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

Δ	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION ((ID)	• February	21 2023
~.	REPORT COMPLETION DATE FOR ALL ROYED JURISDICTIONAL DETERMINATION	(JD)	• I Coruary	21, 2023

B.	DIS	TRICT OFFICE, FILE NAME, AND NUMBER: CESWL-RD, Mead Properties, SWL-2023-00030				
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: Arkansas County/parish/borough: Benton City: Siloam Springs Center coordinates of site (lat/long in degree decimal format): Lat. 36.1854°, Long94.5095° Universal Transverse Mercator: NAD 83/UTM Zone 15, 4005568 Northing, 364267 Easting Name of nearest waterbody: Unnamed tributary to Sager Creek Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Illinois River (OK) Name of watershed or Hydrologic Unit Code (HUC): 11110103 (Illinois)					
		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.	REV	VIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):				
		Office (Desk) Determination. Date: February 17, 2023				
	\checkmark	Field Determination. Date(s): February 7, 2023 Additional field visit on February 15, 2023				
SEC	CTIO	ON II: SUMMARY OF FINDINGS				
A.	RH /re are	A SECTION 10 DETERMINATION OF JURISDICTION. e no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review quired] 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:				
		A SECTION 404 DETERMINATION OF JURISDICTION. e and are not "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				
	$\overline{\mathbf{Q}}$	Relatively Permanent Waters ² (RPWs) that flow directly or indirectly into TNWs				
		Non-RPWs that flow directly or indirectly into TNWs				
	$\overline{\mathbf{V}}$	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: Stream A, 163 linear feet: 9 width (ft); Stream B, 586 linear feet: 3.5 width. Wetlands: Wetland A 0.35 acres.				
		c. Limits (boundaries) of jurisdiction based on: Established by OHWM				
		Elevation of established OHWM (if known):				
	2. ✓	Non-regulated waters/wetlands (check if applicable): ³ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.				

represent preamble waters that are generally not considered jurisdictional per 51 FR, 41217 (November 13, 1986). SECTION III: CWA ANALYSIS

Explain: A man-made pond constructed in uplands was located in the west-central portion of the subject property. This feature was drained and partially filled in 2006 (Google Earth Pros). Two relict, ponded features (part of the original) pond were identified by the Agent (PMI) and observed during the Corps site visit. These features, Upland Pond A (0.17 acre) and Upland Pond B (0.06 acre),

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.

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

General Area Conditions: Watershed size: 757.7 square miles Drainage area: 1.48 square miles Average annual rainfall: 47 inches Average annual snowfall: 9 inches (ii) Physical Characteristics: (a) Relationship with TNW: ☐ Tributary flows directly into TNW. Tributary flows through tributaries before entering TNW. Project waters are 30 (or more) river miles from TNW. Project waters are 1 (or less) river miles from RPW. Project waters are 25-30 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: No, project waters do not cross state boundaries. Identify flow route to TNW5: Stream B flows to Stream A, then to Sager Creek, to Flint Creek, and then to Illinois River (TNW). Tributary stream order, if known: 1st Order. (b) General Tributary Characteristics (check all that apply): Tributary is: ✓ Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain: Portions of Stream B have been channelized. **Tributary** properties with respect to top of bank (estimate): Average width: 3.5 feet

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.

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

			ge depth: 0.5 feet ge side slopes: 3						
		☑ S ☑ C □ B	butary substrate c ilts Cobbles Bedrock Other, Explain:		Sands Gravel		ly): [over: Sedges]] s/<5	Concrete Muck percent
		amounts of Presence of consisted of Tributary g	erosion were not	ed withing omplexe runs. Vely Strain	n the relevants. Explain:	t reach. P Stream B	ortions of Str	eam	in: Stream B is relatively stable, although minor in B have been channelized. run/riffle/pool complexes; the natural reaches
	(c)	Estimate av Descri and gr Other inforto support f stream data Surface flowith a wetla Subsurface dimension i	oundwater. mation on duration low consistently a available outside w is: Discrete and and complex (por	flow ever Channel on and vo in the wa e of aeria d Confin- rtions of Explain v regime.	ents in review flows during colume: Based et period bet al imagery, ed Characte Wetland A) findings: U , likely recei	d on revie ween (esp ristics: Ch in the nor ndetermin	on; receiving w of aerial in ecially betwe nannel is fairl thern portion ned, although	hydnage en l y we of t base	drology from natural runoff, stormwater runoff, ery between 1994 and 2022, the channel appeared December – March). No specific gage date or rell-defined, although exhibits a discrete connection the subject property.
			changes in the shelving vegetation mat leaf litter distu	Il indicat ine impro characte ted down rbed or v sition	essed on the or of soil n, bent, or ab washed away	bank	destruction the presence sediment so scour multiple obs	of to e of rting	
			ther than the OHY ligh Tide Line ind oil or scum line fine shell or de physical marki tidal gauges other (list):	dicated be along s bris dep	oy: shore objects osits (foresh	□ Me	ean High Wa survey to av physical ma	ter N aila rkir	
(iii)			outary (e.g., water						lity; general watershed characteristics, etc.). 2023. Water quality is likely impacted by urban

Identify specific pollutants, if known: No specific pollutant identified, although herbicides, pesticides, increased nutrients, and hydrocarbons would be expected from upstream urban and suburban areas.

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

(iv)	Bio!	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Overall, this channel supported a narrow riparian corridor, consisting primarily of herbaceous species (with scattered trees such as green ash and black willow in portions of the reach
	_	near the northern boundary of subject property).
		Wetland fringe. Characteristics:
	\checkmark	Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
		Aquatic/wildlife diversity. Explain findings: During the Corps site visit, benthic macroinvertebrates (crane fly larvae and other Dipterans) were observed within the channel. In addition, small frog species (<i>Acris crepitans</i>) and crayfish (Cambaridae) were observed. Additional species of amphibians, small mammals, and birds potentially utilize the channel for foraging and associated narrow riparian zone for roosting, loafing, and shelter.
Cha	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)	Phy	vsical Characteristics:
	(a)	General Wetland Characteristics:
		Properties: Westland sizes Westland A 0.25 comes
		Wetland size: Wetland A 0.35 acres Wetland type. Explain: Palustrine emergent, supporting primarily sedges (<i>Carex</i> spp.), rushes (<i>Juncus</i> sp.), and green ash
		sampling (Fraxinus pennsylvanica).
		Wetland quality. Explain: Low to moderate quality based on limited wetland functions and values (relatively small areas that are routinely disturbed by hay production). Low diversity of hydrophytes and relatively short-term inundation during growing season.
		Project wetlands cross or serve as state boundaries. Explain: No, wetlands do not cross or serve as state boundaries.
	(b)	General Flow Relationship with Non-TNW: Flow is: Intermittent Flow Explain: Wetland A exhibits an intermittent hydrologic connection to Stream B.
		Surface flow is: Discrete and Confined Characteristics: Wetland A abuts Stream B (direct hydrologic connection to Stream B); portions of Wetland A support an ephemeral and shallow-subsurface connection to Stream B.
		Subsurface flow: Unknown 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
	(u)	Project wetlands are 30 (or more) river miles from TNW.
		Project waters are 25-30 aerial (straight) miles from TNW.
		Flow is from: Wetland to Navigable Waters
		Estimate approximate location of wetland as within the 50 - 100-year floodplain.
(ii)		emical Characteristics: tracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics;
). Explain: Water was generally clear as observed in Wetland A during Corps site visit. Water quality likely impacted by
		rby urban runoff.
		ntify specific pollutants, if known: No specific pollutant identified, although herbicides, pesticides, increased nutrients, and rocarbons would be expected from upstream urban and suburban areas.
(iii)	Bio	logical Characteristics. Wetland supports (check all that apply):
		Riparian buffer. Characteristics (type, average width):
	\checkmark	Vegetation type/percent cover. Explain: Early successional hydrophyte community that consisted of caric sedges (<i>Carex</i>
	/	spp.), rushes (<i>Juncus</i> sp.) and green ash saplings (<i>Fraxinus pennsylvanica</i>). Habitat for:
	$\overline{\mathbf{A}}$	
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:

2.

Aquatic/wildlife diversity. Explain findings: Frogs and crayfish were observed within Wetland A during Corps site visit Amphibians, reptiles, small mammals, insects, and birds likely utilize the wetland communities for foraging.

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

All wetland(s) being considered in the cumulative analysis: 1 Approximately (0.35) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Dir	rectly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Wetland A	Yes	0.35		

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:

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

API	PLY):
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: Tributary supports water/flow in numerous years of record (based on aerial imagery accessed on Google Earth Pro), fish and benthic macroinvertebrates were observed within the channel, diverse sediment sorting, an associated floodplain, and mapping by USGS topographic quadrangle (Siloam Springs, AR) as perennial, all support the determination that the channel 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: Stream B

amount of flow during two Corps site visits (February 7, 2023 and February 15, 2023).

supported a benthic macroinvertebrate community, filamentous algae, reaches of well-defined bed/banks, and evidence of sustained flow based on several years of record (aerial photography provided by Google Earth Pro). The channel exhibited a good

		Tributary waters: Stream A: 163 linear feet 9 width (ft); Stream B: 586 linear feet, 3.5 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: Wetland A is intersected by Stream B and directly abuts both the left and right banks of the channel. The channel becomes braided and contributes to wetland hydrology in this reach.
		Provide acreage estimates for jurisdictional wetlands in the review area: 0.35 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. 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).
E.	OR	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION R DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK IL THAT APPLY): ¹⁰
		which are or could be used by interstate or foreign travelers for recreational or other purposes.
		from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce.
		Interstate isolated waters. Explain: Other factors. Explain:
	Ide	entify water body and summarize rationale supporting determination:
	Prov	ovide 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:

 ⁸See 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.

		Wetlands: acres.
F.	NO	N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
		If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
		Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above): Two features, Upland Pond A (0.17 acre) and Upland Pond B (0.06 acre), were identified as man-made ponds by the Agent (PMI). These features represent relicts of a man-made pond that was drained and partially filled. These features were constructed in uplands and fit the definition of generally excluded waters per 51 FR, 41217.
	(i.e. (che	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors, presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment ack 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: .
	Ш	Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a ing is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
		Lakes/ponds: acres.
		Other non-wetland waters: acres. List type of aquatic resource: .
		Wetlands: acres.
SEC	CTIC	NIV: DATA SOURCES.
A.		PPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and tested, appropriately reference sources below):
	V	Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Meadows Properties – Siloam Springs, Arkansas USACE Delineation and AJD Request by PMI dated January 9, 2023. Revised delineation report dated February 20, 2023. 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:
	$\overline{\mathbf{A}}$	Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: HUC 8: 11110103 (Illinois); HUC 12: 111101030502 (Sager Creek). NHD accessed using National Regulatory Viewer (February 2023). USGS NHD data.
	$\overline{\mathbf{V}}$	U.S. Geological Survey Hydrologic Atlas: HUC 8: 11110103 (Illinois); HUC 12: 111101030502 (Sager Creek). NHD accessed using National Regulatory Viewer (February 2023). ☑ USGS NHD data. ☑ USGS 8 and 12 digit HUC maps.
	✓	U.S. Geological Survey Hydrologic Atlas: HUC 8: 11110103 (Illinois); HUC 12: 111101030502 (Sager Creek). NHD accessed using National Regulatory Viewer (February 2023). ☑ USGS NHD data. ☑ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: Siloam Springs, AR (1:24K).
		U.S. Geological Survey Hydrologic Atlas: HUC 8: 11110103 (Illinois); HUC 12: 111101030502 (Sager Creek). NHD accessed using National Regulatory Viewer (February 2023). ☑ USGS NHD data. ☑ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: Siloam Springs, AR (1:24K). USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey and soil maps provided by PMI in wetland delineation (January 2023).
		U.S. Geological Survey Hydrologic Atlas: HUC 8: 11110103 (Illinois); HUC 12: 111101030502 (Sager Creek). NHD accessed using National Regulatory Viewer (February 2023). ☑ USGS NHD data. ☑ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: Siloam Springs, AR (1:24K). USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey and soil maps provided by PMI in
		U.S. Geological Survey Hydrologic Atlas: HUC 8: 11110103 (Illinois); HUC 12: 111101030502 (Sager Creek). NHD accessed using National Regulatory Viewer (February 2023). ☑ USGS NHD data. ☑ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: Siloam Springs, AR (1:24K). USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey and soil maps provided by PMI in wetland delineation (January 2023). National wetlands inventory map(s). Cite name: NWI maps provided by PMI in wetland delineation.
		U.S. Geological Survey Hydrologic Atlas: HUC 8: 11110103 (Illinois); HUC 12: 111101030502 (Sager Creek). NHD accessed using National Regulatory Viewer (February 2023). ✓ USGS NHD data. ✓ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: Siloam Springs, AR (1:24K). USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey and soil maps provided by PMI in wetland delineation (January 2023). National wetlands inventory map(s). Cite name: NWI maps provided by PMI in wetland delineation. State/Local wetland inventory map(s):
		U.S. Geological Survey Hydrologic Atlas: HUC 8: 11110103 (Illinois); HUC 12: 111101030502 (Sager Creek). NHD accessed using National Regulatory Viewer (February 2023). ☑ USGS NHD data. ☑ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: Siloam Springs, AR (1:24K). USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey and soil maps provided by PMI in wetland delineation (January 2023). National wetlands inventory map(s). Cite name: NWI maps provided by PMI in wetland delineation. State/Local wetland inventory map(s): FEMA/FIRM maps:
		U.S. Geological Survey Hydrologic Atlas: HUC 8: 11110103 (Illinois); HUC 12: 111101030502 (Sager Creek). NHD accessed using National Regulatory Viewer (February 2023). ☑ USGS NHD data. ☑ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: Siloam Springs, AR (1:24K). USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey and soil maps provided by PMI in wetland delineation (January 2023). National wetlands inventory map(s). Cite name: NWI maps provided by PMI in wetland delineation. State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
		U.S. Geological Survey Hydrologic Atlas: HUC 8: 11110103 (Illinois); HUC 12: 111101030502 (Sager Creek). NHD accessed using National Regulatory Viewer (February 2023). ☑ USGS NHD data. ☑ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: Siloam Springs, AR (1:24K). USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey and soil maps provided by PMI in wetland delineation (January 2023). National wetlands inventory map(s). Cite name: NWI maps provided by PMI in wetland delineation. State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929) Photographs: ☑ Aerial (Name & Date): Google Earth (1994-2022); Maps provided by PMI in wetland delineation or ☑ Other (Name & Date): Site photographs provided by PMI in wetland delineation. Previous determination(s). File no. and date of response letter:
		U.S. Geological Survey Hydrologic Atlas: HUC 8: 11110103 (Illinois); HUC 12: 111101030502 (Sager Creek). NHD accessed using National Regulatory Viewer (February 2023). ☑ USGS NHD data. ☑ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: Siloam Springs, AR (1:24K). USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey and soil maps provided by PMI in wetland delineation (January 2023). National wetlands inventory map(s). Cite name: NWI maps provided by PMI in wetland delineation. State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929) Photographs: ☑ Aerial (Name & Date): Google Earth (1994-2022); Maps provided by PMI in wetland delineation or ☑ Other (Name & Date): Site photographs provided by PMI in wetland delineation. Previous determination(s). File no. and date of response letter: Applicable/supporting case law:
		U.S. Geological Survey Hydrologic Atlas: HUC 8: 11110103 (Illinois); HUC 12: 111101030502 (Sager Creek). NHD accessed using National Regulatory Viewer (February 2023). ☑ USGS NHD data. ☑ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: Siloam Springs, AR (1:24K). USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey and soil maps provided by PMI in wetland delineation (January 2023). National wetlands inventory map(s). Cite name: NWI maps provided by PMI in wetland delineation. State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929) Photographs: ☑ Aerial (Name & Date): Google Earth (1994-2022); Maps provided by PMI in wetland delineation or ☑ Other (Name & Date): Site photographs provided by PMI in wetland delineation. Previous determination(s). File no. and date of response letter:

B. ADDITIONAL COMMENTS TO SUPPORT JD: A wetland delineation by PMI in January 2023 initially identified a perennial channel (Stream A totaling 163 linear feet), an intermittent channel (Stream B totaling 586 linear feet), Upland Pond A (0.17 acre), and Upland Pond B

(0.06 acre). A Corps site visit on February 7, 2023, confirmed the status and locati however, the Corps site visit resulted in determination of the channel as a seasonal Upland Pond A and Upland Pond B were relict pond features resulting from the read wetland feature (Wetland A) totaling approximately 0.35 acre that abuts Stream not identified in the wetland delineation report initially provided by PMI (dated Ja PMI and the Corps resulted in PMI updating the wetland delineation to include the are regulated under Section 404 of the Clean Water Act (CWA) as Waters of the Uand Wetland A. The upland pond features (Upland Pond A and Upland Pond B) rejurisdictional per 51 FR, 41217 (November 13, 1986), and therefore are not regular	I intermittent channel. The Corps site confirmed that both emains of a man-made pond that was partially filled and drained. B, was observed during the Corps site visit. This feature was anuary 9, 2023). A subsequent site visit on February 15, 2023, by the wetland feature. In summary, the following aquatic resources United States within the subject property: Stream A, Stream B, represent preamble waters that are generally not considered
David Dave	February 21, 2023Date
David Rupe	Date

Project Manager