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January 20, 2020

Mr. Joe Koon, Manager
SCDHEC
Division of Mining and Solid Waste Management
2600 Bull Street
Columbia, SC 29201

RE: Outline for Chester Quarry JD Approval and Nationwide Permit Coverage

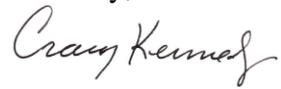
Dear Mr. Koon:

As has been previously discussed, Luck Stone through S&ME has revised the wetland delineation and submitted a revised Jurisdictional Determination (JD) request to the US Army Corps of Engineers. Below is the sequence for the JD approval and issuance of Nationwide Permit coverage for the Chester Quarry.

1. The wetland delineation was revised in fall of 2019. This revision was used to update Chester Quarry mine maps and revised Jurisdictional Determination request to the U.S. Army Corps of Engineers.
2. Revised JD request submitted by S&ME to the Corps on August 25, 2019. Full documentation of the revised JD will be provided to DHEC.
3. The US Army Corps of Engineers have advanced their time frame for renewing ALL Nationwide Permits. Instead of 2022 timeframe for renewal of the 5-year cycle; the Corps will renew the Nationwide Permits early in the spring of 2020 because of Presidential Executive order.
4. Luck Stone plans to submit the Pre-Construction Notice for the Nationwide Permit 44 coverage after the renewed permit is issued in spring of 2020. Luck Stone is reluctant to submit the pre-construction notice under the current Nationwide Permit 44 and repeat the process again when the renewed Nationwide Permit 44 is issued. Repeating the process within such a short time frame is a drain on time and resources for both Luck Stone and the Corps.
5. Corps has indicated that the approval for the revised JD request and Nationwide Permit 44 coverage issuance under the renewed permit will be conducted at the same time.

Given the sequence of the JD approval and Nationwide Permit coverage issuance, Luck Stone respectfully requests that DHEC continue their review of the mine operating permit application and move forward with issuing the mine operating permit with appropriate permit conditions.

Sincerely,

A handwritten signature in cursive script that reads "Craig Kennedy".

Craig Kennedy, PG
Principal

cc Bruce Smith
 Ben Thompson
 Mark Williams
 Chris Davies

FW: Chester Greenfield Site - SAC 2019-00728

Chris Daves <CDaves@smeinc.com>

Fri 2/14/2020 9:13 AM

To: Mark Williams <MarkDWilliams@luckcompanies.com>; Bruce Smith <BruceSmith@luckcompanies.com>; Koon, Joe <koonjm@dhec.sc.gov> 3 attachments (3 MB)

JD Exhibit Chester greenfield USACE Revisions.pdf; PJD Form Chester Greenfield.doc; SAC 2019-00728 - Basis Form-Isolated (Wetland C).doc;

***** Caution. This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or unexpected email. *****

Good morning, Joe,

I am forwarding a copy of our correspondence with Jarrett Cellini, the Corps PM for the project site.

On August 25, 2019, I sent him a revised exhibit that he requested following our field visit. The revisions reflect the Corps desire to have two separate Jurisdictional Determinations (JD) on the site due to the jurisdictional/non-jurisdictional types.

I also provided him with the requested forms on to process these JDs. We are currently awaiting these documents as they are in the cue for processing.

Most of the site will go under a Preliminary JD which is easier for the Corps to process and write up. Typically this will be a two-page JD letter along with a 4-5 page PJD form and the features on the site.

On the western portion of the site, there was a wetland (Wetland C) and some ephemeral channels that were deemed non-jurisdictional. These features will be lumped into an Approved JD.

To summarize, the exhibit changes from 2-20-19 to 8-20-19 include:

1. Combining Wetlands A and B with this wetland (Wetland A) being jurisdictional instead of non-jurisdictional.
2. Making Wetland C a non-jurisdictional wetland.
3. Making Stream 1 and 2 ephemeral channels.
4. Changing the nomenclature of the features on the site to match AJD/PJD Corps formats.
5. Creating separate areas on the site for the Corps to issue an AJD (western 15 acres) and a PJD (rest of site)

Please let me know if you need anything else at this time.

Chris

Chris Daves, P.W.S.

Biologist/Senior Scientist

M: 803.446.2980

cdaves@smeinc.com

From: Chris Daves**Sent:** Sunday, August 25, 2019 5:16 PM**To:** Cellini, Jarrett B CIV USARMY CESAC (US) <Jarrett.B.Cellini@usace.army.mil>**Subject:** Chester Greenfield Site - SAC 2019-00728

Good afternoon, Jarrett,

I wanted to send over the revised JD exhibit for your use in writing up the two JDs. Forms attached as well for your use.

For the overall site, seeking a PJD.

For the one isolated wetland area, we made a box around the feature and the two ephemeral drainages. Seeking an AJD for this area.

Let me know if you need any edits to the exhibit.

We had discussed the possibility of seeking a waiver/variance on the 300 foot threshold for the NWP (versus an IP) based on the condition of the ditched, seasonal stream on the northern portion of the site (NWW-5).

I will headed back up there soon to collect data on the stream and score it.

As far as requesting the variance on the NWP/IP 300-foot threshold, is this something that we should do before submitting a permit? Not sure if Brice and/or Travis needed to make a decision before receiving the permit package.

I will follow up with you this week to discuss.

Thanks again to you and Jonathan coming out on the hottest of days to review the fieldwork.

Chris

Chris Daves, P.W.S.

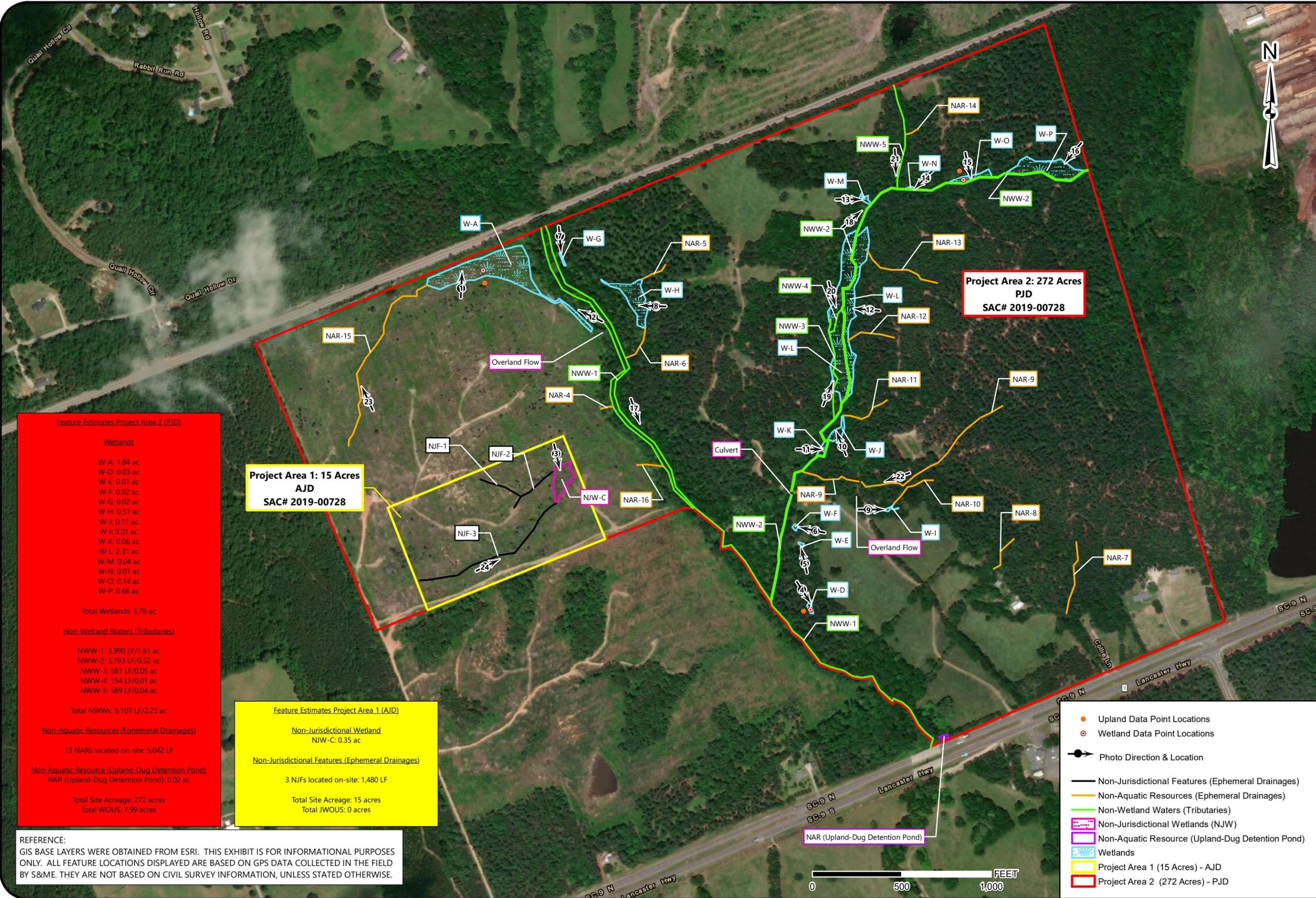
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Drawing Path: T:\Projects\2019\ENV\4261-19-016\Luck Co_Chester Greenfield Site_Chester\GIS\GIS(mxds)\JD Exhibit 1\1x17 Chester greenfield USACE Revisions.mxd plotted by chandley 08-20-2019



Aerial Exhibit

Chester-Greenfield Site +/- 287 Acres
 Chester, Chester County, South Carolina
 World Imagery 2017

Feature Estimates Project Area 2 (PJD)

Wetlands	
W-A:	1.84 ac
W-D:	0.03 ac
W-E:	0.01 ac
W-F:	0.02 ac
W-G:	0.02 ac
W-H:	0.51 ac
W-J:	0.11 ac
W-L:	0.01 ac
W-K:	0.06 ac
W-L:	2.31 ac
W-M:	0.04 ac
W-N:	0.01 ac
W-O:	0.14 ac
W-P:	0.66 ac
Total Wetlands:	5.76 ac

Non-Wetland Waters (Tributaries)	
NWW-1:	3,990 LF/1.61 ac
NWW-2:	3,793 LF/0.52 ac
NWW-3:	581 LF/0.05 ac
NWW-4:	154 LF/0.01 ac
NWW-5:	589 LF/0.04 ac
Total NWWs:	9,107 LF/2.23 ac

Non-Aquatic Resources (Ephemeral Drainages)	
13 NARs located on-site:	5,042 LF

Non-Aquatic Resource (Upland-Dug Detention Pond)	
NAR (Upland-Dug Detention Pond):	0.02 ac
Total Site Acreage:	272 acres
Total WOUS:	7.99 acres

**Project Area 1: 15 Acres
 AJD
 SAC# 2019-00728**

Feature Estimates Project Area 1 (AJD)

Non-Jurisdictional Wetland	
NJW-C:	0.35 ac

Non-Jurisdictional Features (Ephemeral Drainages)	
3 NJFs located on-site:	1,480 LF
Total Site Acreage:	15 acres
Total JWOUS:	0 acres

**Project Area 2: 272 Acres
 PJD
 SAC# 2019-00728**

- Upland Data Point Locations
- Wetland Data Point Locations
- Photo Direction & Location
- Non-Jurisdictional Features (Ephemeral Drainages)
- Non-Aquatic Resources (Ephemeral Drainages)
- Non-Wetland Waters (Tributaries)
- Non-Jurisdictional Wetlands (NJW)
- Non-Aquatic Resource (Upland-Dug Detention Pond)
- Wetlands
- Project Area 1 (15 Acres) - AJD
- Project Area 2 (272 Acres) - PJD

SCALE:
 1" = 500'
 DATE:
 8-20-19
 PROJECT NUMBER
 4261-19-016
 EXHIBIT NO.

REFERENCE:
 GIS BASE LAYERS WERE OBTAINED FROM ESRI. THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. ALL FEATURE LOCATIONS DISPLAYED ARE BASED ON GPS DATA COLLECTED IN THE FIELD BY S&M. THEY ARE NOT BASED ON CIVIL SURVEY INFORMATION, UNLESS STATED OTHERWISE.

ATTACHMENT

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): August XX, 2019

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

Applicant:

Mr. Bruce Smith
Luck Companies
PO Box 29682
Richmond, VA 23242
brucesmith@luckcompanies.com
(804) 476-6406

Consultant:

Mr. Chris Daves
S&ME, Inc.
134 Suber Road
Columbia, SC 29210
cdaves@smeinc.com
803-561-9024

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

Charleston District, Chester Greenfield Site: SAC 2019-00728

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

North of Lancaster Highway (SC 9) in Chester, Chester County, SC.

(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: SC County/parish/borough: Chester City: Chester

Center coordinates of site (lat/long in degree decimal format):

Site Location: Lat. 34.7289°N/ Long. -81.1554°W

Universal Transverse Mercator: NAD83

Name of nearest waterbody: Rocky Creek located on site.

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date:

Field Determination. Date(s): August 14, 2019

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH “MAY BE” SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude	Longitude	Estimated amount of aquatic resource in review area	Type of Aquatic Resource	Geographic Authority to which the Aquatic Resource “may be” Subject
Wetland A	34.7291	-81.1598	1.84 ac	Wetland	Section 404
Wetland D	34.7240	-81.1539	0.03 ac	Wetland	Section 404
Wetland E	34.7251	-81.1539	0.01 ac	Wetland	Section 404
Wetland F	34.7255	-81.1542	0.02 ac	Wetland	Section 404
Wetland G	34.7294	-81.1585	0.02 ac	Wetland	Section 404
Wetland H	34.7288	-81.1573	0.51 ac	Wetland	Section 404
Wetland I	34.7257	-81.1524	0.01 ac	Wetland	Section 404
Wetland J	34.7267	-81.1535	0.11ac	Wetland	Section 404
Wetland K	34.7266	-81.1537	0.06 ac	Wetland	Section 404
Wetland L	34.7287	-81.1532	2.31 ac	Wetland	Section 404
Wetland M	34.7301	-81.1526	0.04 ac	Wetland	Section 404
Wetland N	34.7307	-81.1514	0.01 ac	Wetland	Section 404
Wetland O	34.7308	-81.1500	0.14 ac	Wetland	Section 404
Wetland P	34.7308	-81.1488	0.66 ac	Wetland	Section 404
NWW-1 (Trib)	34.7256	-81.1559	3,990 LF/0.1.61 ac	Non-Wetland	Section 404
NWW-2 (Trib)	34.7292	-81.1529	3,793 LF/0.52 ac	Non-Wetland	Section 404
NWW-3 (Trib)	34.7279	-81.1534	581 LF/0.05 ac	Non-Wetland	Section 404
NWW-4 (Trib)	34.7287	-81.1533	189 LF/0.01 ac	Non-Wetland	Section 404
NWW-5 (Trib)	34.7313	-81.1521	679 LF/0.04 ac	Non-Wetland	Section 404

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable. This preliminary JD finds that there "*may be*" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply

- checked items should 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: **The site is depicted on a sketch prepared by S&ME, Inc. titled "Exhibit 3 – Aerial Exhibit", dated 8-20-2019.**

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: **SAC 1977 Navigability Study.**

U.S. Geological Survey Hydrologic Atlas: **HA 730-G, 1990.**

USGS NHD data.

USGS 8 and 12 digit HUC maps. **03050103-05 (Rocky Creek-Catawba River Watershed (Catawba River Basin).**

U.S. Geological Survey map(s). Cite scale & quad name: **1:24,000 (USGS 7.5 Minute Topographic Quadrangle Chester, SC 1969.**

USDA Natural Resources Conservation Service Soil Survey. Citation: **Chester & Fairfield Cos. Soil Survey, dated 1982.**

National wetlands inventory map(s). Cite name: **USFWS NWI Data – Chester, SC Quad.**

State/Local wetland inventory map(s): .

FEMA/FIRM maps: **45023C0210C, dated 9-16-2011.**

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

Photographs: Aerial (Name & Date): **World Imagery 2017 Aerial, Google Earth Aerial Photographs (1995-2018), and SCDNR Chester County Aerial Index (1999 and 2006).**

or Other (Name & Date): **Photos provided by S&ME, Inc. in JD request submittal dated 2-20-2019.**

Previous determination(s). File no. and date of response letter:

Other information (please specify): **Chester County LIDAR Data.**

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of
Regulatory Project Manager
(REQUIRED)

Signature and date of
person requesting preliminary JD
(REQUIRED, unless obtaining the
signature is impracticable)

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):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Charleston; Chester Greenfield Site; SAC-2019-00728; Form 1 of 1

C. PROJECT LOCATION AND BACKGROUND INFORMATION: North of Lancaster Highway (SC 9)

State: South Carolina County/parish/borough: **Chester** City: **Chester**
Center coordinates of site (lat/long in degree decimal format): Lat. **34.7248° N**, Long. **-81.1594° W**.
Universal Transverse Mercator: **NAD 83**

Name of nearest waterbody: **Rocky Creek**

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Catawba River**

Name of watershed or Hydrologic Unit Code (HUC): **Rocky Creek-Catawba River Watershed (03050103-05)**

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 14, 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 waters² (RPWs) that flow directly or indirectly into TNWs
- Non-RPWs that flow directly or indirectly into TNWs
- Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- Impoundments of jurisdictional waters
- Isolated (interstate or intrastate) waters, including isolated wetlands

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

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

Wetlands: acres.

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

Elevation of established OHWM (if known): N/A.

2. Non-regulated waters/wetlands (check if applicable):³ [Including potentially jurisdictional features that upon assessment are NOT waters or wetlands]

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: **Non-Jurisdictional Wetland C (0.35 ac). This wetland is surrounded by upland areas. This wetland receives**

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.

runoff from upland areas, but its only outlet is through evapotranspiration. It do not have either a surface or apparent subsurface hydrological connection, no apparent ecological interconnectivity with other water features including any waters of the U.S., and no apparent connection to interstate or foreign commerce. Therefore, this wetland was determined to be non-jurisdictional and not subject to the regulation under Section 404 of the CWA.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. **TNW**

Identify TNW: .

Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is “adjacent”:

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

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

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

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

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

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

(i) **General Area Conditions:**

Watershed size: **Pick List** ;

Drainage area: **Pick List**

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: N/A.

⁴ Note 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 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: T.

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
 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):

(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:

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.

⁷Ibid.

(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:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
█	█	█	█

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-RPWs⁸ 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: **B**.

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: 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: .

⁸See Footnote # 3.

⁹To 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.

is through evapotranspiration. The wetland does not have either a surface or apparent subsurface hydrological connection, no apparent ecological interconnectivity with other water features, including any waters of the U.S., and no apparent connection to interstate or foreign commerce. Therefore, the wetland was determined to be non-jurisdictional and not subject to regulation under Section 404 of the CWA.