

# **Environmental Report**

## **Kongiganak, Alaska**



**Prepared for: Indian Health Service / U.S. Environmental Protection Agency**

**Prepared by: Summit Consulting Services,  
the Native Village of Kongiganak,  
and  
the Village Safe Water Program  
State of Alaska, Department of Environmental Conservation**

**June 12, 2018**

## Environmental Assessment

This environmental report has been prepared for the Indian Health Service by *Summit Consulting Services*. It is intended to assess the impacts of the proposed project on the environment. It will be the environmental document that will be released to the Public for review.

\_\_\_\_\_  
Name of Preparer

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Rural Development Borrower

\_\_\_\_\_  
Date

## ABBREVIATIONS

AAC - Alaska Administrative Code  
ACOE – Army Corps of Engineers  
ac-day - Acre-Day  
ADEC - Alaska Department of Environmental Conservation  
ADNR – Alaska Department of Natural Resources  
ADOL – Alaska Department of Labor  
AKFG – Alaska Fish and Game Department  
ANTHC - Alaska Native Tribal Health Consortium  
ASV - All Season Vehicles  
ATVs - All Terrain Vehicles  
BOD - Biological Oxygen Demand  
CRUM - Cold Regions Utility Manual  
DAR – Design Analysis Report  
DOT - Department of Transportation  
DCCED – Department of Community, Commerce, and Economic Development  
EMS - Emergency Medical Services  
IHS – Indian Health Service  
KTC - Kongiganak Tribal Council  
MLLW - Mean Lower Low Water  
NVK – Native Village of Kongiganak  
O&M - Operations and Maintenance  
PER – Preliminary Engineering Report  
PF - Public Facilities  
PWSID – Public Water System Identification  
RUS - Rural Utilities Service  
SHPO - State Historic Preservation Office  
SWTR – Surface Water Treatment Rule  
U.S. EPA - United States Environmental Protection Agency  
US - United States  
USACE - United States Army Corps of Engineering  
USF&WS - United States Fish and Wildlife Service  
USDA RD - United States Department of Agriculture Rural Development  
VSW - Village Safe Water  
WTP – Water Treatment Plant  
WTS – Water Treatment System  
WST – Water Storage Tank  
YKHC - Yukon-Kuskokwim Health Corporation

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## **1. PURPOSE AND NEED OF THE PROJECT**

### **a) Project Description**

The purpose for this proposal is to address several sanitation deficiencies within the Village of Kongiganak and to support funding for the repair and improvement of those deficiencies. The project focuses on three primary areas of concern within the community. The community expressed a need for repair of the existing sewage lagoon, repairs or modifications to the washeteria, and upgrades and repairs to the water treatment plant.

### **b) Purpose and Need of the Project**

The purpose of the proposed water improvement project is to ensure the structural integrity of the sewage lagoon berm, improve the functionality of the washeteria, and bring the Village's water system into compliance with existing water quality standards.

The sewage lagoon has developed erosion on an interior berm, and could eventually lead to an uncontrolled raw sewage leakage into the surrounding wetlands adjacent to the village. A breach of the berm would be difficult to repair due to a lack of immediately available material and equipment. Gaps in access gates also present a security concern. Timely repair of the berm will prevent the risk of the environmental damage and reduce the potential for contact with raw sewage.

A safe drinking water supply is vital for everyday living. Regular bathing and laundering are important for cleanliness and health. Current washeteria facilities experience several sanitary challenges: collapsing sheetrock, broken toilets, non-operational showers and inefficient ventilation. In addition to the constant, strong unpleasant smell from out of service plumbing, these problems may present a substantial health risk associated with mold and various bacteria. Ripped, cracked, and peeling flooring presents a potential tripping hazard. The current inadequate amount of laundry equipment limits residents' abilities to provide themselves and their families with clean clothes, bedding and towels. Washeteria accessibility and availability is especially crucial for families with small children and the elderly. New laundry equipment and washeteria repairs will improve personal and community hygiene practices thus preventing spreading of various diseases and viruses.

## **2. ALTERNATIVES TO THE PROPOSED ACTION**

### **a) Lagoon Berms**

Each alternative is intended to address deficiencies in the sewage lagoon. The lagoon is filled beyond design capacity. Erosion on the north berm poses risk of unmonitored discharge to surrounding area.

#### **i. Alternative 1: Repair and Rebuild**

This alternative requires repairing necessary equipment and discharging the excess of lagoon water (approximately 6.5 million gallons) to wetlands and then to the river. This would also include repairing the eroding berms to the extent possible.

#### **ii. Alternative 2: Do Nothing**

This alternative would make no improvements on the sewage lagoon. Alternative 2 does not improve the health and welfare of the residents and is not recommended.

### **b) Washeteria Improvements**

The washeteria is in disrepair such that much of the interior is damaged and equipment is not operating as intended. These alternatives intend to address the deficiencies in the washeteria.

#### **i. Alternative 1: Repairs and Upgrades**

This alternative would include repairing and/or replacing washers, dryers, finishes, and fixtures.

#### **ii. Alternative 2: Do Nothing**

This alternative would maintain the current status of the washeteria which would pose safety risks as well as depress the profitability of the facility. Revenues from this facility support the water treatment system and are vital to providing safe water.

### **c) Water Treatment Plant Improvements**

The water treatment plant currently does not meet Surface Water Treatment Rules. These alternatives intend to address the deficiencies in the water treatment plant.

#### **i. Alternative 1: Repairs and Upgrades**

This alternative assumes the following items:

- Define the water usage rate with DEC given contradictions between the design and the latest Status Component Inspection.
- Identify the source of lead/copper exceedances and recommend a solution (perhaps copper piping replacement).
- Physically inspect the media in the filters and provide a recommendation on replacement.
- Determine if a SCD is appropriate.

- Define and examine DBP exceedances.
- Define and provide recommendations of improvements for backwash procedures, equipment, and controls.
- Specify master meter.
- Investigate the feasibility of replacing existing turbidimeters.
- Propose a solution to DEC for meeting CT requirements and obtain feedback.

**ii. Alternative 2: Do Nothing**

This alternative would maintain the current status of the treatment plant which would not be in compliance with the Surface Water Treatment Rules.

**3. AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES**

**a) Land Use/ Important Farmland/ Formally Classified Lands**

**i. Affected Environment**

Land use in Kongiganak is predominately residential with a few areas dedicated to the commercial services and community facilities. A strip of land approximately 124 acres is classified as airport land use and belongs to State of Alaska. The surrounding areas are part of the Yukon Delta National Wildlife Refuge and used for recreation and subsistence berry picking, fishing and hunting. All surface rights within the village belong to Qemirtalek Coast Corporation (QCC) and subsurface property is owned by Calista Corporation (KKH Gravity Sewer 100% plan set 2010). Kongiganak Traditional Council holds a number of land use leases that include boardwalks, sewer lagoon area and lagoon access road, and WTP/Washeteria property.

There is one Alaska Native Claims Settlement Act Section 17(b) easement (EIN 2, C3, D1, D9) from the airport to the Kongnignanohk River (Native Village of Kongiganak Hazard Mitigation Plan 2015). There are no farmlands due to the nature of the climate and topography.

**ii. Environmental Consequences**

The proposed repairs to the existing sewer lagoon described in Alternatives 1 through 3 will be confined within the KTC land lease boundaries and will not require new land use permits.

The proposed repairs to the washeteria and water treatment plant are not expected to have any environmental consequences due to work being confined within the existing structure.

**iii. Mitigation**

All landowners who may be affected will be contacted for permission. All proposed activities will occur on lands controlled by the KTC.

**b) Floodplains**

**i. Affected Environment**

Even though the village is several miles inland from the Bering Sea, the area experiences periodic wind and tide driven coastal flooding which saturates the surrounding grounds with seawater (C.Wrobel SCS, 2005). Kongiganak does not participate in the National Flood Program and floodplains within the area are not mapped. In 2005 U.S. Army Corps of Engineers estimated the 100-year flood or Base Flood Elevation to be 20.7 ft MLLW (C.Wrobel SCS, 2005). A more recent study conducted by the ACOE looked at storm damage and flooding for several western Alaskan points, including Kongiganak. The resulting 100 year surge level was 18.28 ft MLLW with a standard deviation of 1.28 ft (ACOE, 2009). Further design activities should correlate this surge elevation with a local datum in Kongiganak to determine if the design criteria of 20.7 ft MLLW should be altered.

**ii. Environmental Consequences**

The proposed projects will be located within the community, within existing structures, or within the berms of the lagoon and will largely not be susceptible to flooding from coastal storms. Improvements to the lagoon will occur within existing berms which were constructed at an elevation of 27 ft MLLW, therefore they will not be impacted by floods.

**iii. Mitigation**

Mitigation for possible damage from flooding will require assuring that all construction associated with this project remains within the lagoon berms or existing, elevated structures.

**c) Wetlands**

**i. Affected Environment**

The Village of Kongiganak is located in the Yukon-Kuskokwim Delta (YKD), Southwestern Alaska. YKD encompasses 75,289 square miles of coastal wetlands, tundra, and mountains. It includes the town of Bethel and 50 villages along the coast of the Bering Sea and on the banks of the Yukon and Kuskokwim Rivers and their tributaries (Indian Health Service, Alaska Area Profile). Kongiganak area is dotted with small lakes and tundra ponds, crossed by multiple meandering streams and is situated within an extensive area of Freshwater Emergent Wetland (USF&WS, 2017).

**ii. Environmental Consequences**

Alternative 1 for the sewage lagoon poses no risk to wetlands as they occur within the footprint of an existing lagoon. Alternative 2, do nothing, poses the largest risk due to the potential of a breach occurring on the north berm without erosion control or mitigation.

All of the alternatives for improvements to the washeteria and water treatment plant would have no adverse environmental impact.

**iii. Mitigation**

Not applicable. The recommended, Alternative 1, occurs within the existing lagoon.

**d) Cultural Resources****i. Affected Environment**

January 2009 State Historic Preservation Officer review for related projects in Kongiganak identified two sites as historic: the Russian Orthodox Church and Saint Gabriel Chapel.

**ii. Environmental Consequences**

All sites are outside the project area and will not be affected. No new construction or excavation is anticipated.

**iii. Mitigation**

In the event that human remains or other indications of burials are found during ground-disturbing activities on federal lands or tribal trust lands, the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) must be followed. Immediate steps should be taken to secure and protect the human remains and cultural items, including stabilization or covering, as appropriate. The Project Manager should immediately notify both the Alaska SHPO and the local Native American organizations likely to be culturally affiliated with the discovered remains.

**e) Biological Resources****i. Affected Environment**

Yukon Delta National Wildlife Refuge supports one of the largest aggregations of water birds in the world. Over one million ducks and half a million geese breed here annually, and in some summers, up to a third of the continent's northern pintails can be found on the refuge (USF&WS 2017). There are 12 migratory bird species and 1 critical habitat listed within the Kongiganak area by the USF&WS (2018). Wet tundra regions on the Yukon-Kuskokwim Delta are a critical habitat for the threatened Spectacled Eiders. Spring migration from the wintering area in the Bearing Sea includes multiple stopovers at coastal sites with arrival on the breeding grounds in late May or June (ADF&G, 2018). The following migratory birds could be found in the vicinity of Kongiganak: American Golden-plover, Bald Eagle, Bar-tailed Godwit, Black Turnstone, Bristle-thighed Curlew, Hudsonian Godwit, Lesser Yellowlegs, Pacific Golden-plover, Red-throated Loon, Semipalmated Sandpiper, Short-billed Dowitcher, and Whimbrel.

ADF&G Fish Resource Monitor lists whitefish as indigenous to the Kongnignanohk River. Other fish species that can be found in the region include sheefish (iconnu), burbot, pike, and blackfish. Wildlife includes moose, black bear, snowshoe and arctic hare and various furbearers such as beaver and fox. Vegetation is primarily subarctic tundra, underlain by permafrost, and includes a variety of scrub, peatland, heath meadow, marsh, and bog habitats (USF&WS 2017).

**ii. Environmental Consequences**

All of the alternatives for improvements to the wastewater and water treatment plant are not expected to have any environmental impact due to the construction being conducted within the existing structures and next to the existing boardwalks.

Work within the existing sewage lagoon is not expected to have an environmental impact. If special care is not taken to monitor river and discharge water quality during discharge events, high turbidity and low dissolved oxygen contents could affect the health of vegetation and organisms such as fish in the river.

On 04/12/2018 the US Fish and Wildlife Service (USF&WS) was contacted regarding the potential for Threatened and /or Endangered Species (Consultation Code: 07CAAN00-2018-SLI-0171) in the proposed area of improvements under Section 7(c) of the Endangered Species Act of 1973 as amended (16 U.S.C. 1531 et seq.) It was determined that there were no critical habitats within the project areas.

**iii. Mitigation**

Required monitoring of the lagoon discharge will take place to ensure that water quality of discharge and the river remain in acceptable ranges. Special attention will be made to avoid an accidental take and bird disturbance.

**f) Water Quality Issues****i. Affected Environment**

There are three main water bodies that are within the lagoon repair project: East Lake which borders with east berm of the sewer lagoon and unnamed tundra pond behind the south berm and Kongnignanohk River to the west of the lagoon.

**ii. Environmental Consequences**

All of the alternatives for improvements to the wastewater and water treatment plant are not expected to have any negative environmental impact due to the construction being conducted within the existing structures and next to the existing boardwalks.

The existing wastewater lagoon is authorized under General Permit AKG 573008 expiring 08/31/2018 for discharge of wastewater to the Kongnignanohk River. Alaska Department of Environmental Conservation (ADEC) Wastewater Program will review any proposed modifications to the wastewater lagoon. Additionally, a Section 401(c) water quality certification may be required depending on the impact of recommended work.

**iii. Mitigation**

Any work related to any of the alternatives will be in compliance with ADEC permits and meet the necessary monitoring requirements to minimize discharge of high turbidity and/or low dissolved oxygen water.

**g) Coastal Resources****i. Affected Environment**

Kongiganak was one of forty communities included in the Ceñaliulriit Coastal Resource Service Area (CCRSA). The CRSA included 8,933 miles of coast, and a coastal zone of 15,364 square miles (ADNR 2011, Coastal Impact Assistance Program). On July 1, 2011, Alaska withdrew from the voluntary National Coastal Zone Management Program (NOAA 2017). As of today a non-profit Yukon-Kuskokwim Coastal Association (YKCA) manages Alaska Coastal Impact Assistance Program (CIAP) fund distribution. The U.S. Fish and Wildlife Service assumed administrative responsibility of CIAP on July 1, 2011 and the Department of Natural Resources is the designated state agency that has the authority to represent and act for the state in dealing with USF&WS for CIAP purposes.

**ii. Environmental Consequences**

No coastal barriers are located within the project area (CBRS Mapper).

**iii. Mitigation**

Not applicable

**h) Socio-economic Issues****i. Affected Environment**

The local economy is based primarily on employment with the school, village services, stores, commercial fishing, seasonal construction as well as some small private enterprises in traditional arts and crafts. By managing the projects on a force account basis, the community will benefit both socially and economically.

**ii. Environmental Consequences**

Force account construction methods were successfully implemented during previous Village Safe Water projects. This approach allowed local hires to work alongside construction foreman thus allowing them to learn new skills, gain work experience and provide for their families.

Improving the washeteria and water treatment plant will encourage washeteria and watering point use and encourage spending on laundry, showers, and water for haul.

**iii. Mitigation**

Not applicable.



#### **i) Miscellaneous Issues**

The proposed project is not anticipated to adversely affect air quality or noise levels. Impacts related to construction activity will be temporary and mitigated by communication with residents, scheduling construction activity during day hours, and controlling dust if necessary. None of the alternatives will have adverse impacts on transportation within the community.

#### **4. SUMMARY OF MITIGATION**

Mitigation of environmental impacts for this project will primarily involve obtaining and complying with the proper permits.

#### **5. CORRESPONDENCE AND COORDINATION**

On April 12, 2018 the US Fish and Wildlife Service (USF&WS) was contacted regarding the potential for Threatened and /or Endangered Species (Consultation Code: 07CAAN00-2018-SLI-0171) in the proposed area of improvements under Section 7(c) of the Endangered Species Act of 1973 as amended (16 U.S.C. 1531 et seq.) It was determined that there were no critical habitats within the project areas.

#### **6. REFERENCES**

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# **Attachment A**

## **Figures**



X:\Kongiganak\PER 2017\Figures\PER 2018\F1-General Overview.dwg, OVERVIEW, 4/16/2018 2:11:57 PM, Adobe PDF for Images.pc3

- EXISTING GRAVITY SEWER

MARINE HEADER

EXISTING ABOVE GROUND GRAVITY SEWER:  
ARCTIC PIPE ON T-SUPPORTS

ABOVE GROUND POWER LINE

BURIED POWER LINE

ELECTRIC POLE

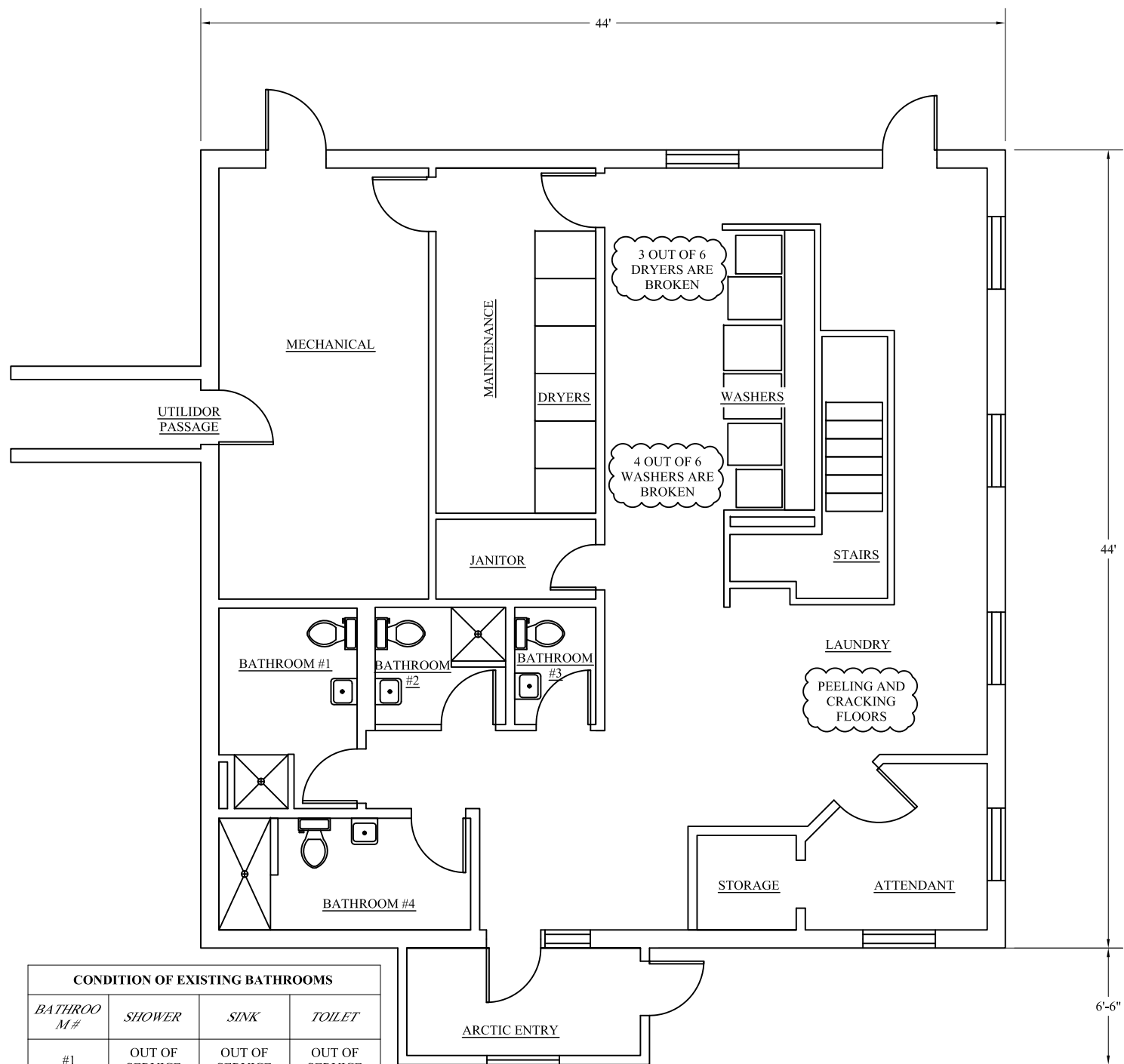
RESIDENTIAL BUILDING

COMMERCIAL BUILDING

PUBLIC BUILDING
- 
- 
- 
- CITY OF KONGIGANAK  
PRELIMINARY ENGINEERING REPORT  
GENERAL OVERVIEW
- 
- FIGURE  
1
- DATE: 04/16/2018  
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SCALE: AS NOTED

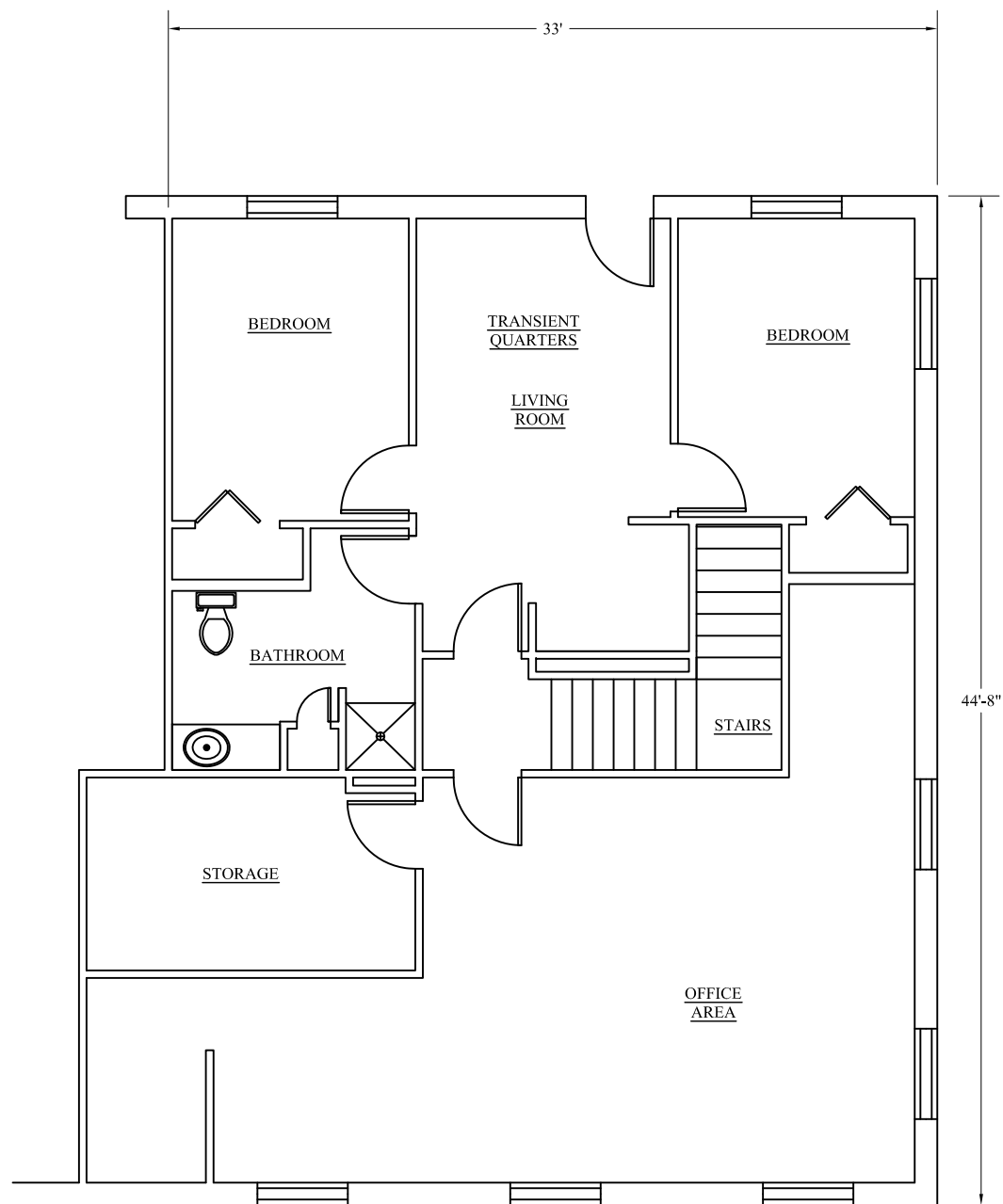


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CONDITION OF EXISTING BATHROOMS			
BATHROOM #	SHOWER	SINK	TOILET
#1	OUT OF SERVICE	OUT OF SERVICE	OUT OF SERVICE
#2	OUT OF SERVICE	OUT OF SERVICE	OUT OF SERVICE
#3	N/A	OUT OF SERVICE	IN SERVICE
#4	OUT OF SERVICE	IN SERVICE	IN SERVICE

1 FIRST FLOOR PLAN VIEW  
SCALE: NTS



2 SECOND FLOOR PLAN VIEW  
SCALE: NTS

CITY OF KONGIGANAK  
PRELIMINARY ENGINEERING REPORT  
EXISTING LAUNDRY FACILITY



FIGURE  
2

DATE: 04/16/2018  
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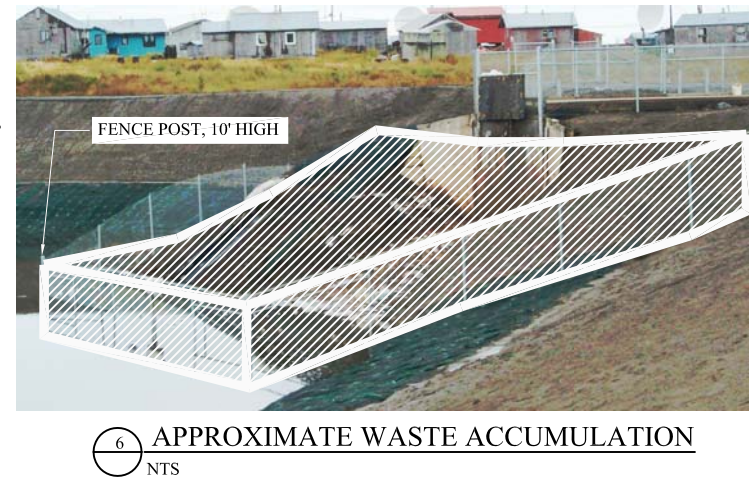
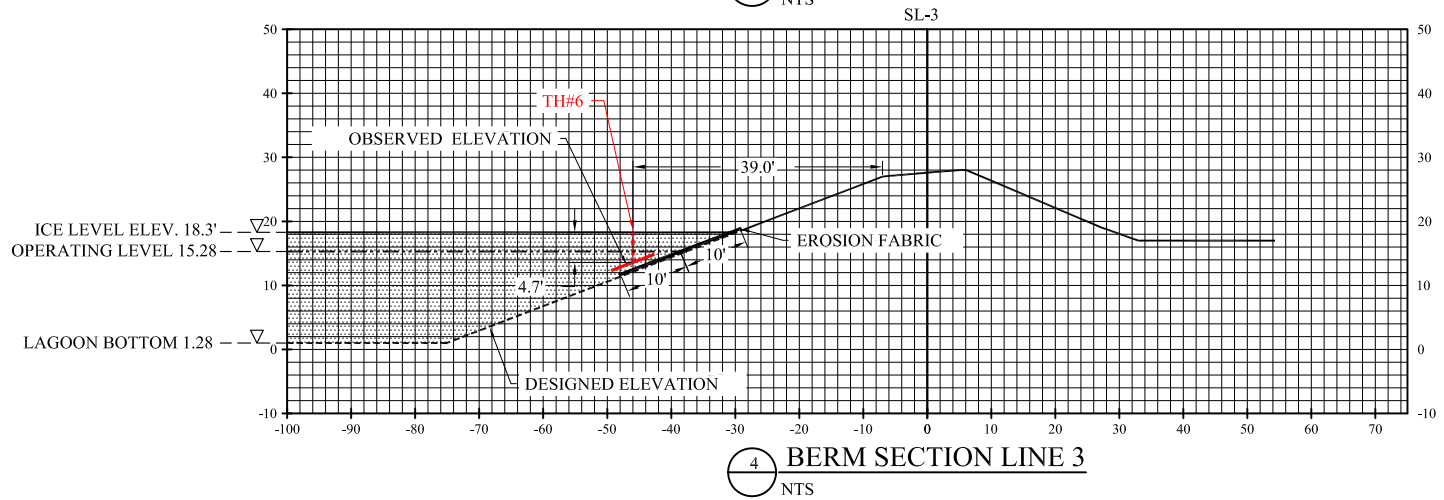
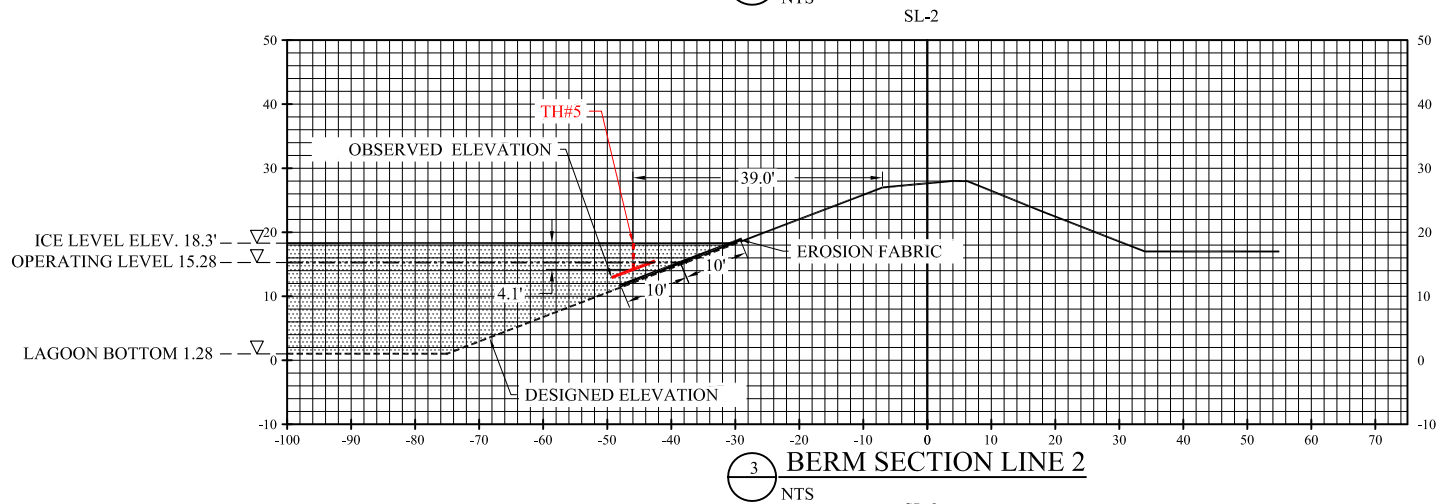
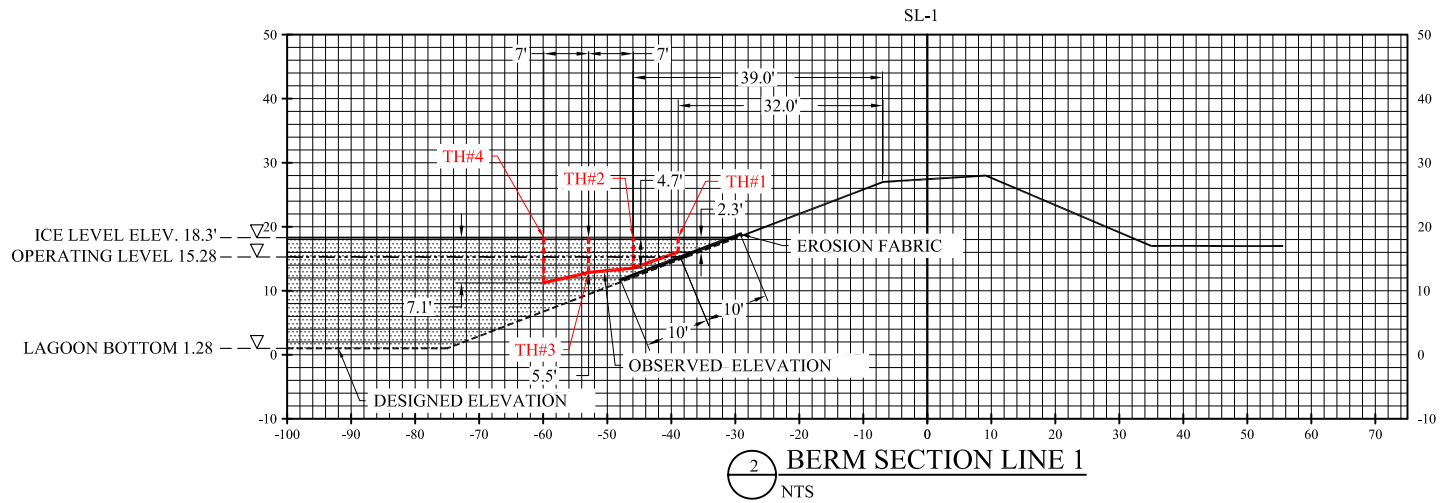
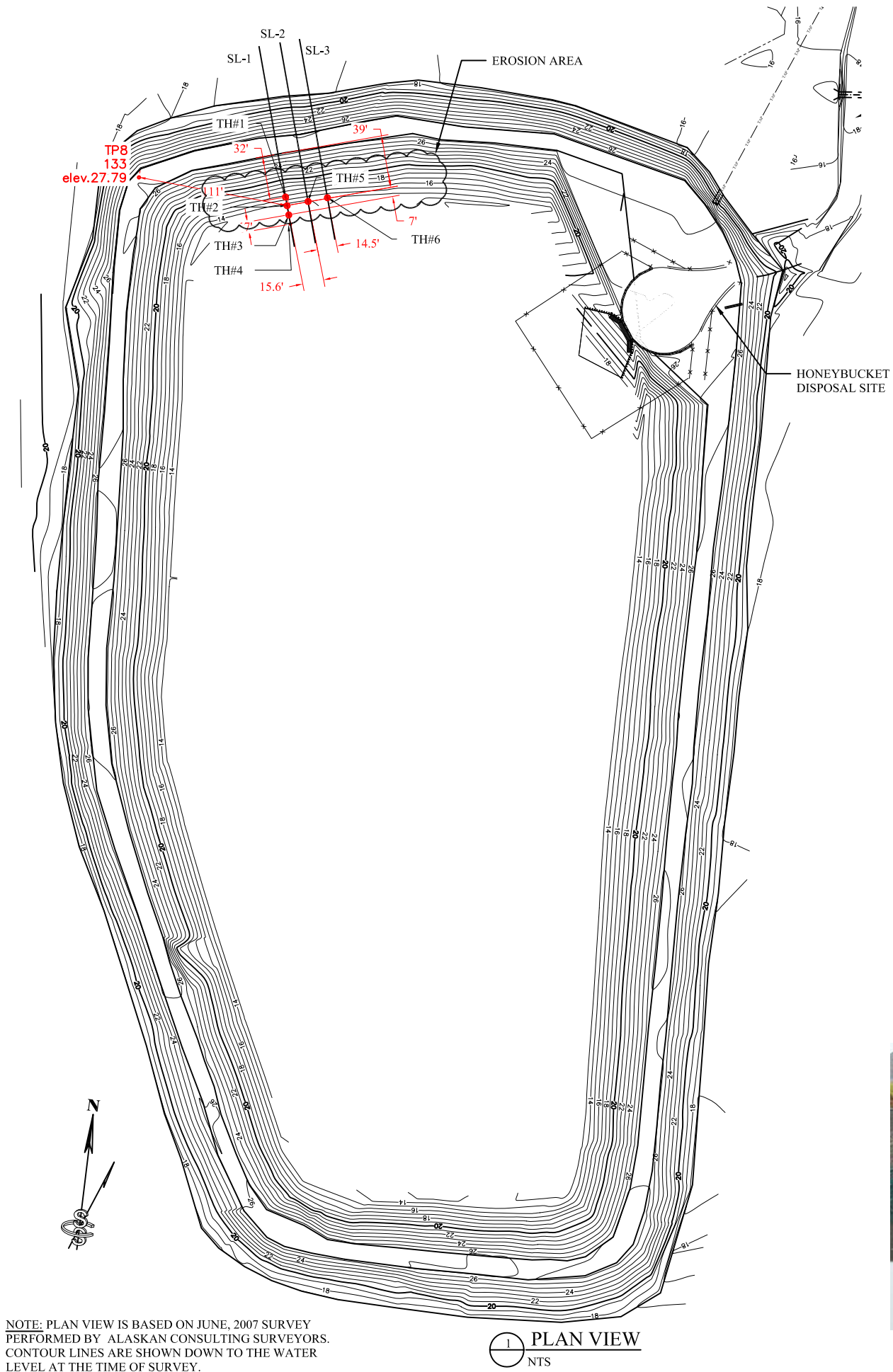
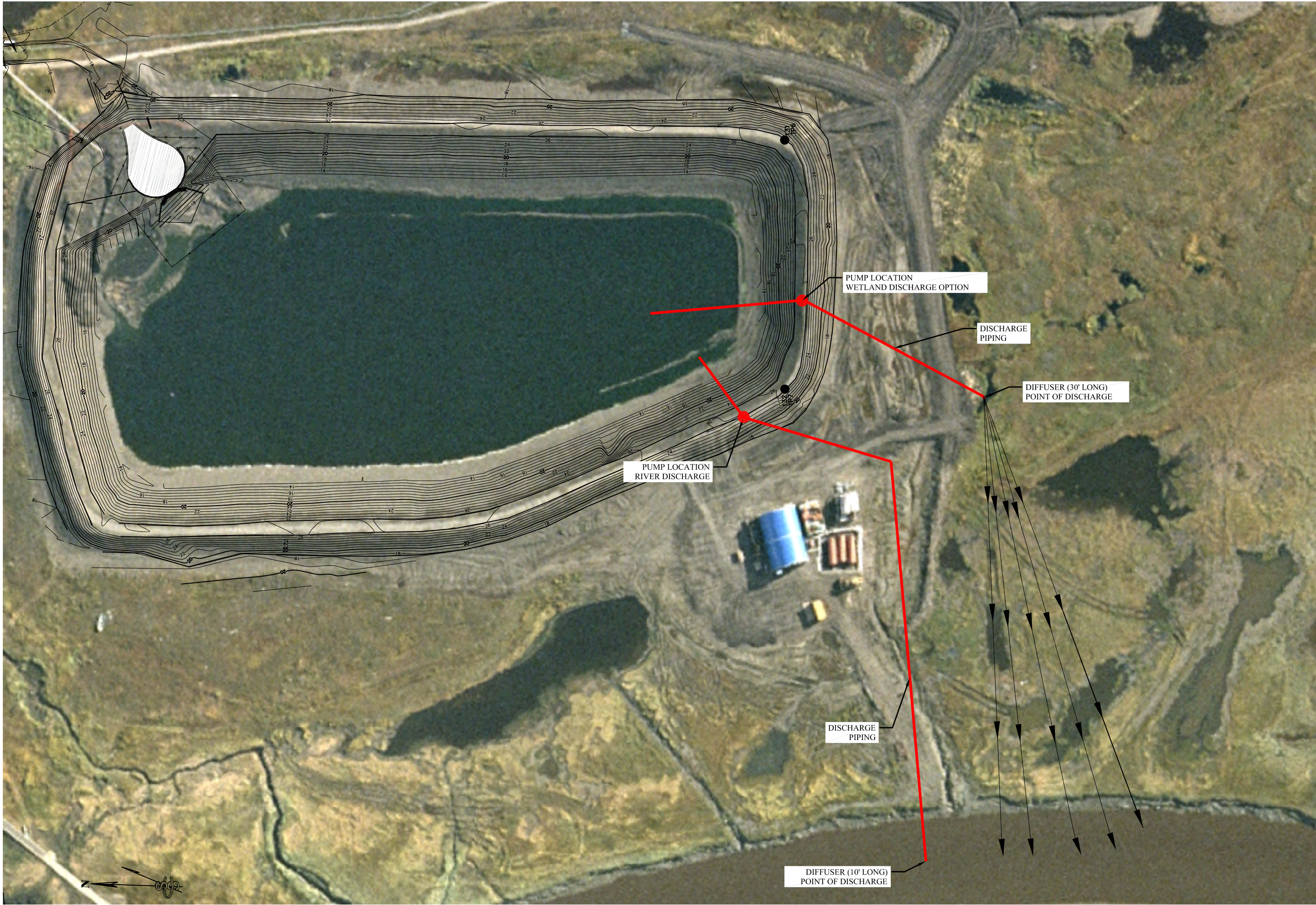


FIGURE 3  
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CITY OF KONGIGANAK  
PRELIMINARY ENGINEERING REPORT  
PRELIMINARY ENGINEERING REPORT INVESTIGATION  
SEWER LAGOON BANK EROSION

SUMMIT  
CONSULTING SERVICES Inc.  
[Logo]





CITY OF KONGIGANAK  
PRELIMINARY ENGINEERING REPORT  
SEWER LAGOON DISCHARGE OPTIONS

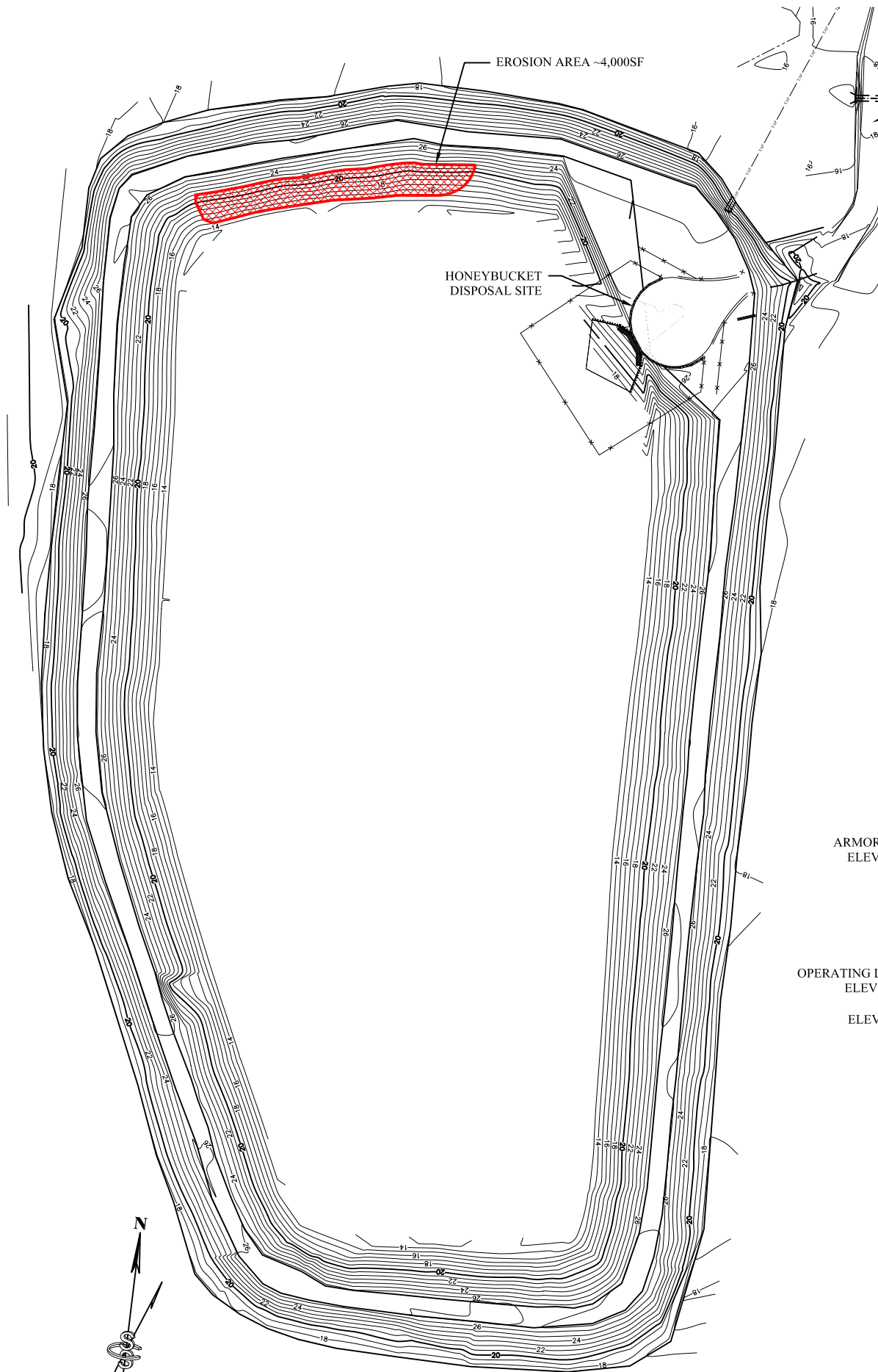


FIGURE  
4

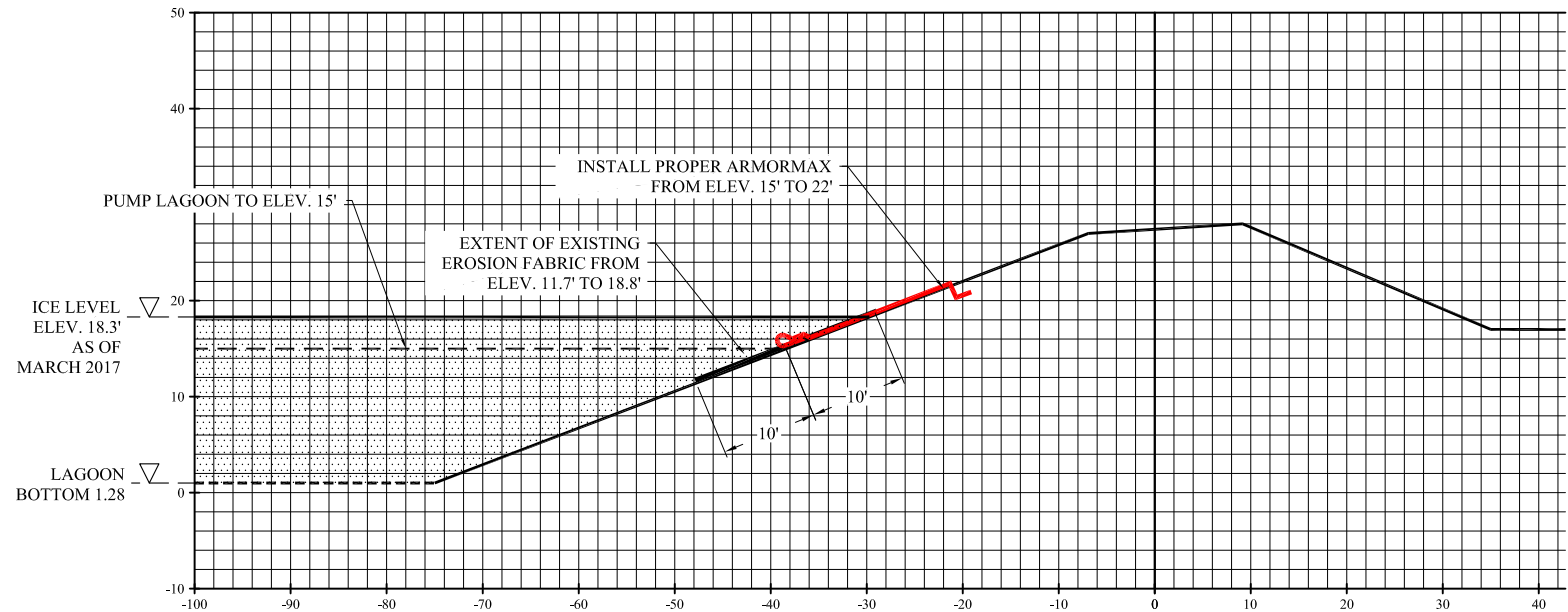
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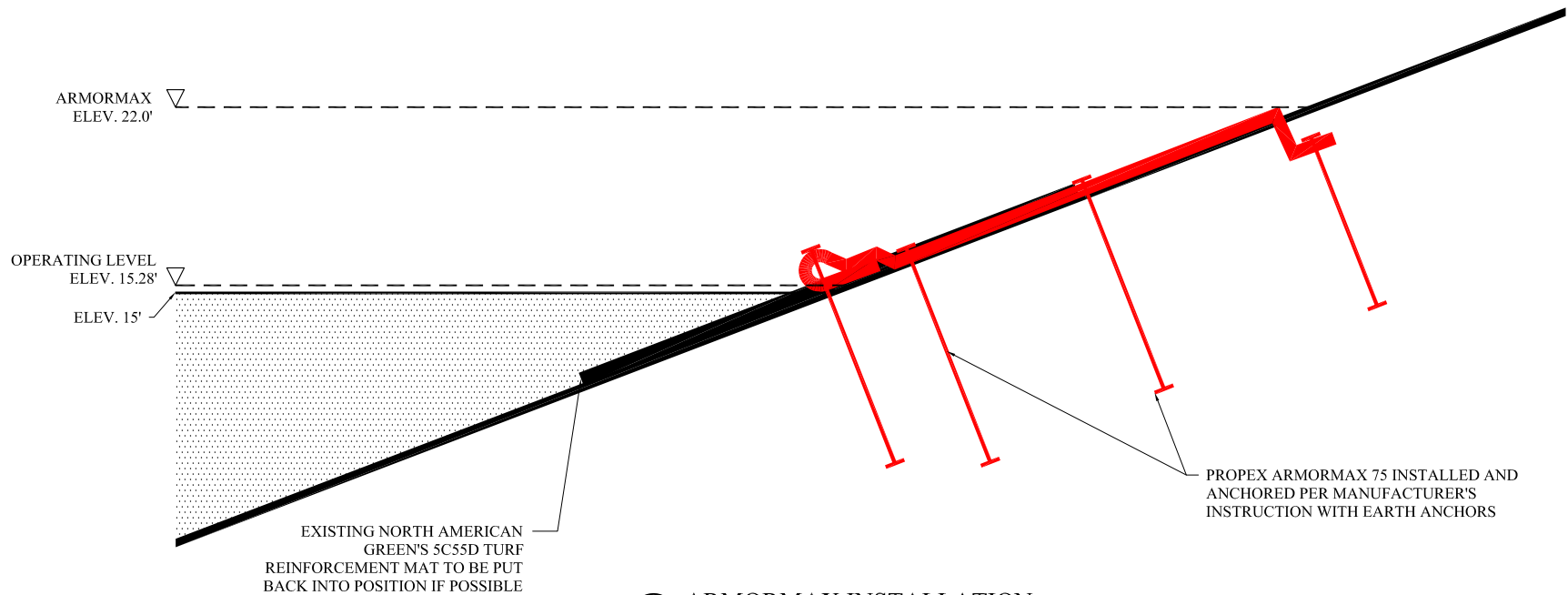
X:\Kongiganak\PER 2017\Figures PER 2018\F5- Lagoon Repair Altr1.dwg, F5, 4/16/2018 4:30:37 PM, Adobe PDF



1 LAGOON REPAIR LOCATION PLAN  
NTS



2 LAGOON BERM REPAIR SECTION  
NTS



3 ARMORMAX INSTALLATION  
NTS

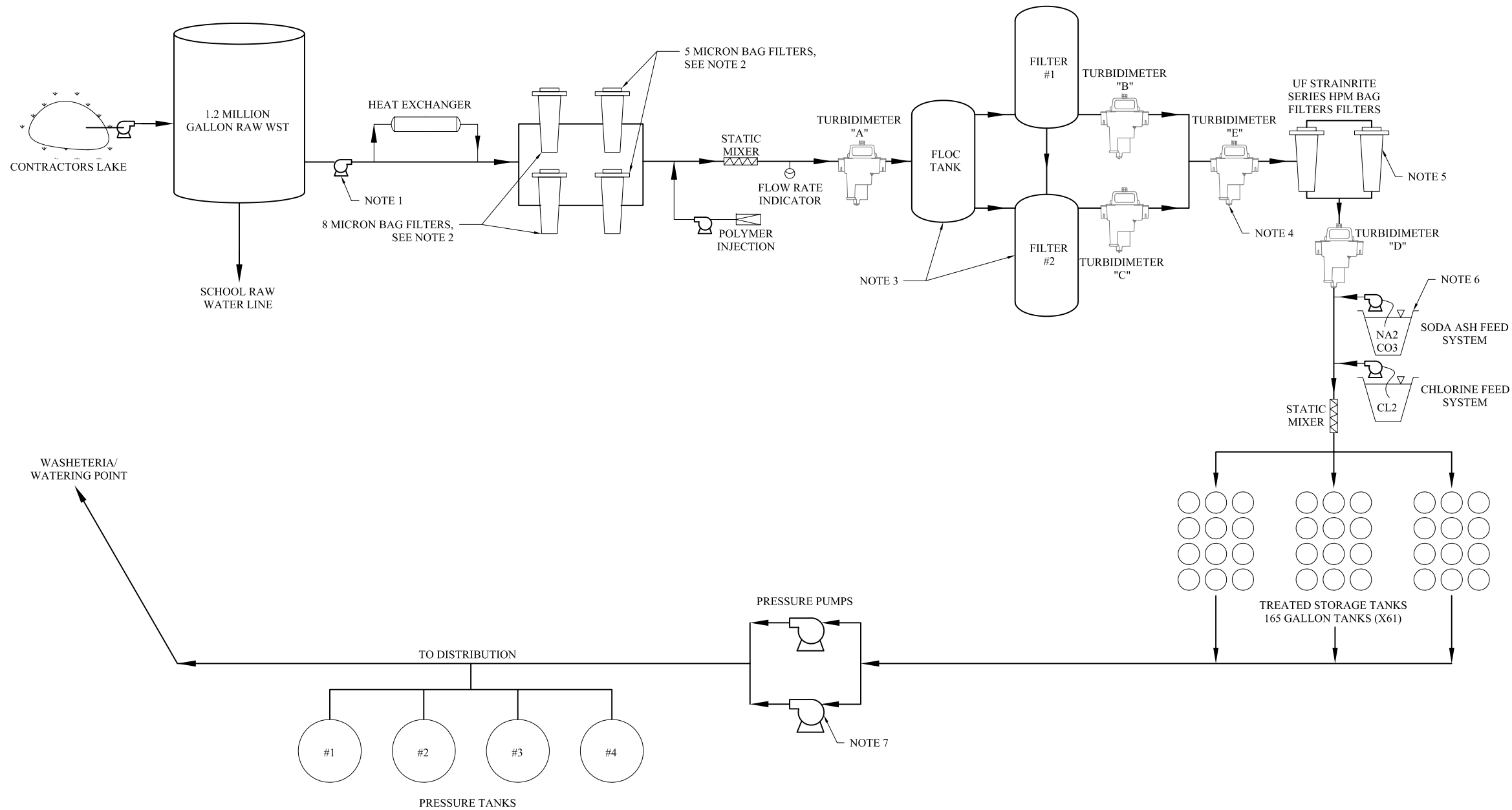
CITY OF KONGIGANAK  
PRELIMINARY ENGINEERING REPORT  
SEWER LAGOON REPAIR ALTERNATIVE 1



FIGURE  
5

DATE: 04/13/2018  
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SCALE: AS NOTED





**NOTES:**

1. TREATMENT PUMP IS A 2HP GOULDS PLACED ON THE FIRST FLOOR. PUMP HAS INSUFFICIENT NPSH TO OPERATE CORRECTLY AT LOWER TANK LEVELS, BELOW 7-8 FT.
2. NONE OF THE BAG FILTERS ARE IN USE.
3. FILTERS WERE BEING OPERATED IN SERIES.
4. HATCH 1720E TURBIDIMETERS IN USE BUT NOT SERVICED.
5. GIARDIA FILTER NOT IN USE.
6. SODA ASH SYSTEM NOT IN USE. OPERATOR NO LONGER HAS A HAND HELD PH METER.
7. ONE OF THE PRESSURE PUMPS IN INOPERABLE.

**CITY OF KONGIGANAK**  
**PRELIMINARY ENGINEERING REPORT**  
**WATER SYSTEM AK2271025 SITE SCHEMATIC**



**FIGURE 6**

DATE: 04/11/2018  
DRAWN BY: JK  
CHECKED BY: HG  
SCALE: AS NOTED

## **Attachment B**

### **US Fish and Wildlife Service IPaC Consultation**

**IPaC** Information for Planning and Consultation **U.S. Fish & Wildlife Service**

## IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

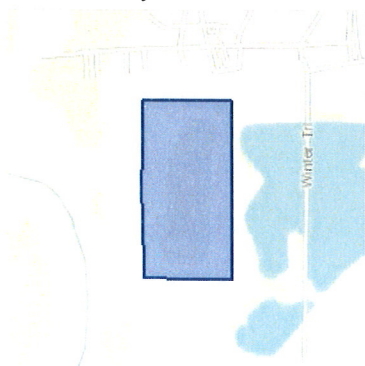
### Project information

**NAME**

Kongiganak Preliminary Engineering Report

**LOCATION**

Bethel County, Alaska

**DESCRIPTION**

Summit Consulting is preparing an engineering report to secure USDA funding for the existing sewer lagoon repairs in Kongiganak, Alaska. The project includes: Internal berm erosion, failing fencing, failing honeybucket deck and overfilled honeybucket dumping area. All the issues are concentrated on the north side of the lagoon and will be limited to approximately 1.19 acres. The whole lagoon area is around 10 acres. If the funding is secured the work will take place in June-October of 2018.

### Local office

Anchorage Fish And Wildlife Field Office

☎ (907) 271-2888

📠 (907) 271-2786

4700 Blm Road  
Anchorage, AK 99507

### Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence

(AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> are managed by the [Endangered Species Program](#) of the U.S. Fish and Wildlife Service.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.

The following species are potentially affected by activities in this location:

## Birds

NAME

STATUS

Spectacled Eider *Somateria fischeri*

Threatened

There is a ~~final~~ critical habitat designated for this species. Your location is outside the designated critical habitat.

<https://ecos.fws.gov/ecp/species/762>

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service<sup>3</sup>. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/>



[birds-of-conservation-concern.php](#)

- Conservation measures for birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data <http://www.birdscanada.org/birdmon/default/datasummaries.jsp>

The migratory birds species listed below are species of particular conservation concern (e.g. [Birds of Conservation Concern](#)) that may be potentially affected by activities in this location. It is not a list of every bird species you may find in this location, nor a guarantee that all of the bird species on this list will be found on or near this location. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the [AKN Histogram Tools](#) and [Other Bird Data Resources](#). To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

NAME	SEASON(S)
Bar-tailed Godwit <i>Limosa lapponica</i>	Breeding
Fox Sparrow <i>Passerella iliaca</i>	Breeding
Mckay's Bunting <i>Plectrophenax hyperboreus</i> <a href="https://ecos.fws.gov/ecp/species/1236">https://ecos.fws.gov/ecp/species/1236</a>	Wintering
Pelagic Cormorant <i>Phalacrocorax pelagicus pelagicus</i>	Breeding
Peregrine Falcon <i>Falco peregrinus</i> <a href="https://ecos.fws.gov/ecp/species/8831">https://ecos.fws.gov/ecp/species/8831</a>	Breeding
Rusty Blackbird <i>Euphagus carolinus</i>	Breeding
Short-billed Dowitcher <i>Limnodromus griseus</i> <a href="https://ecos.fws.gov/ecp/species/9480">https://ecos.fws.gov/ecp/species/9480</a>	Breeding
Short-eared Owl <i>Asio flammeus</i> <a href="https://ecos.fws.gov/ecp/species/9295">https://ecos.fws.gov/ecp/species/9295</a>	Breeding

What does IPaC use to generate the list of migratory bird species potentially occurring in my specified location?

#### Landbirds:

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

#### Atlantic Seabirds:

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date. NOAA/NCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAA/NCCOS models: the models were developed as part of the NOAA/NCCOS project: [Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#). The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decision-making on activities off the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the [Northeast Ocean Data Portal](#), which can be used to explore details about the relative occurrence and abundance of bird species in a particular area off the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?

#### Landbirds:

The [Avian Knowledge Network \(AKN\)](#) provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest, survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the [Migratory Bird Programs AKN Histogram Tools](#) webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

#### Atlantic Seabirds:

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCOS [Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

## Facilities

### Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

This location overlaps the following wetlands:

#### FRESHWATER EMERGENT WETLAND

[PEM1/SS1C](#)

[PEM1/UBT](#)

#### FRESHWATER POND

[PAB3H](#)

#### LAKE

[L2AB3H](#)

A full description for each wetland code can be found at the National Wetlands Inventory website: <https://ecos.fws.gov/ipac/wetlands/decoder>

#### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

**Not for consultation**