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): 3/30/2022

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:CEMVR-RD-2021-1595

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State:Iowa County/parish/borough: Dallas City: Urbandale
Center coordinates of site (lat/long in degree decimal format): Lat. 41.6624° **N**, Long. -93.8295° **W**.
Universal Transverse Mercator: UTM Z 15 NAD 83
Name of nearest waterbody: Walnut Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Des Moines River
Name of watershed or Hydrologic Unit Code (HUC): 7100006
☐ 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: 3/9/2022
☐ Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☒ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☒ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☒ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: 3785 linear feet: width (ft) and/or acres.
      Wetlands: 2.13 acres.

   c. **Limits (boundaries) of jurisdiction** based on: **1987 Delineation Manual**
      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.
   Explain: **The following wetlands were determined to be non-jurisdictional. Wetland 11 (0.66 acres), Wetland 12 (0.14 acres), Wetland 13 (0.09 acres), Wetland 14 (0.02 acres), Wetland 9 (0.16 acres) and Wetland 15 (0.20 acres). Several swales were also noted by the consultant, Terracon, and these swales are non-jurisdictional because they are charcterized by low duration flows with no characteristics of a stream and no not contain any ordinary high water marks. All features are identified on Figure 5A. Wetlands 11, 12, 13, 14, 9 and 15 are isolated wetlands. Wetland 11**

[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.

appears at the top of an agricultural drainageway that was converted to a grassed waterway at an undetermined date in the past. There is approximately 1000-feet between wetland 11 and wetland 10, which directly abuts a downstream RPW. There are also two upland data points (DP 23 and 24) between wetland 11 and 10. Wetland 9 is similar in that it sits atop an area that drains to the main tributary that bisects the site. There is one data point between wetland 9 and wetland 8, which has an ephemeral connection to drainage 1. The data point was determined to be upland and this repesents a clear hydrologic break between wetland 9 and 8.

Wetlands 12, 13, 14 and 15 are all depressional wetlands within an active farm field. It was determined that wetland 12 did not meet the three parameter criteria due to the incorrect applicatio of hydrology indicators B3 and B10. These indicatorrs are typically used in linear systems along tributaries

Wetland 13 is a hydrologically isolated wetland. The wetland indicators were correctly applied but there is no hydrologic connection to a downstream RPW.

Wetland 14 is a hydrologically isolated wetland depression. It has no connection to a downstream waterway or RPW.

Wetland 15 is a hydrologically isolated wetland with no overland conection to a downstream RPW. It appears that wetland 15 may connect to wetland 9 due to a poorly graded powerline access, but wetland 9 is non-jurisdictional.

In summary, wetlands 11, 13, 14, 15 and 9 are all hydrologically isolated wetlands. These wetlands have no nexus with a downstream waterway that is more than speculative. No fish, shellfish or any other waterborne organisms could be caught and harvested from these wetlands. There is no interstate commerce connection between these wetlands and a downstream TWN or RPW. Wetland 12 was determined to be non-wetland based on the incorrection application of the Regional Supplement indicators for hydrology.

Drainage 2, 2A and 3 were all identified as ephemeral drainages. None of these drainages are mapped. According to the wetland delineation, these features were dry at the time of the delineation and had overall widths no greater than 1.5 feet. These features have extremly low flow, no OHWM noted and only exist as swales within a wetland or they connect wetlands to the downstream RPW.

Drainages 2 and 2A connect wetlands 6 and 7 and 7 and 8. These drainages are characterized by low flow and short duration. Based on the 2007 guidebook, these two features, while non-jurisdictional, do provide the connections that allows water to flow from wetland 8 to wetland 7 to wetland 6 and into the jurisdictional tributary.

Drainage 3 is similar in that it carries ephemeral flow through a wetland to the main tributary. This drainage feature is not a stream, it is a swale that is non-jurisdictional.

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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: **N/A**.

Summarize rationale supporting determination: N/A.

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": N/A.

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

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

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

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

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

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

(i) General Area Conditions:
Watershed size: 2470 **square miles**
Drainage area: 440 **acres**
Average annual rainfall: 35-40 inches
Average annual snowfall: 30-40 inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☒ Tributary flows through **2** tributaries before entering TNW.

Project waters are **10-15** river miles from TNW.
Project waters are **1 (or less)** river miles from RPW.
Project waters are **10-15** 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: ALl waters are within the State of Iowa.

Identify flow route to TNW[5]: Unnamed tributary (Drainage 1) - Walnut Creek - Raccoon River - Des Moines River.
Tributary stream order, if known: 1st .

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(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: 2-4 feet
Average depth: <1 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: .
Presence of run/riffle/pool complexes. Explain: Project area contains a Run.
Tributary geometry: **Meandering**
Tributary gradient (approximate average slope): 0-2 %

(c) Flow:

Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **20 (or greater)**
Describe flow regime: The flow regime is perennial. The analysis is being done to complete the significant nexus for wetlands 6, 7 and 8.
Other information on duration and volume: The tributary is a perennial stream. This choice is not available in the pick list. In addition .

Surface flow is: **Discrete and confined.** Characteristics: The channel is well contained between its banks..

Subsurface flow: **Unknown**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☒ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☒ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

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

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

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: According to the wetland delineation, the water color was brownish and clarity was not very good. The watershed is currently developing and the water quality is expected to degrade over time .
Identify specific pollutants, if known: Unknown.

[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.

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

☒ Riparian corridor. Characteristics (type, average width): There is a forested riparian corridor along the entire drainage under review. It appears to be 100 to 150 feet wide..

☒ Wetland fringe. Characteristics: Several wetlands have been identified by the wetland consulnat along Drainage 1..

☒ Habitat for:

☐ Federally Listed species. Explain findings: .

☐ Fish/spawn areas. Explain findings: .

☐ Other environmentally-sensitive species. Explain findings: .

☒ Aquatic/wildlife diversity. Explain findings: Wetland consultant identified frogs within the drainage area.

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: 0.96 acres

Wetland type. Explain:Wetlands, 6, 7 and 8 can be characterized as emergent wetlands mixed with small shrubs.

Wetland quality. Explain: All wetlands are dominated by reed canary grass and willow species. These wetlands exist in a drainageway that has not been manipulated for farming, however we are not aware whether there are tile lines in the drainage feature..

Project wetlands cross or serve as state boundaries. Explain: N/A.

(b) General Flow Relationship with Non-TNW:

Flow is: **Ephemeral flow**. Explain: Wetland 8 is connected to wetland 7 via a small channel that is 1.5 feet wide at the widest point. The channel is ephemeral in nature and pools of water were observed according to the wetland delineation. There was no OHWM observed. Wetland 7 connects to wetland 6 through a similar ephemeral channel. Wetland 6 is connected to the unnamed perennial tributary that leads to Walnut Creek via a third ephemeral channel.

Surface flow is**: Discrete and confined**

Characteristics: Wetland 8 flows to wetland 7 through an ephemeral drainage. Wetland 7 leads to wetland 6 through another small channel. Wetland 6 connects to the unnamed perennial tributary through another 100-foot ephemeral channel.

Subsurface flow: **Unknown**. Explain findings: .

☐ Dye (or other) test performed: N/A.

(c) Wetland Adjacency Determination with Non-TNW:

☐ Directly abutting

☒ Not directly abutting

☒ Discrete wetland hydrologic connection. Explain: Drainage 2 and 2A connect all the wetlands (6, 7 and 8) with the downstream RPW.

☒ Ecological connection. Explain: Aerial photos suggest that there are ecological connections but other than photos this is unknown.

☒ Separated by berm/barrier. Explain: Wetland 2 is separated from drainage 1 by a rock lined channel that was constructed when work was done in drainage 1. This was an authorized project.

(d) Proximity (Relationship) to TNW

Project wetlands are **10-15** river miles from TNW.

Project waters are **10-15** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters.**

Estimate approximate location of wetland as within the **100 - 500-year** 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: Water was not present in the two channels that connect wetlands 6, 7 and 8 to drainage 1. These three wetlands are located in the middle of an agricultural field. This field is likely to contain common agricultural pollutants found in fertilizers, such as nitrogen, phosphous and pottasium. .

Identify specific pollutants, if known: Unknown at this time.

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

☒ Riparian buffer. Characteristics (type, average width):Wetlands 6, 7 and 8 are all within a narrow strip no wider than 40 to 50 feet..

☒ Vegetation type/percent cover. Explain:Vegetation is dominated by reed canary grass.

☐ Habitat for:

☐ Federally Listed species. Explain findings:N/A.

☐ Fish/spawn areas. Explain findings: channels are dry, unlikely that fish would utilize these areas.

☐ Other environmentally-sensitive species. Explain findings:N/A.

☒ Aquatic/wildlife diversity. Explain findings:Amphibians could use these areas when the water levels are seasonally higher..

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

All wetland(s) being considered in the cumulative analysis: **3**

Approximately (0.97) 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)
N - WL 6	0.23 acres	N - WL 7	0.03 acres
N - WL 8	0.71 acres	Y - WL 5	0.08 acres
Y- WL 4	0.01 acres	Y - WL 1	0.15 acres
Y - WL 10	0.84 acres	Y - WL 3	0.04 acres
Y - WL 2	0.04 acres		

Summarize overall biological, chemical and physical functions being performed: Wetlands 6, 7 and 8 perform water quality functions over anything else. These small wetlands likely absorb water seasonally and allow it to flow back into the watershed slowly. Working in combination with the other wetlands that abut drainage 1 these wetlands perform functions on more than a speculative basis..

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: Wetlands 6, 7 and 8 have a significant nexus with Drainage 1. These three wetlands are adjacent to an RPW based on their unbroken hydrologic connection that is documented in the wetland delineation. There was no water quality information available at the time of the delineation and the channel was dry. Drainages 2 and 2A are small swales within wetlands 6, 7 and 8, therefore they do serve as a biological connection between the three wetlands that link the three to the downstream tributary. If pollutants were present in these three wetlands, the drainages (2 and 2A would carry them downstream).These three wetlands play a role in sediment transport to the downstream tributary.

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: Drainage 1 is a perenial stream. It was described as perennial in the wetland delineation completed by Terracon. This tributary flows to Walnut Creek which is a tributary of the Raccoon River, a major RPW that flows to the Des Moines River, a TNW .
   ☐ 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: **3875** linear feet width (ft).
   ☐ Other non-wetland waters: acres.
   Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
   ☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
   ☒ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
   ☒ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **Figure 5 from the wetland delineation illustrates that Wetlands 2, 3, 1, 4, 5, and 10 directly abut Drainage 10. Data supporting the perennial determination is described above.**

   ☐ 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: **1.16** 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: **0.97** acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
   ☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
   As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
   ☐ Demonstrate that impoundment was created from "waters of the U.S.," or
   ☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
   ☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

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

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

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

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☒ Other: (explain, if not covered above): **Wetlands determined to be isolated are described above.**

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

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

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:Terracon wetland delineation, Figure 5.
☒ 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:Grimes, IA 24K, Figure 6.
☒ USDA Natural Resources Conservation Service Soil Survey. Citation:Exhibit 3 in wetland delineation.
☒ National wetlands inventory map(s). Cite name:Exhibit 2 in wetland delineation.

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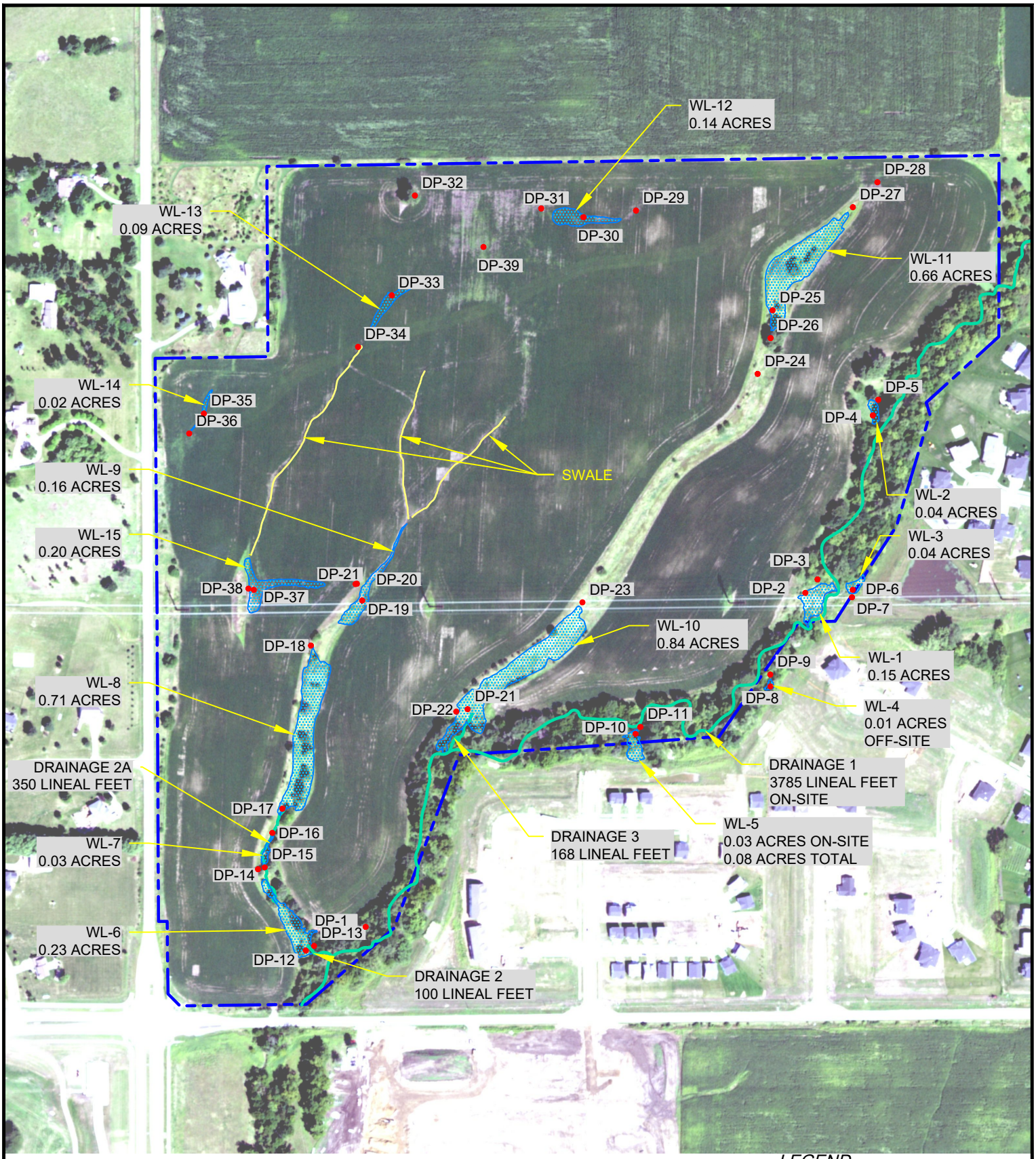
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

- ☐ State/Local wetland inventory map(s): .
- ☐ FEMA/FIRM maps: .
- ☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- ☐ Photographs: ☐ Aerial (Name & Date): .
  or ☐ Other (Name & Date): .
- ☐ Previous determination(s). File no. and date of response letter: .
- ☐ Applicable/supporting case law: .
- ☐ Applicable/supporting scientific literature: .
- ☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: .



LEGEND

- BOUNDARY OF ASSESSED AREA
- WETLAND AREA
- DATA POINT LOCATION

AERIAL PHOTO FROM IOWA GEOGRAPHIC MAP SERVER MAINTAINED BY IOWA STATE UNIVERSITY AND MIT - http://cairo.gis.iastate.edu/map.html

NORTH

0 400'

APPROXIMATE SCALING

Project No.	08217204
Date:	7/29/2021
Project Mngr:	ACC
Drawn By:	JAL
File Name:	08217204-03.dwg
Layout Name:	E5

Terracon
Consulting Engineers and Scientists
600 SW 7TH STREET DES MOINES, IOWA 50309
PH. (515) 244-3184 FAX. (515) 244-5249

WETLAND DELINEATION MAP

MAGNOLIA HEIGHTS WETLAND DELINEATION
NW OF INTERSECTION OF NW 156TH ST. & WATERFORD RD.
URBANDALE, IOWA

EXHIBIT

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