

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): **AUG 19 2019**

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: JD Form 1 of 1; SAC #2019-00282, B&C Lowes Tract

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South Carolina County/parish/borough: Horry City: Myrtle Beach
Center coordinates of site (lat/long in degree decimal format): Lat. 33.648642° N, Long. -78.987919° W.
Universal Transverse Mercator:

Name of nearest waterbody: Un-named Tributaries of the Waccamaw River

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Atlantic Intracoastal Waterway (AIWW)

Name of watershed or Hydrologic Unit Code (HUC): Waccamaw River:HUC 03040206

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: August 14, 2019

Field Determination. Date(s): Previous Site visit performed on 8/8/2012, under SAC-2010-0266-3JH

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 waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 890 linear feet: +/- 15width (ft) and/or acres.

Wetlands: Wetlands #01, 02, 03 & 04 total of 13.94 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

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: Upland excavated non-jurisdictional roadside ditches determined to drain only uplands and upland excavated stormwater ponds determined not to be an impoundment of waters of the US.

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: Atlantic Intracoastal Waterway (AIWW).

Summarize rationale supporting determination: Subject to ebb and flood of tide.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

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

(i) General Area Conditions:

Watershed size: 136,317 acres ;

Drainage area: 1,200 acres

Average annual rainfall: 53 inches

Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 3 tributaries before entering TNW.

Project waters are 2-5 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

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

Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

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

Identify flow route to TNW⁵: Tributary flows through 3 un-named tributaries before entering the AIWW (TNW).
Tributary stream order, if known: 1.

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain: Tributary has been straightened and widened during the years to handle increased stormwater runoff from adjacent subdivisions and U.S. Highway 17 Bypass.

Tributary properties with respect to top of bank (estimate):

Average width: 15 feet
Average depth: 5 feet
Average side slopes: 2:1.

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: Banks of tributary are maintained and stabilized with various types of grasses.

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: Relatively straight.

Tributary gradient (approximate average slope): 1 %

(c) Flow:

Tributary provides for: Perennial flow

Estimate average number of flow events in review area/year: 20 (or greater)

Describe flow regime: flow regime has been determined to be 90 % of the year. From the previous determination documented under SAC-2010-01266-3JH (November 20, 2012) the following was documented: Multiple site visits were made and water was observed flowing on all site visits. A review of available information revealed the site visits were conducted under drought conditions.

Other information on duration and volume:

Surface flow is: Confined. Characteristics: Flow is within the bed and banks of tributary.

Subsurface flow: Pick List. Explain findings:

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away 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: Land use in the drainage area is largely urban development with some forestland. Tributary headwaters are located adjacent to a residential subdivision. At the time of site visit, water color observed was discolored (mucky, carrying sediments).

Identify specific pollutants, if known: sediments, refuse from adjacent highways and residential developments, various pesticides.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

Riparian corridor. Characteristics (type, average width): From the previous determination documented under SAC-2010-01266-3JH (November 20, 2012) the following was documented: Portions of tributary flow through forested areas that aerial photos indicate includes wetlands. Both the upland and wetland forest areas shade and buffer the tributary and provide filtering of runoff before it enters the tributary.

Wetland fringe. Characteristics: See above statement .

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings: Evidence of foraging, nesting, and travel corridors as well as minnows, tadpoles, reptiles and small macrofauna were observed in the offsite tributary.

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW: From the previous determination documented under SAC-2010-01266-3JH (November 20, 2012) the following was documented:**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: 13.95 acres

Wetland type. Explain: palustrine.

Wetland quality. Explain: forested fully functional .

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: Ephemeral flow. Explain: Flow of wetlands to onsite tributary is through adjacent ditches, swales and drainage patterns observed during field visit.

Surface flow is: Discrete and confined

Characteristics: see above statment.

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: Berms adjacent to wetland and tributary; wetland #01 has a hydrologic connection via non-jurisdictional ditch, In addition, wetlands 2,3,& 4 are adjacent to upland roadside ditches that discharge into onsite RPW .

Ecological connection. Explain:

Separated by berm/barrier. Explain: See above statement

(d) Proximity (Relationship) to TNW

Project wetlands are 2-5 river miles from TNW.

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

Flow is from: Wetland to navigable waters.

Estimate approximate location of wetland as within the 500-year or greater 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: General watershed consists of developed urban areas. Urban development is continuing in this area, resulting in fewer and more fragmented wetlands and altered, more rapid runoff following rain events.

Identify specific pollutants, if known: It's reasonable to expect trash from the adjacent development and US Hwy 17, as well as pollutants carried by stormwater runoff from the downstream developments and adjacent highways can enter tributary and be transported to the TNW.

(iii) Biological Characteristics. Wetland supports (check all that apply):

Riparian buffer. Characteristics (type, average width): While the wetlands are not truly riparian, they do act as a buffer to the adjacent tributary and downstream RPWs and TNW. Wetlands (that also continue offsite) retains and filters runoff before it enters the tributary.

Vegetation type/percent cover. Explain: Dominant vegetation is FACW and OBL; Area Forested..

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings: This wetland system enhances wildlife diversity through timber type changes and the transition between upland and aquatic systems.

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

All wetland(s) being considered in the cumulative analysis:4

Approximately (45) 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) |
|-----------------------|-----------------|-----------------------|-----------------|
| W-1 (N) | 1.79 | | |
| W-2 (N) | 9.07 | | |
| W-3 (N) | 2.36 | | |
| W-4 (N) | 0.73 | | |
| Offsite wetlands (Y) | 30.5 | | |

Summarize overall biological, chemical and physical functions being performed: The similarly situated wetlands contribute vital biological, chemical, and physical functions to the downstream TNW. This wetland system enhances wildlife diversity, acts as catch basins filtering sediment and pollutants from surrounding urban development and silvicultural practices, supports the downstream food web, and provides nutrient fixation, flood attenuation and flow maintenance functions. See III.C.3. below for more details.

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: From the previous determination documented under SAC-2010-01266-3JH (November 20, 2012) the following was documented: The wetlands adjacent to this perennial RPW include mixed hardwood/pine Palestine forested digressional wetlands. The wetlands which are similarly situated and adjacent to the RPW are collectively performing functions consistent with following: Biological- A variety of biological functions are being performed which include providing breeding grounds, shelter, foraging, nesting and travel corridors for aquatic and wetland-dependent species. They enhance wildlife diversity through timber type changes and the transition between upland and aquatic systems. The wetlands are essential in providing collective primary productivity to downstream waters by supplying organic carbon, resulting in the nourishment of the downstream food web. Chemical- The wetlands and tributary within the review area are providing the important collective functions of removal of excess nutrients which are contributed by runoff from surrounding urban and silvicultural areas, reducing nitrogen and phosphorus loading downstream, and effectively preventing oxygen depletion that can result from eutrophication. Physical- The wetlands and tributary in the review area are collectively filtering sediments and pollutants carried by stormwater runoff from roads, urban development and silviculture areas. They are providing flood attenuation and flow maintenance functions by retaining runoff and releasing it slowly, which results in the reduction of downstream peak flows (discharge and volumes) and lower continuous flow volumes. Wetlands such as the ones identified in this reach are actively storing stormwater runoff from adjacent development and silvicultural areas. Based on the collective functions described above and their importance to the biological, chemical, and physical integrity of the traditional navigable waters of the AIWW, it has been determined that there is a significant nexus between the relevant reach of the tributary and adjacent wetlands to the downstream TNW..
- 4.

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: From the previous determination documented under SAC-2010-01266-3JH (November 20, 2012) the following was documented: At the time of site visit water was observed flowing under drought conditions and within the growing season. Multiple site visits have been made and all site visits water has been observed flowing within the onsite tributary. At the time of the final site visit, collected rainfall data for previous 12month period revealed a total of 36.94" for this location of Horry County. A review of NRCS WETS historical data revealed the average rainfall for this area as 53.31". Due the fact water was observed flowing under drought conditions and during the growing season, this office has concluded that the flow of the onsite tributary is at least 90% of the year.

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: 890 linear feet +/- 15 width (ft).
 - Other non-wetland waters: acres.
- Identify type(s) of waters:

3. Non-RPWs³ 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).

³See Footnote # 3.

- 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **13.94** 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.
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:

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*.

- Other: (explain, if not covered above): Upland excavated non-jurisdictional roadside ditches determined to drain only uplands and upland excavated stormwater ponds determined not to be an impoundment of waters of the US.

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:

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: Report and maps provided by Hynes Land & Engineering Services in the submittal dated February 14, 2019. Plat dated May 25, 2019, prepared by Development Resource Group, Inc., titled "WETLAND MAP/ OF/ TAX PARCEL 185-00-02-059, 202, 251, 255, 256, and 257 / SOCASTEE TOWNSHIP, Horry County, SC/ PREPARED FOR:/MYRTLE BEACH FARMS COMPANY, INC..
- 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:
 USGS NHD data.
 USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Myrtle Beach Quad: Quad depicts tributaries as blue lines and a portion of wetlands with the a symbol that represents wetlands. Topographic map depicts wetlands and tributaries in the location of delineated waters submitted on provided plat referenced above. The remainder of site is depicted as forested uplands..
- USDA Natural Resources Conservation Service Soil Survey. Citation: Horry County Soil Survey page 90 depicts the soil types of Ogeechee, Meggett, Yemassee, and Yauhannah. The soil types of Ogeechee and Meggett are listed on the National Hydric soil List.
- National wetlands inventory map(s). Cite name: HorryNWI depicts the site as upland planted pines (U42P) and Forested partially ditched drained wetlands (PFO1/4Bd). NWI depicts ditched drained wetlands in the area of the delineated waters.
- State/Local wetland inventory map(s):
 FEMA/FIRM maps:
 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): 2006 SCDNR, 2018 Google Earth
or Other (Name & Date): Site photos provided by Hynes Land & Engineering Services in the submittal dated February 14, 2019.
- Previous determination(s). File no. and date of response letter: November 20, 2012, SAC-2010-01266-3JH.
- Applicable/supporting case law:
 Applicable/supporting scientific literature:
 Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: Onsite wetlands 01, 02, 03, and 04 were determined to be adjacent, non-abutting the onsite tributary. Adjacent wetlands and tributary were documented to have a significant nexus with the downstream TNW (AIWW) in Section C of this document. In addition, the project area contains numerous upland excavated non-jurisdictional ditches (roadside ditches) determined to drain only uplands and upland excavated stormwater ponds located adjacent to and within commercial developments. The project area (tract) incorporates portions of adjacent developed areas (paved roads, storm water ponds and paved parking areas) associated with offsite commercial development (retail stores). This portion was not part of the previous jurisdictional determination (JD) of 2012. This determination is based on the review of the information submitted in the JD submittal dated February 14, 2019 from Hynes Land & Engineering Services, previous JD of 2012 (SAC-2010-01266-3JH) where a site visit was performed, and available desktop resources to include USGS topo maps, Horry NWI, Horry County Soil Survey, and aerial photos.