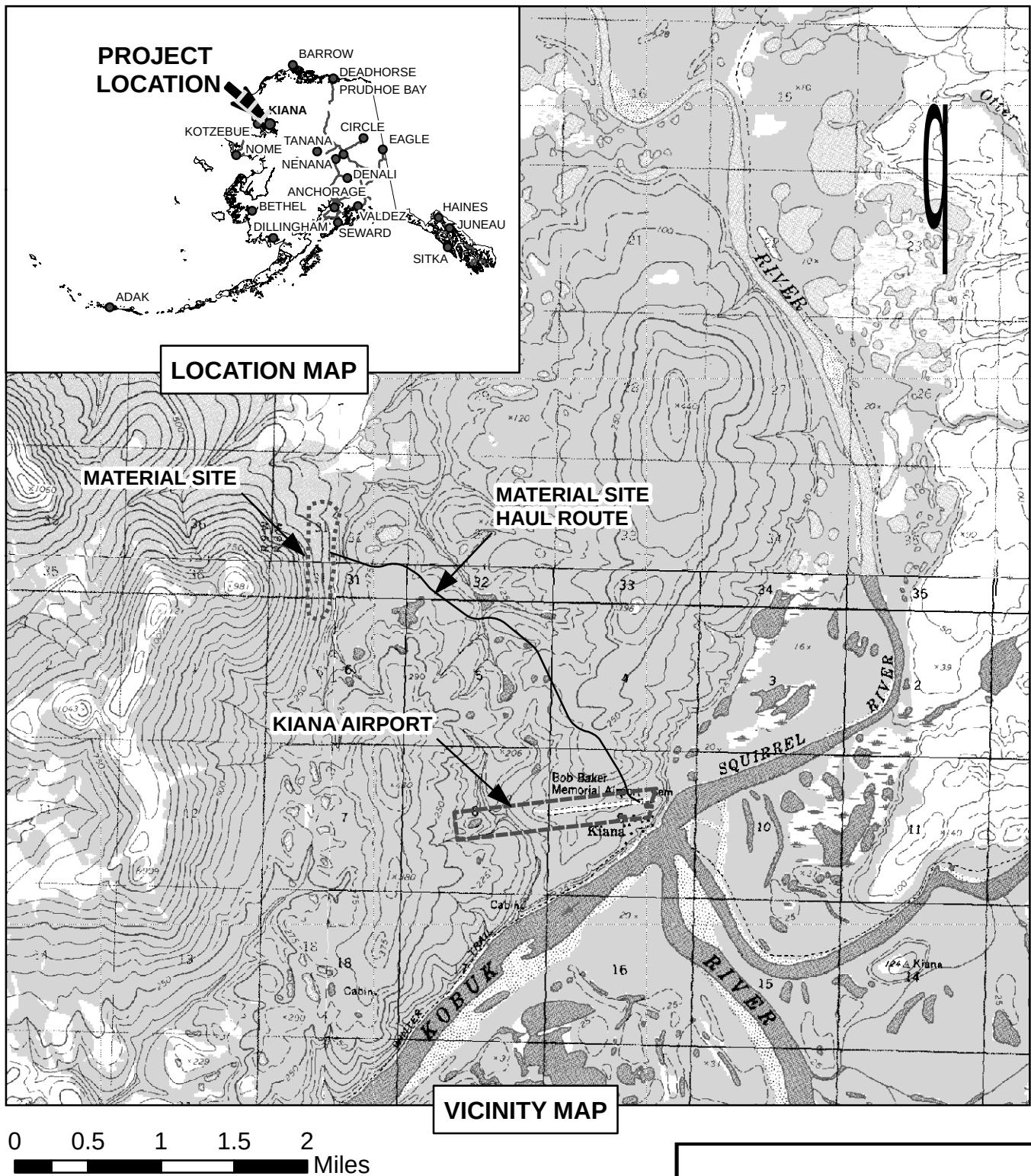


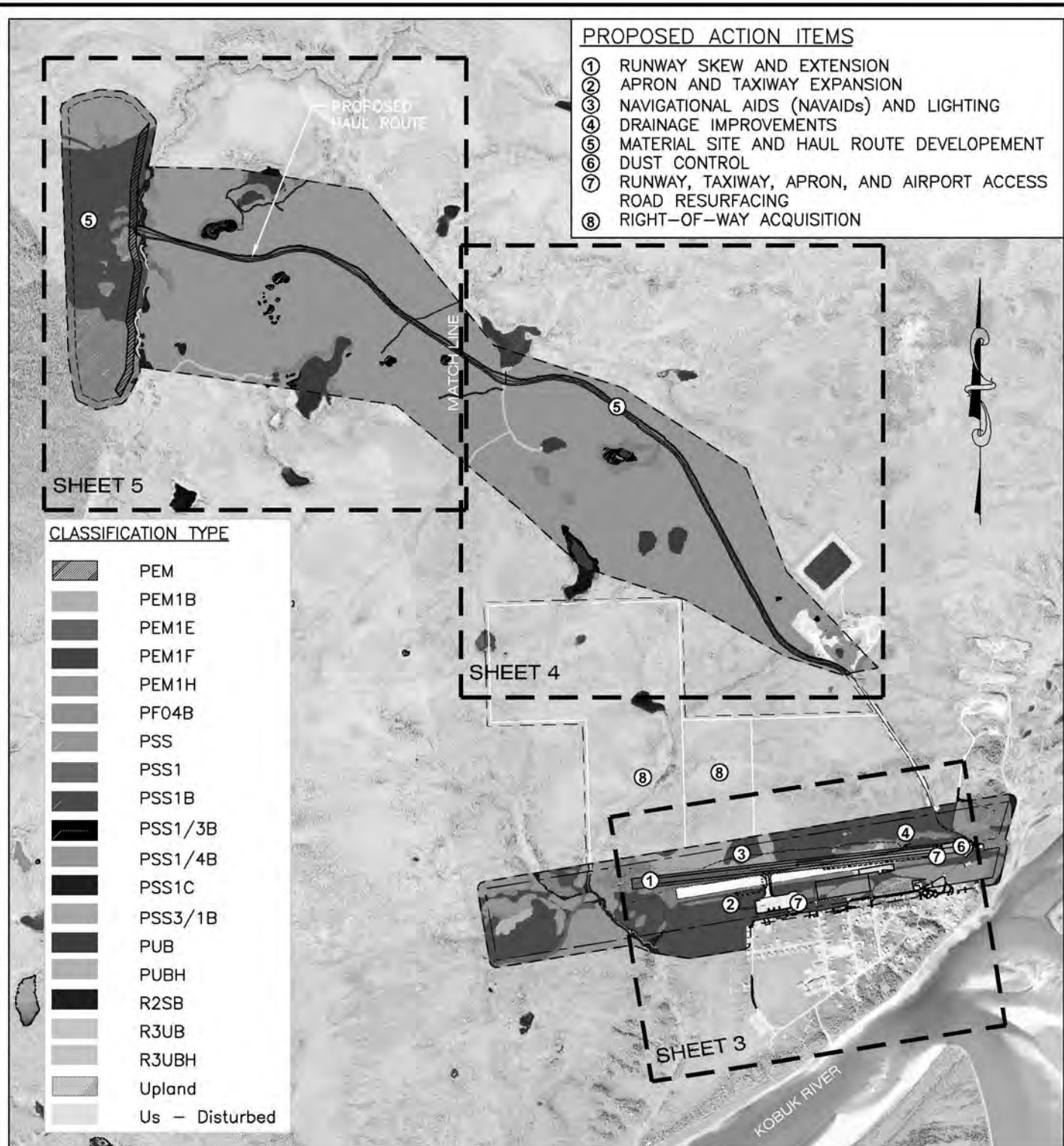
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#### KIANA AIRPORT IMPROVEMENTS

Application by: AK DOT&PF, Northern Region  
File No: POA-2017-184  
Waterway: Kobuk River tributaries  
Proposed Activity: Wetland fill for airport  
safety improvements  
Sections 4, 5, 6, 8, 9 / 31, 32  
Township 18N / 19N, Range 8W / 8W  
Meridian: Kateel River  
Lat.: 66.9759 (Airport)  
Long.: 160.4365 (Airport)  
DATE: April 2017

FILE: U:\204700215\DWGS\N\FIGURES\ACOE\_PERMIT\204700215\_ACOE\_FIG\_02.DWG PLOTTED: Apr 28, 2017 -- 11:20:01 AM (Pannone, Cindl)



## KIANA AIRPORT IMPROVEMENTS

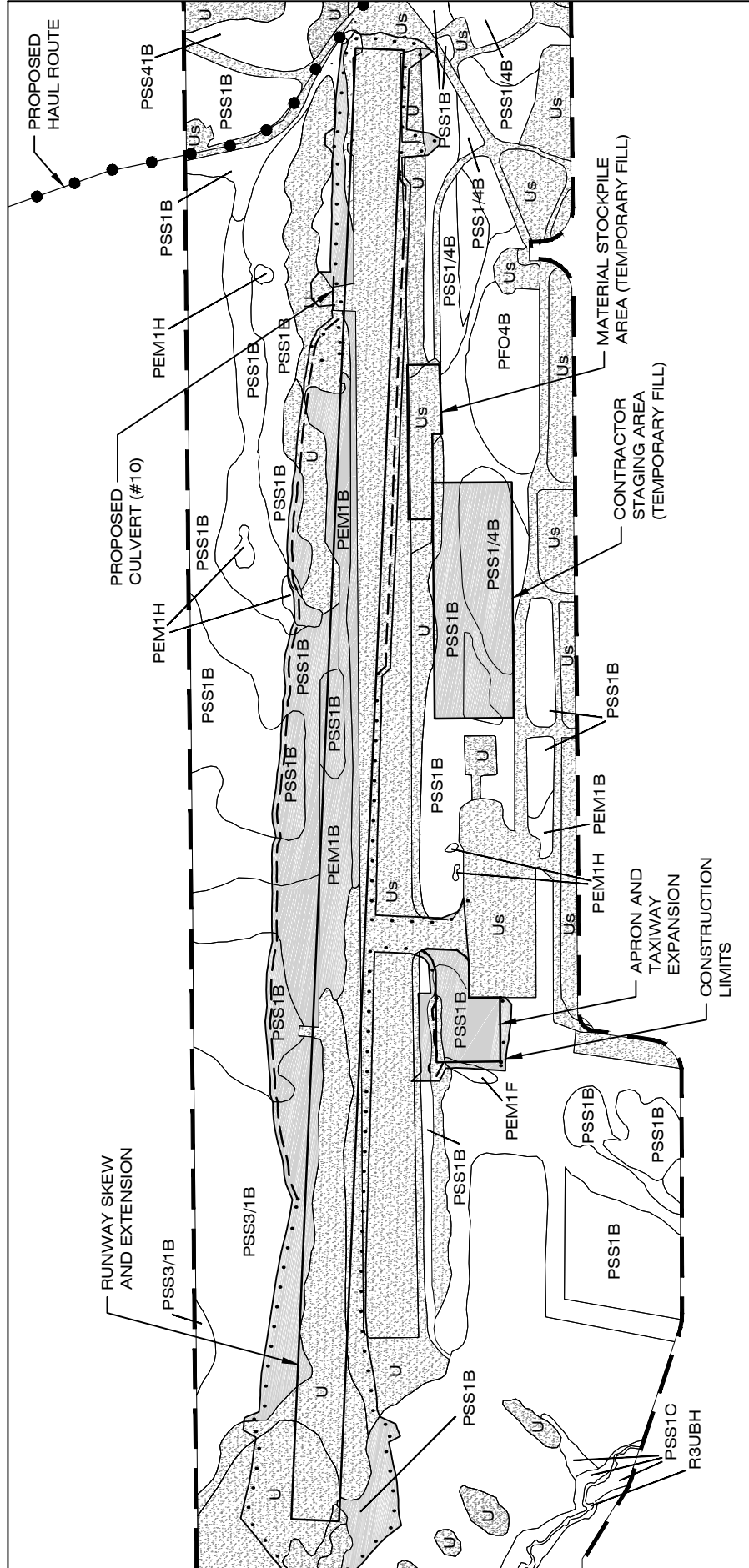
Application by: AK DOT&PF, Northern Region  
File No: POA-2017-184  
Waterway: Kobuk River tributaries  
Proposed Activity: Wetland fill for airport safety improvements  
Sections 4, 5, 6, 8, 9 / 31, 32  
Township 18N / 19N, Range 8W / 8W  
Meridian: Kateel River  
Lat.: 66.9759 (Airport)  
Long.: 160.4365 (Airport)

DATE: April 2017

SHEET 2 OF 10



FILE: \\US1309-F01\SHARED\_PROJECTS\204700215\DWGS\FIGURES\ACOE\_PERMIT\204700215\_ACOE\_FIG\_03-05.DWG PLOTTED: Apr 28, 2017 - 12:00:59 AM (Pamona, Cind)



**LEGEND**

- STUDY AREA
- HAUL ROUTE
- DRAINAGE IMPROVEMENTS - CULVERT
- UPLAND/DEVELOPED WETLAND IMPACTS
- FILL LIMITS
- CUT LIMITS

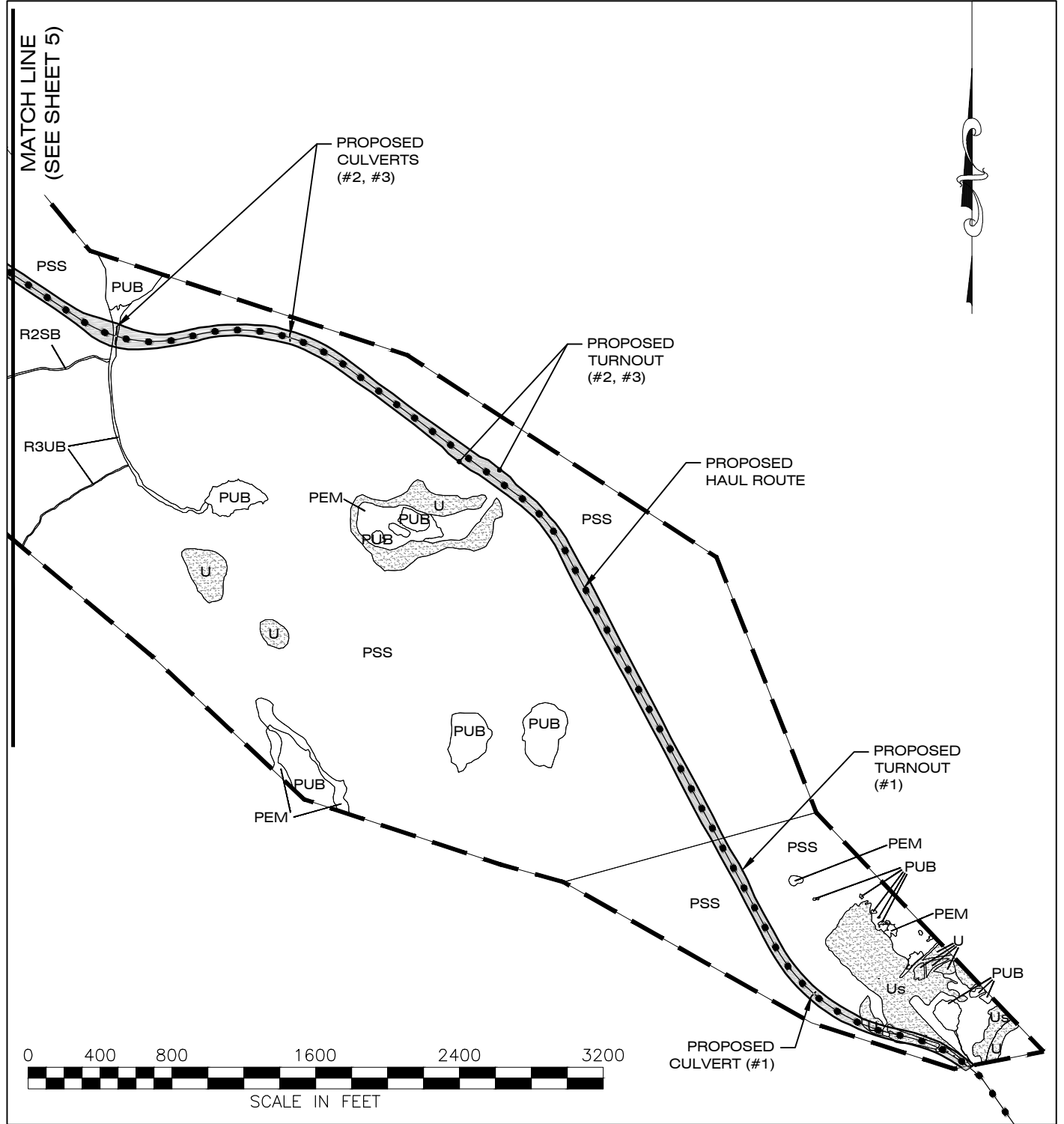


**AIRPORT IMPROVEMENTS**

**KIANA AIRPORT IMPROVEMENTS**

Application by: AK DOT&PF, Northern Region  
File No: POA-2017-184  
Waterway: Kobuk River tributaries  
Proposed Activity: Wetland fill for airport safety improvements  
Sections 4, 5, 6, 8, 9 / 31, 32  
Township 18N / 19N, Range 8W / 8W  
Meridian: Kateel River  
Lat.: 66.9759 (Airport)  
Long.: 160.4365 (Airport)

FILE: \\US1309-F01\SHARED\_PROJECTS\204700215\DWGS\FIGURES\ACOE\_PERMIT\204700215\_ACOE\_FIG\_03-05.DWG PLOTTED: Apr 28, 2017 - 12:01:40 AM (Pamone, Cindi)



### HAUL ROUTE

### LEGEND

- STUDY AREA
- HAUL ROUTE
- DRAINAGE IMPROVEMENTS - CULVERT
- UPLAND/DEVELOPED
- WETLAND IMPACTS
- ... FILL LIMITS
- CUT LIMITS

### KIANA AIRPORT IMPROVEMENTS

Application by: AK DOT&PF, Northern Region  
 File No: POA-2017-184  
 Waterway: Kobuk River tributaries  
 Proposed Activity: Wetland fill for airport safety improvements  
 Sections 4, 5, 6, 8, 9 / 31, 32  
 Township 18N / 19N, Range 8W / 8W  
 Meridian: Kateel River  
 Lat.: 66.9759 (Airport)  
 Long.: 160.4365 (Airport)

DATE: April 2017

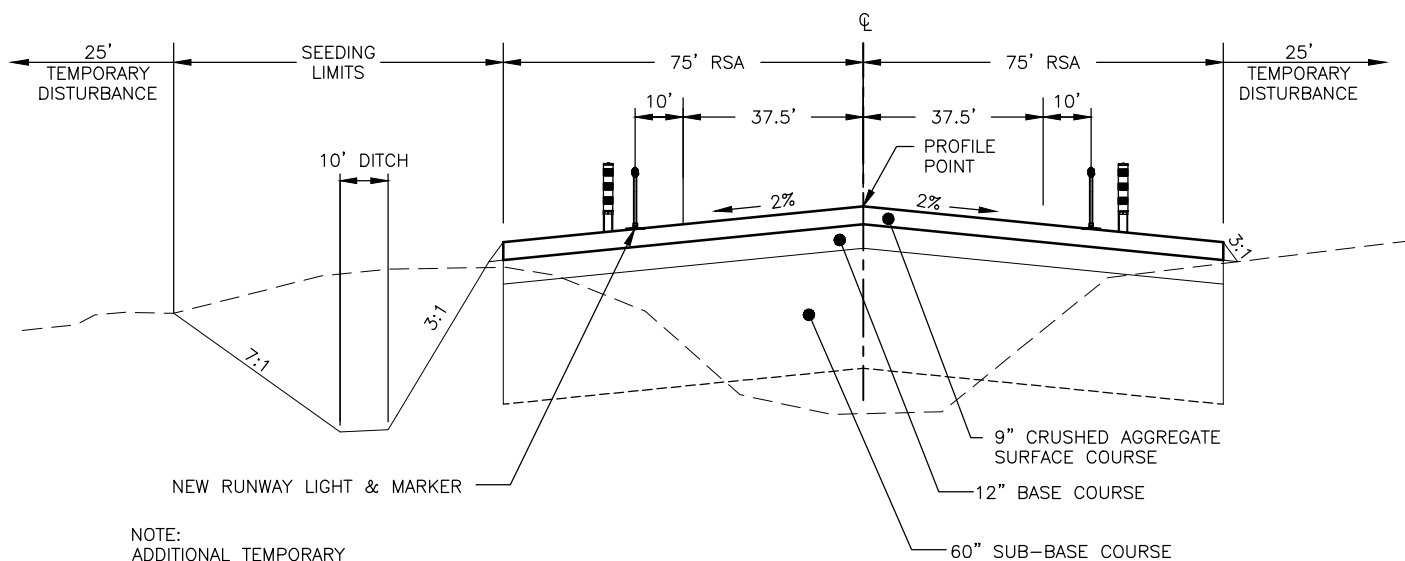
SHEET 4 OF 10




 STUDY AREA  
 HAUL ROUTE  
 DRAINAGE IMPROVEMENTS – CULVERT  
 UPLAND/DEVELOPED  
 WETLAND IMPACTS  
 FILL LIMITS  
 CUT LIMITS

Application by: AK DOT&PF, Northern Region  
File No: POA-2017-184  
Waterway: Kobuk River tributaries  
Proposed Activity: Wetland fill for airport  
safety improvements  
Sections 4, 5, 6, 8, 9 / 31, 32  
Township 18N / 19N, Range 8W / 8W  
Meridian: Kateel River  
Lat.: 66.9759 (Airport)  
Long.: 160.4365 (Airport)

SHEET 5 OF 10



NOTE:  
ADDITIONAL TEMPORARY  
DISTURBANCE 25' BEYOND  
EMBANKMENT WILL BE  
RESTORED AND RESEEDED  
AFTER CONSTRUCTION IS  
COMPLETE.

**RUNWAY TYPICAL SECTION**  
N.T.S.

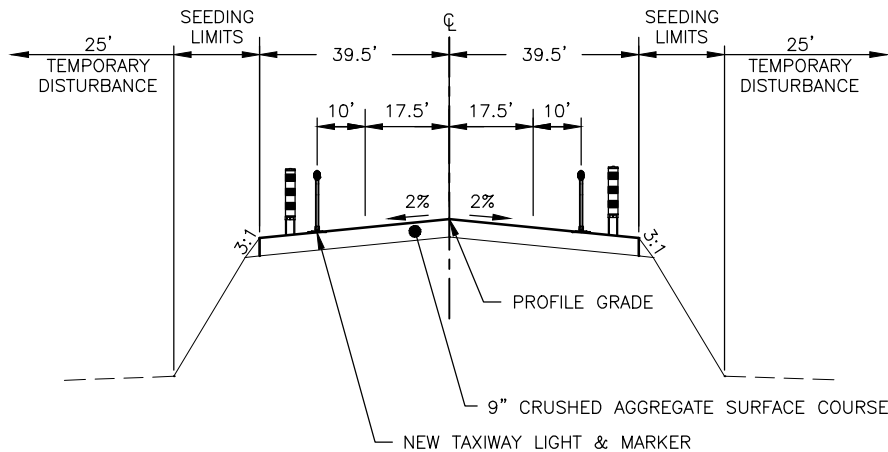
### TYPICAL SECTIONS

#### **KIANA AIRPORT IMPROVEMENTS**

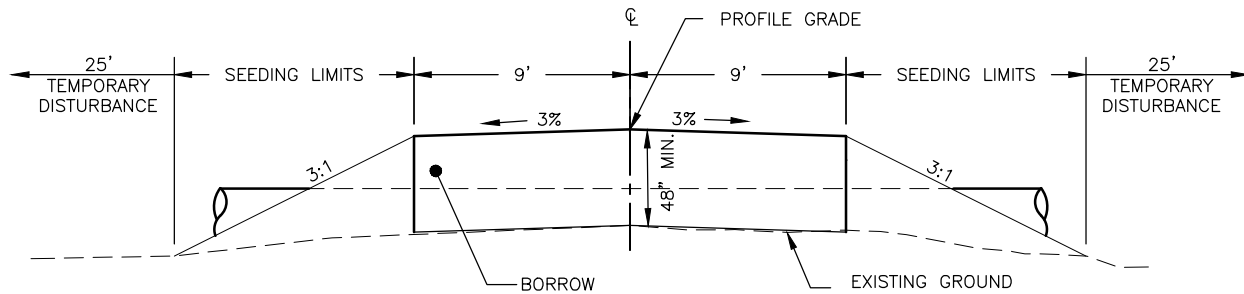
Application by: AK DOT&PF, Northern Region  
File No: POA-2017-184  
Waterway: Kobuk River tributaries  
Proposed Activity: Wetland fill for airport  
safety improvements  
Sections 4, 5, 6, 8, 9 / 31, 32  
Township 18N / 19N, Range 8W / 8W  
Meridian: Kateel River  
Lat.: 66.9759 (Airport)  
Long.: 160.4365 (Airport)

DATE: April 2017

SHEET **6** OF **10**



**TAXIWAY TYPICAL SECTION**  
N.T.S.



**MATERIAL ACCESS ROAD/CULVERT TYPICAL SECTION**  
**SOFT/WET GROUND**  
N.T.S.

| CULVERT SUMMARY TABLE |                |              |      |                                  |
|-----------------------|----------------|--------------|------|----------------------------------|
| CULVERT LOCATION ID   | DIAMETER (IN.) | LENGTH (FT.) | TYPE | REMARKS                          |
| 1                     | 36"            | 40'          | CMP  | SKEW MAY BE ADJUSTED BY ENGINEER |
| 2                     | 24"            | 45'          | CMP  | SKEW MAY BE ADJUSTED BY ENGINEER |
| 3                     | 36"            | 100'         | CMP  | SKEW MAY BE ADJUSTED BY ENGINEER |
| 4                     | 24"            | 40'          | CMP  |                                  |
| 5                     | 24"            | 70'          | CMP  | SKEW MAY BE ADJUSTED BY ENGINEER |
| 6                     | 24"            | 40'          | CMP  |                                  |
| 7                     | 36"            | 120'         | CMP  |                                  |
| 8                     | 60"            | 120'         | CMP  | SKEW MAY BE ADJUSTED BY ENGINEER |
| 9                     | 36"            | 120'         | CMP  | SKEW MAY BE ADJUSTED BY ENGINEER |
| 10                    | 36"            | 80'          | CMP  | SKEW MAY BE ADJUSTED BY ENGINEER |

NOTE:  
ADDITIONAL TEMPORARY  
DISTURBANCE 25' BEYOND  
EMBANKMENT WILL BE  
RESTORED AND RESEEDED  
AFTER CONSTRUCTION IS  
COMPLETE.

## TYPICAL SECTIONS

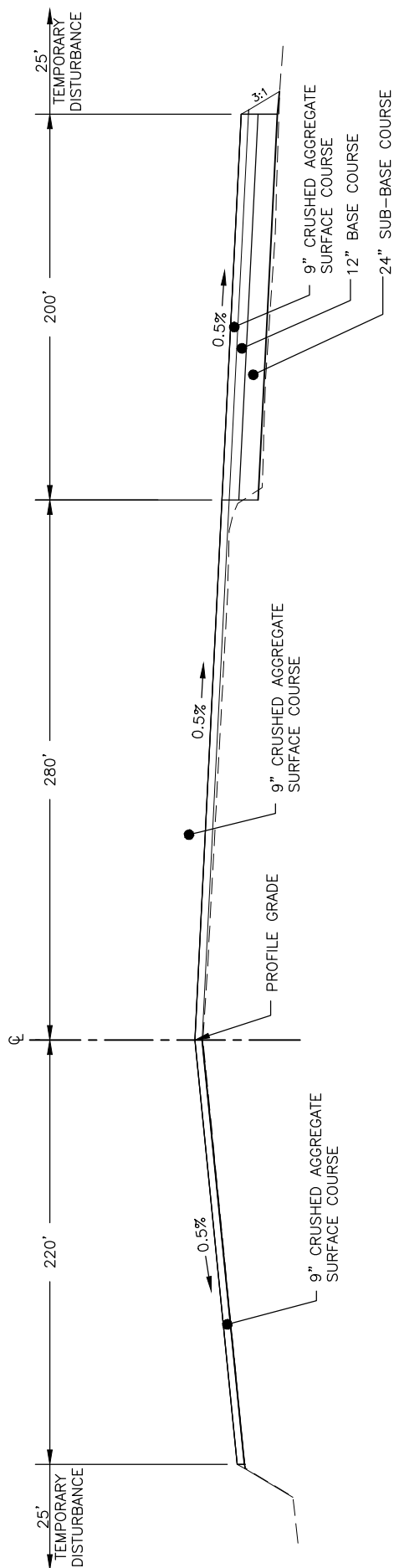
### KIANA AIRPORT IMPROVEMENTS

Application by: AK DOT&PF, Northern Region  
File No: POA-2017-184  
Waterway: Kobuk River tributaries  
Proposed Activity: Wetland fill for airport  
safety improvements  
Sections 4, 5, 6, 8, 9 / 31, 32  
Township 18N / 19N, Range 8W / 8W  
Meridian: Kateel River  
Lat.: 66.9759 (Airport)  
Long.: 160.4365 (Airport)

DATE: April 2017

SHEET **7** OF **10**

FILE: \\US1309-F01\SHARED\_PROJECTS\204700215\DWGS\N\FIGURES\ACOE\_PERMIT\204700215\_ACOE\_FIG\_06-09.DWG PLOTTED: Apr 28, 2017 - 12:17:20 AM (Pamone, Cindi)



NOTE:  
ADDITIONAL TEMPORARY  
DISTURBANCE 25' BEYOND  
EMBANKMENT WILL BE  
RESTORED AND RESEED  
AFTER CONSTRUCTION IS  
COMPLETE.

# APRON TYPICAL SECTION N.T.S.

## TYPICAL SECTIONS

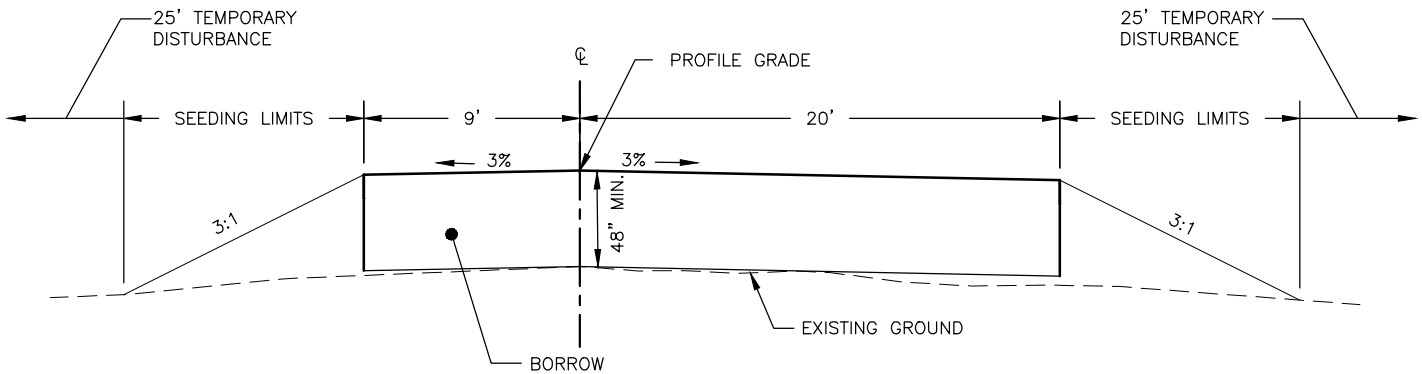
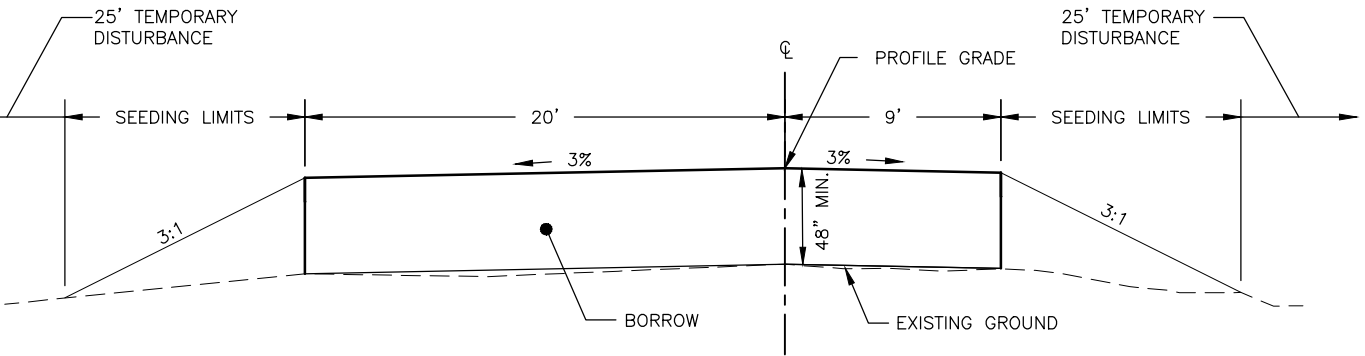
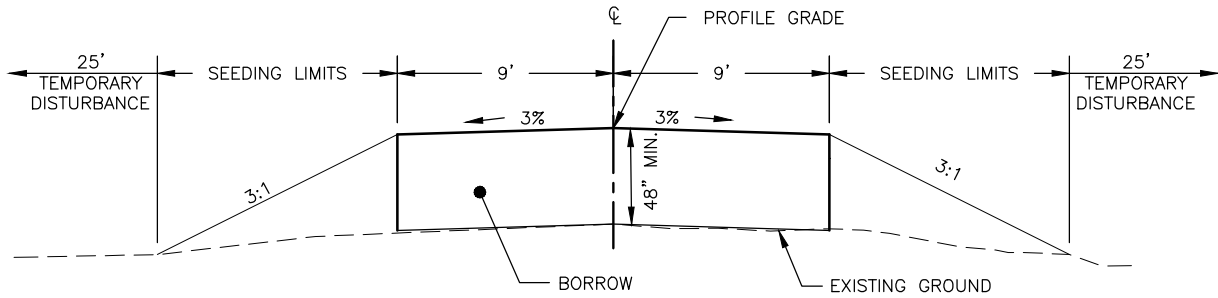
### KIANA AIRPORT IMPROVEMENTS

Application by: AK DOT&PF, Northern Region  
File No: POA-2017-184  
Waterway: Kobuk River tributaries  
Proposed Activity: Wetland fill for airport  
safety improvements  
Sections 4, 5, 6, 8, 9 / 31, 32  
Township 18N / 19N, Range 8W / 8W  
Meridian: Kateel River  
Lat.: 66.9759 (Airport)  
Long.: 160.4365 (Airport)

DATE: April 2017

SHEET 8 OF 10





NOTE:  
ADDITIONAL TEMPORARY  
DISTURBANCE 25' BEYOND  
EMBANKMENT WILL BE  
RESTORED AND RESEEDED  
AFTER CONSTRUCTION IS  
COMPLETE.

### TYPICAL SECTIONS

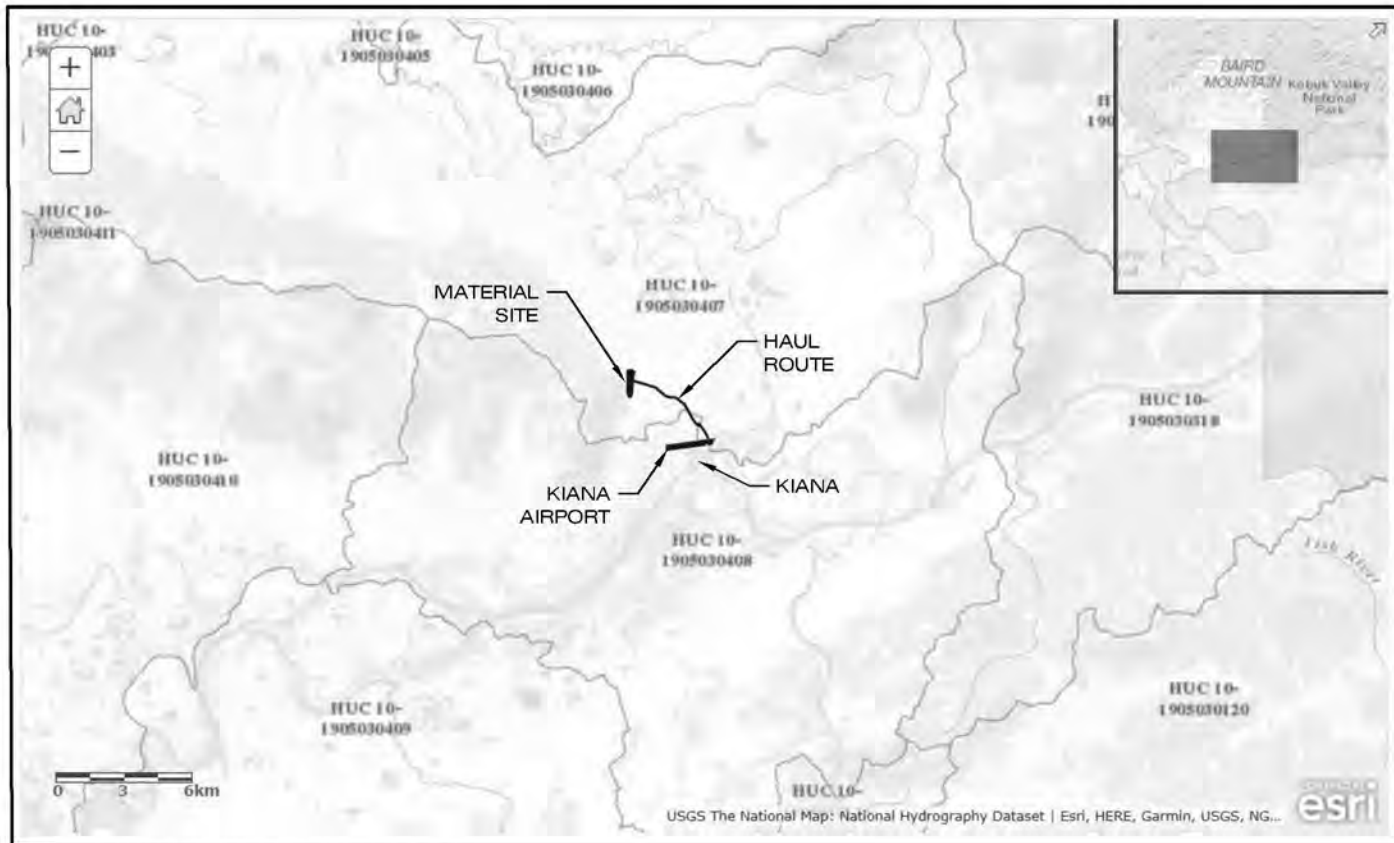
#### KIANA AIRPORT IMPROVEMENTS

Application by: AK DOT&PF, Northern Region  
File No: POA-2017-184  
Waterway: Kobuk River tributaries  
Proposed Activity: Wetland fill for airport  
safety improvements  
Sections 4, 5, 6, 8, 9 / 31, 32  
Township 18N / 19N, Range 8W / 8W  
Meridian: Kateel River  
Lat.: 66.9759 (Airport)  
Long.: 160.4365 (Airport)

DATE: April 2017

SHEET 9 OF 10

FILE: \\US1309-F01\SHARED\_PROJECTS\204700215\DWGS\N\FIGURES\ACOE\_PERMIT\204700215\_ACOE\_FIG\_06-09.DWG PLOTTED: Apr 28, 2017 - 12:31:51 AM (Parmona, Cind)



SOURCE: UNITED STATES GEOLOGICAL SURVEY,  
NATIONAL HYDROGRAPHY DATASET

## WATERSHED BOUNDARY DATASET

10 DIGIT HYDROLOGIC UNIT CODE (HUC)

## HUC MAP

### KIANA AIRPORT IMPROVEMENTS

Application by: AK DOT&PF, Northern Region  
File No: POA-2017-184  
Waterway: Kobuk River tributaries  
Proposed Activity: Wetland fill for airport  
safety improvements  
Sections 4, 5, 6, 8, 9 / 31, 32  
Township 18N / 19N, Range 8W / 8W  
Meridian: Kateel River  
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Long.: 160.4365 (Airport)

DATE: April 2017

SHEET 10 OF 10