bounding three sides of the project site; the river and its adjacent wetlands bound the project sites western boundary, while the north and south boundaries are bounded by unnamed tributaries of the river. The location and extent of the unnamed tributaries correlates to the locations of jurisdictional tributaries "JT-1" and "JT-2", as shown on the provided waters map (assessed in SAC-2000-34105 AJD Forms 1, 2, and 4, of 4). Additionally, within the site are multiple ditches depicted as solid blue line features (see SAC-2000-34105 AJD Forms 1, 2, and 4, of 4), and three oval shaped blue line features that are labeled "Bays" to denote the features as Carolina Bays.; NRCS Sumter County Soil Survey, Sheet 99, depicts 9 individual soil types and a matrix of soil complexes within the project site, including: Rains sandy loam, Norfolk loamy sand, Noboco loamy sand, Osier loamy sand (shown as Johnson mucky sandy soil on the 2018 newer survey), Rembert loam, Lynchburg sandy loam, Wagram sand, Goldsboro loamy sand, and Ruthlege loamy sand. All on-site soils, outside of Rembert loam, Ruthlege loamy sand, and Wagram sand are depicted as hydric on the 2017 NRCS South Carolina hydric soils list for Sumter County.; National Wetland Inventory maps depict a broad swath of wetlands from the western project boundary to the northern project boundary, correlating with the general location and extent of the on-site five (5) wetland areas (assessed in SAC-2000-34105 AJD Forms 1-2 of 3); this swath includes a matrix of wetland types including palustrine forested and scrub/shrub wetlands of both evergreen and deciduous growth patterns and multiple hydrology regimes ranging from seasonally flooded to semi-permanently flooded.; LiDAR Digital Elevation Model depicts a predominately flat site bounded by the Pocotaligo River drainage basin on three sides. Additionally, within the project site the following can be identified: the remnants of three partially filled in Carolina Bays, six excavated ditches, one isolated wetland depression (see section II B.2 for additional details).

Total on-site resource summary (see forms 1-4, of 4): Five (5) jurisdictional wetlands totaling 39.51 acres (2.88 + 0.01 + 15.25 + 20.63 + 0.74); Two jurisdictional tributaries totaling 3,771 linear feet (JT1: 250 LF long x ~1.75 LF wide / 0.01 acre + JT2: 3,521 LF long x ~3.96 LF wide / 0.32 acres); Six non-jurisdictional upland excavated ditches totaling ~6,341 (~1,405 + ~235 + ~765 + ~1,856 + ~315 + ~1,765); One non-jurisdictional (isolated) wetland totaling 0.88 acres. Total site acreage: 319.45 acres.

This site was assessed on four forms per the provided site maps and information. Additionally, see forms 1, 2, and 4, of 4, for jurisdictional waters determination within the project area. The on-site isolated wetland was coordinated with the EPA and USACE Isolated Waters; coordination was considered complete on September 3, 2019, with no questions or comments provided by the agencies.

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): September 23, 2019

B. DISTRICT OFFICE, FILE NUMBER, FILE NAME: JD Form 4 of 4; CESAC-RDE SAC-2000-34105; Pocotaligo Industrial Park;

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: **South Carolina** County/parish/borough: **Sumter County** City: **Sumter**
Center coordinates of site (lat/long in degree decimal format): Lat. **33.8581 °N**, Long. **-80.3161 °W**.
Universal Transverse Mercator: **17S 563195 3746304**
Name of nearest waterbody: **Pocotaligo River (RPW)**
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Black River**
Name of watershed or Hydrologic Unit Code (HUC): **0304020504 (Pocotaligo River)**
☒ 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): **August 5, 2019.**

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.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **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):** [1]
   ☐ 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: linear feet: width (ft) and/or acres.
   Wetlands: **(JW-E) 0.74 + (JW-B) 0.01 = 0.75** 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.

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **On-site are Six (6) upland excavated ditches totaling ~6,341 linear feet (1,405 LF + 235 LF + 765 LF + 1,856 LF + 315 LF + 1,765 LF [all approx.]). These ditches where excavated to provide a means for storm-water storage and off-site conveyance. Of the six ditches only one ditch is shown as a blue line feature on the USGS topography map, Brogdon Quadrangle; the depicted ditch is the largest (~1,856 LF) of the six on-site ditches and is located in the southern portion of the site. All of the ditches can be clearly seen on LiDAR as manmade linear features that have been, at least partially, maintained for storm-water conveyance. All but one of the on-site ditches, were excavated out of NWI mapped uplands. The smallest ditch (235 LF), which is located in the far northeast corner of the site, was excavated out of NWI palustrine forested wetlands; this ditch is hardly discernable on LiDAR data, does not connect multiple wetlands, and does not feature the physical attributes of a tributary.**

The six (6) ditches were assessed during an August 5, 2019, site visit and found be the same extent and size as the depicted non-jurisdictional features shown on the waters map provided by the applicant's consultant, S&ME, Incorporated. Additionally, these ditches were deemed non-jurisdictional in a previously issued approved jurisdictional determination, issued on October 2, 2009.

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: **Black River**. **Summarize rationale supporting determination: According to the USACE 1977 Navigability Study Report No. 06, regarding the watershed encompassing the Black River, presently classifies the Black River as navigable water of the U.S. between its mouth on the Great Pee Dee River and its confluence with Black River Swamp and Pocotaligo River at R.M. 107.7 (0-107.7 River Miles). On-site aquatic resources (5 wetlands / 2 tributaries) flow have a direct hydrological and physical connection to the Pocotaligo River (RPW), which provides conveyance to the Black River (TNW) via a direct confluence of the two waterbodies at R.M. 107.7 of the Black River.**

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[4] 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 ;**

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

Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:

(a) 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:

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	☐ 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	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

[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.
[6] A 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.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- ☒ High Tide Line indicated by:
  - ☐ oil or scum line along shore objects
  - ☐ fine shell or debris deposits (foreshore)
  - ☐ physical markings/characteristics
  - ☐ tidal gauges
  - ☐ other (list):
- ☒ Mean High Water Mark indicated by:
  - ☐ survey to available datum;
  - ☐ physical markings;
  - ☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .

Identify specific pollutants, if known: .

(iv) Biological 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: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) 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: .

(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: .

(d) 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) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological 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: .

[7]Ibid.

☐ Fish/spawn areas. Explain findings: .
☐ Other environmentally-sensitive species. Explain findings: .
☐ Aquatic/wildlife diversity. Explain findings: .

3. **Characteristics of all wetlands adjacent to the tributary (if any)**
   All wetland(s) being considered in the cumulative analysis: **Pick List**
   Approximately ( ) acres in total are being considered in the cumulative analysis.
   For each wetland, specify the following:

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:
.

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: The wetlands assessed on this form directly abut the Pocotaligo River offsite. The Pocotaligo River is a perennial RPW that has continuous flow at least 80% of the year. This is a braided river system that is a named feature on USGS topo maps and has been observed by USACE staff multiple times in the field.

   ☐ 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: **On site wetlands are a portion of a contiguous wetland ecosystem that directly abuts the Pocotaligo River (off-site) and the associated contiguous wetlands.**

   This form covers only two out of the five jurisdictional wetlands within the project site, including the following wetlands depicted on the site map: JW-B, and JD-E.

   ☐ 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: **(JW-E) 0.74 + (JW-B) 0.01 = 0.75** 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:

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

E. 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: .

Identify water body and summarize rationale supporting determination: .

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: .
☐ Wetlands: acres.

F. NON-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): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (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.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding 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.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: **Maps, data sheets, and site information provided by the applicant's consultant, S&ME, Incorporated. Map titled: "Aerial Exhibit /** Pocotaligo Industrial Park Site +/- 319.45 Acres / Sumter County, South Carolina**", dated August 5, 2019.**
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report.
☐ 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: **0304020504 (Pocotaligo River).**
☐ USGS NHD data.
☒ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name: **USGS topographic map, Brogdon quadrangle, depicts the Pocotaligo River, and unnamed tributaries thereof, bounding three sides of the project site; the river and its adjacent wetlands bound the project sites western boundary, while the north and south boundaries are bounded by unnamed tributaries of the river. The location and extent of the unnamed tributaries correlates to the locations of jurisdictional tributaries "JT-1" (see form 2 of 4) and "JT-2" (see form 1 of 4), as shown on the provided waters map. Additionally, within the site are multiple ditches depicted as**

[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.***

solid blue line features (see section II B.2 for additional details), and three oval shaped blue line features that are labeled "Bays" to denote the features as Carolina Bays.

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: **NRCS Sumter County Soil Survey, Sheet 99, depicts 9 individual soil types and a matrix of soil complexes within the project site, including: Rains sandy loam, Norfolk loamy sand, Noboco loamy sand, Osier loamy sand (shown as Johnson mucky sandy soil on the 2018 newer survey), Rembert loam, Lynchburg sandy loam, Wagram sand, Goldsboro loamy sand, and Ruthlege loamy sand. All on-site soils, outside of Rembert loam, Ruthlege loamy sand, and Wagram sand are depicted as hydric on the 2017 NRCS South Carolina hydric soils list for Sumter County.**

☒ National wetlands inventory map(s). Cite name: N**ational Wetland Inventory maps depict a broad swath of wetlands from the western project boundary to the northern project boundary, correlating with the general location and extent of the on-site five (5) wetland areas; this swath includes a matrix of wetland types including palustrine forested and scrub/shrub wetlands of both evergreen and deciduous growth patterns and multiple hydrology regimes ranging from seasonally flooded to semi-permanently flooded.**

☐ State/Local wetland inventory map(s): .

☐ FEMA/FIRM maps: .

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): **Sumter 1999 Aerial Index (11204:96; 11203:9); SC DNR 2006; Google Earth 2004-2018**

or ☒ Other (Name & Date): **Site pictures 1-12, provided by the applicant's consultant.**

☒ Previous determination(s). File no. and date of response letter: **SAC-2000-34105 (AJD), dated October 2, 2009.**

☐ Applicable/supporting case law: .

☐ Applicable/supporting scientific literature: .

☒ Other information (please specify): **On August 5, 2019, the Corps performed a site visit to verify the extent and location of on-site resources.**

LiDAR Digital Elevation Model depicts a predominately flat site bounded by the Pocotaligo River drainage basin on three sides. Additionally, within the project site the following can be identified: the remnants of three partially filled in Carolina Bays, six excavated ditches, one isolated wetland depression (see SAC-2000-34105 AJD Form 3 of 4, section II B.2 for additional details).

B. ADDITIONAL COMMENTS TO SUPPORT JD: Jurisdictional waters assessed in SAC-2000-34105 AJD Forms 1, 2, and 4, of 4; Non-jurisdictional waters assessed in SAC-2000-34105 AJD Form 3 of 4;

On August 5, 2019, the Corps performed a site visit on this 319.45 acre property to spot check the delineation of the on-site aquatic resources. All aquatic features delineated on the provided site maps appeared to be accurate in scope and placement of the provided WOUS maps and site pictures 1-12. Additionally, this site was previously delineated by an approved jurisdictional determination on October 2, 2009, by this office. The previous JD matches the scope and placement of the current on-site resources and should serve as additional justification on the Corps legal jurisdiction over these on-site aquatic resources.

CWA Analysis: According to the USACE 1977 Navigability Study Report No. 06, regarding the watershed encompassing the Black River, presently classifies the Black River as navigable water of the U.S. between its mouth on the Great Pee Dee River and its confluence with Black River Swamp and Pocotaligo River at R.M. 107.7 (0-107.7 River Miles). On-site aquatic resources (5 wetlands / 2 tributaries) flow have a direct hydrological and physical connection to the Pocotaligo River, which provides conveyance to the Black River via a direct confluence of the two waterbodies at R.M. 107.7 of the Black River.

Non-regulated waters/wetlands: On-site are Six (6) upland excavated ditches totaling ~6,341 linear feet (1,405 LF + 235 LF + 765 LF + 1,856 LF + 315 LF + 1,765 LF [all approx.]). These ditches where excavated to provide a means for storm-water storage and off-site conveyance. Of the six ditches only one ditch is shown as a blue line feature on the USGS topography, Brogdon Quadrangle; the depicted ditch is the largest (~1,856 LF) of the six on-site ditches and is located in the southern portion of the site. All of the ditches can be clearly seen on LiDAR as manmade linear features that have been, at least partially, maintained for storm-water conveyance. All but one of the on-site ditches, were excavated out of NWI mapped uplands. The smallest ditch (235 LF), which is located in the far northeast corner of the site, was excavated out of NWI palustrine forested wetlands; this ditch is hardly discernable on LiDAR data, does not connect multiple wetlands, and does not feature the physical attributes of a tributary. The six (6) ditches were assessed during an August 5, 2019, site visit and found be the same extent and size as the depicted non-jurisdictional features shown on the waters map provided by the applicant's consultant, S&ME, Incorporated. Additionally, these ditches were deemed non-jurisdictional in a previously issued approved jurisdictional determination, issued on October 2, 2009.

Data source information: Maps, data sheets, and site information provided by the applicant's consultant, S&ME, Incorporated. Map titled: "**Aerial Exhibit** / Pocotaligo Industrial Park Site +/- 319.45 Acres / Sumter County, South Carolina", dated August 5, 2019; HUC: 0304020504 (Pocotaligo River); USGS topographic map, Brogdon quadrangle, depicts the Pocotaligo River, and unnamed tributaries thereof, bounding three sides of the project site; the river and its adjacent wetlands bound the project sites western boundary, while the north and south boundaries are bounded by unnamed tributaries of the river. The location and extent of the unnamed tributaries correlates to the locations of jurisdictional tributaries "JT-1" and "JT-2", as shown on the provided waters map. Additionally, within the site are multiple ditches depicted as solid blue line features (see section II B.2 for additional details), and three oval shaped blue line features that are labeled "Bays" to denote the features as Carolina Bays.; NRCS Sumter County Soil Survey, Sheet 99, depicts 9 individual soil types and a matrix of soil complexes within the project site, including: Rains sandy loam, Norfolk loamy sand, Noboco loamy sand, Osier loamy sand (shown as Johnson mucky sandy soil on the 2018 newer survey), Rembert loam, Lynchburg sandy loam, Wagram sand, Goldsboro loamy sand, and Ruthlege loamy sand. All on-site soils, outside of Rembert loam, Ruthlege loamy sand, and Wagram sand are depicted as hydric on the 2017

NRCS South Carolina hydric soils list for Sumter County.; National Wetland Inventory maps depict a broad swath of wetlands from the western project boundary to the northern project boundary, correlating with the general location and extent of the on-site five (5) wetland areas; this swath includes a matrix of wetland types including palustrine forested and scrub/shrub wetlands of both evergreen and deciduous growth patterns and multiple hydrology regimes ranging from seasonally flooded to semi-permanently flooded.; LiDAR Digital Elevation Model depicts a predominately flat site bounded by the Pocotaligo River

Total on-site resources analyzed within this form: Two (2) jurisdictional wetlands totaling 0.75 acres (0.01 + 0.74);

Total on-site resource summary (see forms 1-4, of 4): Five (5) jurisdictional wetlands totaling 39.51 acres (2.88 + 0.01 + 15.25 + 20.63 + 0.74); Two jurisdictional tributaries totaling 3,771 linear feet (JT1: 250 LF long x ~1.75 LF wide / 0.01 acre + JT2: 3,521 LF long x ~3.96 LF wide / 0.32 acres); Six non-jurisdictional upland excavated ditches totaling ~6,341 (~1,405 + ~235 + ~765 + ~1,856 + ~315 + ~1,765); One non-jurisdictional (isolated) wetland totaling 0.88 acres. Total site acreage: 319.45 acres.

This site was assessed on a four forms per the provided site maps and information.