c. Limits (boundaries) of jurisdiction:

APPROVE	ED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers				
SECTION I: BACKGROUND INFORMATION					
A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 25-Oct-2012					
B. DISTRICT OFFICE, FILE NAME, AND NUMBER:	Alaska District, POA-2012-00075-JD2				
C. PROJECT LOCATION AND BACKGROUND INFO	ORMATION:				
State :	AK - Alaska				
County/parish/borough:	Anchorage				
City:	Anchorage				
Lat:	61.1128				
Long:	-149.8097				
Universal Transverse Mercator	Folder UTM List				
	UTM list determined by folder location				
	NAD83 / UTM zone 6N				
	Waters UTM List				
	UTM list determined by waters location				
	NAD83 / UTM zone 6N				
Name of nearest waterbody:	Furrow Creek				
Name of nearest Traditional Navigable Water (TN)	N): Cook Inlet				
Name of watershed or Hydrologic Unit Code (HUC) :				
Check if map/diagram of review area and/or pot	ential jurisdictional areas is/are available upon request.				
Check if other sites (e.g., offsite mitigation sites, form.	disposal sites, etc¿) are associated with the action and are recorded on a different JD				
D. REVIEW PERFORMED FOR SITE EVALUATION	:				
✓ Office Determination Date: 24-Oct-2012					
✓ Field Determination Date(s): ☐ 05-Jun-2012					
Tiola Determination Bate(s).					
SECTION II: SUMMARY OF FINDINGS					
A. RHA SECTION 10 DETERMINATION OF JURISD	DICTION				
There "navigable waters of the U.S." within Rivers ar	nd Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.				
Waters subject to the ebb and flow of the	ne tide.				
Waters are presently used, or have been commerce.	en used in the past, or may be susceptible for use to transport interstate or foreign				
Explain:					
B. CWA SECTION 404 DETERMINATION OF JURIS	SDICTION.				
There "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.				
Waters of the U.S. a. Indicate presence of waters of U.S. in review area	₃ .1				
Water Name	Water Type(s) Present				
	/aters (RPWs) that flow directly or indirectly into TNWs				
b. Identify (estimate) size of waters of the U.S. in the	e review area:				
Area: (m²)					
Linear: (m)					

https://orm.usace.army.mil/orm2/f?p=106:34:17435927895215... 10/25/2012 based on:

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:3

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

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1.TNW

Not Applicable.

2. Wetland Adjacent to TNW

Not Applicable.

- B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):
- 1. Characteristics of non-TNWs that flow directly or indirectly into TNW
- (i) General Area Conditions:

Watershed size:

Drainage area:

Average annual rainfall: inches
Average annual snowfall: inches

- (ii) Physical Characteristics
- (a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [] tributaries before entering TNW.

:Number of tributaries

Project waters are river miles from TNW.

Project waters are river miles from RPW.

Project Waters are aerial (straight) miles from TNW.

Project waters are aerial(straight) miles from RPW.

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:5

Tributary Stream Order, if known:

Order	Tributary Name
1	Furrow Creek Headwaters

(b) General Tributary Characteristics:

Tributary is:

inbutary to:					
Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
Furrow Creek Headwaters	Х	-	-	X	Reaches of the creek are contained within ditches and pipes, but the reach within the subject area is natural and undisturbed. Furrow Creek is listed as a heavily impacted watershed within the Municipality of Anchorage.

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
Furrow Creek Headwaters	-	-	-

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other	
Furrow Creek Headwaters	-	-	-	-	-	X	-	X	-	

Vegetation Explained:

Tributary Name	Percent Cover	Vegetation Explained
Furrow Creek Headwaters	-	Subject reach runs through a mixed forest.

Tributary (conditions, stability, presence, geometry, gradient):

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
Furrow Creek Headwaters	Headwaters are stable.	None in subject area.	Meandering	2

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
Furrow Creek Headwaters	Perennial flow	-	Flow has been observed in the subject area throughout the spring and summer months. The area freezes to ground level during winter months. The Municipality of Anchorage has mapped the stream as perennial.	-

Surface Flow is:

Tributary Name	Surface Flow	Characteristics
Furrow Creek Headwaters	Discrete and confined	-

Subsurface Flow:

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
Furrow Creek Headwaters	Unknown	-	-

Tributary has:

Tributary Name	Bed & Banks	ОНWМ	Discontinuous OHWM ⁷	Explain
Furrow Creek Headwaters	-	-	X	A clear indication of a continuous bed and banks was difficult to determine in the field. An area of various widths conveyed flowing water through the subject area.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:

Not Applicable.

Mean High Water Mark indicated by:

Not Applicable.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality;general watershed characteristics, etc.).

Tributary Name	Explain	Identify specific pollutants, if known
Furrow Creek Headwaters	The subject area is considered the headwaters to a highly impacted water. The subject area is in a natural and undisturbed state.	-

(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
Furrow Creek Headwaters	-	-	-	-	-

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Not Applicable.

(b) General Flow Relationship with Non-TNW:

Flow is:

Not Applicable.

Surface flow is:

Not Applicable.

Subsurface flow:

Not Applicable.

(c) Wetland Adjacency Determination with Non-TNW:

Not Applicable.

(d) Proximity (Relationship) to TNW:

Not Applicable.

(ii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Not Applicable.

(iii) Biological Characteristics. Wetland supports:

Not Applicable

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

All wetlands being considered in the cumulative analysis:

Not Applicable.

Summarize overall biological, chemical and physical functions being performed:

Not Applicable.

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.

Significant Nexus: Not Applicable

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:

Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

Wetland Name	Flow	Explain
Furrow Creek Headwaters	PERENNIAL	Flow has been observed throughout the summer in the subject stream reach. Furrow Creek flows into Cook Inlet.

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Туре	Size (Linear) (m)	Size (Area) (m²)
Furrow Creek Headwaters	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	-	445.15416
Total:		0	445.15416

3. Non-RPWs that flow directly or indirectly into TNWs: ⁸ Not Applicable.
Provide estimates for jurisdictional waters in the review area:
Not Applicable.
4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Not Applicable.
Provide acreage estimates for jurisdictional wetlands in the review area: Not Applicable.
5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs: Not Applicable.
Provide acreage estimates for jurisdictional wetlands in the review area: Not Applicable.
6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs: Not Applicable.
Provide estimates for jurisdictional wetlands in the review area: Not Applicable.
7. Impoundments of jurisdictional waters: ⁹ Not Applicable.
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: 10 Not Applicable.
Identify water body and summarize rationale supporting determination: Not Applicable.
Provide estimates for jurisdictional waters in the review area: Not Applicable.
F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS
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 soley 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):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:

Not Applicable.

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.

Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description	
Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	Wetland Determination	ABR (August 2012)	
Data sheets prepared/submitted by or on behalf of the applicant/consultant	Wetland Data Sheets	ABR (August 2012)	
Office concurs with data sheets/delineation report	Wetland Determination MFR	Corps	
U.S. Geological Survey map(s).	Topographic Map	USGS via USFWS	
National wetlands inventory map(s).	NWI Map	USFWS	
State/Local wetland inventory map(s):	Anchorage Wetlands Map # 87	MOA Wetlands Atlas (2008)	
Other	Site Photographs	ABR Wetland Delineation (August 2012)	

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

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).

 $^{^{3}\}mbox{-Supporting}$ documentation is presented in Section III.F.

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.

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&}lt;sub>-Ibid.</sub>

⁸-See 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.