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 IN	NFORMATION
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REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 10/14/2021

DISTRICT OFFICE FILE NAME AND NUMBER

в.	DISTRICT OFFICE, FILE NAME, AND NUMBER:		
	Galveston District, SWG-2020-00538, 262 Acres, HCFCD Project No. P500-02-00-E013		
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: Texas		
	JD form. PJD form for Deed Restricted area		
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: 10/14/2021 ☐ Field Determination. Date(s):		
SEC	CTION II: SUMMARY OF FINDINGS		
_	RHA SECTION 10 DETERMINATION OF JURISDICTION.		
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew 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:		
В. (CWA SECTION 404 DETERMINATION OF JURISDICTION.		

There are 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	II 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 TN			
	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs			
		Impoundments of jurisdictional waters		
	\boxtimes	Isolated (interstate or intrastate) waters, including isolated wetlands		

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

Non-wetland waters: 10,402 linear feet, 3.219 acres

Wetlands: N/A

c. Limits (boundaries) of jurisdiction based on: Established by OHWM.

Elevation of established OHWM (if known):

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).

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 nearest relatively permanent water is Little Cypress Creek. The features present on the subject property are detailed in the table below, along with their distance to Little Cypress Creek.

Name	Ditch A	Ditch B	Ditch C	Ditch D	Ditch E	Ditch F1
Approximate Size (acre)	1.36	0.041	0.024	0.076	0.082	0.893
Elevation (feet above mean sea level)	194	184	185	172	172	189
Distance to Little Cypress Creek (feet)	7,089	5,545	6,678	2,729	2,750	6,564
Center Coordinate of Site (decimal degrees, NAD 83)	30.049304451, -95.747471304	30.045098293, -95.746825503	30.046488395, -95.754538380	30.036983641, -95.742846199	30.036866513, -95.742814246	30.047790000, -95.738390000

Name	Pond A	SCF A	SCF B	Wetland J
Approximate Size (acre)	0.24	15.751	8.229	0.073
Elevation (feet above mean sea level)	173	184	192	185
Distance to Little Cypress Creek (feet)	2,852	7,316	8,262	5,213
Center Coordinate of Site (decimal degrees, NAD 83)	30.037386686, -95.741822460	30.048597916, -95.753816183	30.052203259, -95.736819697	30.044026540, -95.738594869

The features (Wet J, 0.073 ac)) are either located outside of the 100-year floodplain (base floodplain elevation is 184 feet AMSL), would not be considered impoundments of jurisdictional water, and have no hydrological connection to jurisdictional waters or wetlands in the area. Therefore, these features have been determined to be "ISOLATED" as defined in federal regulations (33 CFR 330.2(e)).

Wetland J was identified using the 1987 Manual Regional Supplement: Atlantic and Gulf Coastal Plain Region, which requires that all three wetland criteria be present under normal circumstances for an area to be determined a wetland. The wetland is a depression area that experiences seasonal hydrology during and after rain events, providing the conditions necessary for a wetland to establish.

Impacts to the above features would not affect interstate or foreign travelers for recreational or other purposes, would not affect fish or shellfish that could be taken and sold in interstate or foreign commerce, and would not affect the current use or potential use for industrial purposes by industries in interstate commerce. Therefore, these features are not considered waters of the US.

"Adjacent" as per Federal regulations 33 CFR 328.3 is defined: "bordering, contiguous, or neighboring. Wetlands separated from other Waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are 'adjacent wetlands'." The nearest Waters of the U.S. to the features listed above is Little Cypress Creek. The water features and wetland are not expected to share surface hydrology with Little Cypress Creek, including during high flow (e.g., the 100-year floodplain), as they are isolated from the base floodplain elevation of Little Cypress Creek. The water features and wetland are also separated from other Waters of the U.S. by uplands that do not allow the exchange of waters via a confined surface hydrology connection during normal conditions and these water features and wetland are not inseparably bound with Little Cypress Creek.

³ Supporting documentation is presented in Section III.F.

"Isolated" waters as defined in 33 CFR 330.2 (e) is: "those non-tidal Waters of the U.S. that are: (1) not part of a surface tributary system to interstate or navigable Waters of the U.S.; and (2) not adjacent to such tributary waterbodies." These water features and wetland have been identified as an aquatic resource and has been determined to be isolated.

"Waters of the U.S." are defined in 33 CFR 328.3 (a) 1 through 7 which is addressed in the following. Due to the fact that these aquatic resources: (1) are not currently used, or were used in the past, nor susceptible to be used for interstate or foreign commerce nor subject to the ebb and flow of the daily tide; (2) do not cross interstate or tribal boundaries; (3) the destruction of these wetlands are not expected to affect (i) interstate or foreign travelers for recreational purposes or other purposes or (ii) fish or shellfish that could be taken and sold in interstate or foreign commerce or (iii) current use or potential use for industrial purposes by industries in interstate commerce; (4) are not impoundments of Waters of the U.S.; (5) are not part of a surface tributary system of (a) (1) through (4); (6) are not part of the territorial seas; and (7) are not adjacent to Waters of the U.S. identified in (a) (1) through (6). Therefore, it is SWG position that these aquatic resources are not Waters of the U.S. subject to Section 404 of the Clean Water Act.

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, fill out Section III.D.2 and 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 water body is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the water body 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: 7.5 **square miles**Drainage area: 7.5 **square miles**Average annual rainfall: 1,205.7 2mm

Average annual snowfall:

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

	Physical Characteristics: (a) Relationship with TNW: ☐ Tributary flows directly into TNW. ☑ Tributary flows through 2 tributaries before entering TNW.				
	Project waters are 20-25 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: N/A				
	Identify flow route to TNW ⁵ : Ditch F2 flows into Stream A. Stream A flows into Little Cypress Creek. Little Cypress Creek flows into Cypress Creek. Cypress Creek turns into a TNW at 30.005965, -95.512663. Tributary stream order, if known: 1				
(b) General Tributary Characteristics (check all that apply): Tributary is: □ Natural □ Artificial (man-made). Explain: Ditch F2 is a man-made, upland-cut drainage feature the not relocate a tributary and is not constructed in a tributary. □ Manipulated (man-altered). Explain: Stream A appears to be a natural tributary, but a sit has been diverted to flow underneath a highway and the slopes have been lined with concriprap.					
	Tributary properties with respect to top of bank (estimate): Average width: Stream A: 7ft; Ditch F2: 68ft Average depth: Stream A: 2, Ditch F2: 3 Average side slopes: 2:1				
	Primary tributary substrate composition (check all that apply): Silts				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: The banks are experiencing erosion. Presence of run/riffle/pool complexes. Explain: Tributary geometry: Meandering Tributary gradient (approximate average slope): 30%				
(c) Flow: Tributary provides for: Estimate average number of flow events in review area/year: 2-5 Describe flow regime: Intermittent Other information on duration and volume:					
	Surface flow is: Confined. Characteristics: Surface flow increases or decreases according to precipitation.				
	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 changes in the character of soil changes in the character of soil the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment deposition multiple observed or predicted flow events abrupt change in plant community other (list):				

(ii)

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. 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 water body'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.

	☐ 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:
Č	hemical Characteristics: haracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: The water is muddy brown in color and ranges from moderate to shallow depth. lentify specific pollutants, if known: N/A
	_ 1
Chara	cteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(1	hysical Characteristics: O General Wetland Characteristics: Properties: Wetland size: Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain: O 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:
((Wetland Adjacency Determination with Non-TNW: □ Directly abutting □ Not directly abutting □ Discrete wetland hydrologic connection. Explain: □ Ecological connection. Explain: □ Separated by berm/barrier. Explain: □ 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.
Ċ	hemical Characteristics: haracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: lentify specific pollutants, if known:

2.

⁷Ibid.

	(III) Diological Characteristics. W	etianu supports (check a	in mat appry):	
	Riparian buffer. Character	istics (type, average widt	h):	
	☐ Vegetation type/percent co	ver. Explain:		
	☐ Habitat for:			
	☐ Federally Listed specie	s. Explain findings:		
	☐ Fish/spawn areas. Expl	ain findings:		
	☐ Other environmentally	-sensitive species. Explai	in findings:	
	☐ Aquatic/wildlife divers	ity. Explain findings:		
3.	Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.			
	For each wetland, specify the following:			
	Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
	Summarize overall biologi	cal, chemical and physica	al functions being performed:	

(iii) Pialogical Characteristics Wetland supports (about all that apply)

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions per formed 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: Stream A and Ditch F2 have a significant nexus to Little Cypress Creek because of their proximity to the TNW, the potential of the non-RPWs to filter out pollutants and carry flood waters to the TNW, and they provide aquatic habitat to numerous freshwater fish species.
- 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:

TH	AT 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: At the time of the site visit, Stream A was not carrying water except in shallow pools. However, vegetation was not growing within its OHWM, and there were signs of sediment sorting. The stream likely flows as a RPW during the rainy season or during seasons with low rates of evaporation.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 10,402 linear feet 3.219 acres Other non-wetland waters: acres Identify type(s) of waters:
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. ☑ Water body 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: 5,088 linear feet 3.100 acres. Other non-wetland waters: acres Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. □ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres
7.	Impoundments of jurisdictional waters. 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).

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL

 $^{^8} See$ 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 Engine ers Wetland Delineation Manual and/or appropriate Regional Supplements. ☑ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.			
	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: acre		

 $^{^{10}}$ 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 $\it Memorandum$ $\it Regarding$ CWA Act Jurisdiction Following Rapanos.

SECTION IV: DATA SOURCES.

an	 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): 								
F	Corps navigable waters' study:								
_	U.S. Geological Survey Hydrologic AtlaUSGS NHD data	S:							
	USGS 8 and 12 digit HUC maps								
		avigable Waters							
\boxtimes									
	Н	istorical and Modern USGS Topographic Map	S						
	Date	Scale	Quadrangle Name						
	1916	1:24,000	7.5' Satsuma and Aldine, Texas						
	1920	1:24,000	7.5' Satsuma and Aldine, Texas						
	1962	1:24,000	7.5' Satsuma and Aldine, Texas						
	1980	1:24,000	7.5' Satsuma and Aldine, Texas						
	2019	1:24,000	7.5' Satsuma and Aldine, Texas						
	 ✓ USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of Harris County, TX (August 1976) ✓ National wetlands inventory map(s). Cite name: Satsuma, TX and Aldine, TX Quadrangle ✓ State/Local wetland inventory map(s): ✓ FEMA/FIRM maps: 48201C0195N (Effective 11/15/2019), 48339C0675G (Effective 8/18/2014) ✓ 100-year Floodplain Elevation is: 178-feet AMSL (National Geodectic Vertical Datum of 1929) ✓ Photographs: ✓ Aerial (Name & Date): or ◯ Other (Name & Date): 								
	Historic and Modern Aerial Orthoimagery								
Date Imagery Type Source									
1943 Black and White Google Earth 1977 Black and White Google Earth 1988 Black and White Google Earth									
							1995	Black and White	Google Earth
							2006	True Color	Google Earth
	2010	True Color	Google Earth						
2019 True Color Google Earth									

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: