



US Army Corps  
of Engineers  
Alaska District

# Public Notice of Application for Permit

Regulatory Division (1145)  
CEPOA-RD  
Post Office Box 6898  
JBER, Alaska 99506-0898

**PUBLIC NOTICE DATE:** December 4, 2012  
**EXPIRATION DATE:** January 4, 2013  
**REFERENCE NUMBER:** POA-2006-312  
**WATERWAY:** Cook Inlet

Interested parties are hereby notified that a Department of the Army permit application has been received for work in waters of the United States as described below and shown on the enclosed project drawings.

Comments on the described work, with the reference number, should reach this office no later than the expiration date of this Public Notice to become part of the record and be considered in the decision. Please contact **Heather Boyer** at (907) 753-2877, toll free from within Alaska at (800) 478-2712, by fax at (907) 753-5567, or by email at [heather.l.boyer@usace.army.mil](mailto:heather.l.boyer@usace.army.mil) if further information is desired concerning this notice.

**APPLICANT:** Furie Operating Alaska, LLC, 1029 West 3<sup>rd</sup> Avenue, Suite 500, Anchorage, Alaska 99501, 907-277-3726

**AGENT:** Stoel Rives LLP, Ms. Ramona Monroe, 510 L Street, Suite 500, Anchorage, Alaska 99501, 907-263-8445.

**LOCATION:** Approximate geographic coordinates of the project structures are provided below. Although Furie plans to erect the Kitchen Lights KLU Platform A over the existing Unit KLU Well #1, the actual location would depend on construction limitations, would be within approximately 1,000 feet of the location described herein, and would be determined by post-installation as-built survey.

**Offshore Production KLU Platform A:** Section 25, T.10 N., R. 11 W., 60.9344°N, 151.1517°W

**Onshore Production Facility:** Section 35, T. 8 N., R. 12 W., 60.7358°N, 151.3306°W

**Marine Gathering Pipelines:** Section varies with location, T. 8 N., 9 N., and 10 N., R. 11 W. and 12 W.

PURPOSE: The applicant's stated purpose is the installation, operation, and maintenance of a platform structure for the long-term production of natural gas from the Kitchen Lights Unit Well #1 reservoir area, transport of natural gas to an onshore production facility, and transport to CIGGS to bring natural gas to energy suppliers.

PROPOSED WORK: The applicant proposes to install and operate an offshore natural gas platform and two marine gathering pipelines in Upper Cook Inlet, Alaska. In addition, the applicant proposes to construct an onshore production facility and an onshore tie-in pipeline in the area of Nikiski, Alaska to support natural gas production operations.

There are four major structural activities to the proposed project with both permanent and temporary structures to be situated both onshore and offshore, as follows:

- 1) Natural gas production platform (permanent offshore structure)
- 2) Jack-up drilling rig and/or platform rig for well support and intervention (temporary offshore structures)
- 3) Natural gas marine gathering pipelines and onshore tie-in pipeline (permanent offshore and onshore structures, respectively)
- 4) Natural gas production facility (permanent onshore structure)

#### Natural Gas Production Platform Design

KLU Platform A would have the following approximate structural dimensions (Sheet 2 of 9 and Sheet 3 of 9):

- 64.5-foot x 72-foot production deck and main deck
- 30-foot x 72-foot living quarters and helicopter deck extending from one side of the platform
- 100-foot boom crane
- 18-foot diameter caisson designed to sit vertically in the water to reach approximately 62 feet above Mean Sea Level
- At the base of the caisson, there are eight 51-inch diameter skirt pile sleeves for 42-inch diameter piles with grouted annuli.

#### Natural Gas Production Platform Installation and Activities

The pre-fabricated platform, deck, and components would be shipped to one of three ports (Homer, Nikiski, or Anchorage) from an out-of-state fabrication center. Two tug barges will "wet tow" the lower portion of the platform (including the caisson) to the project site. The platform would be submerged through a controlled process so that it is positioned vertically in the vicinity of the existing Kitchen Lights Unit (KLU) Well #1 location, using a derrick barge to support the installation process. To secure the platform, the derrick barge would drive eight support piles (the platform support footing). An impact driver would drive each pile to a depth of approximately 120 feet below the seafloor, and the piles would be filled with grout. Alternately, holes for the piles may be pre-drilled and the piles lowered into place and grouted. The derrick barge would install the deck pieces once the platform support footing is secured. The structure would be finalized by completing all connections, piping, and other service units among the deck pieces.

#### Jack-up Drilling Rig and/or Platform Rig Design

The Spartan 151 jack-up drilling rig (jack-up rig), or a similar rig, would be used for drilling activities. Spartan 151 is an A-1 self-elevating mobile drilling unit

with the following structural dimensions (Sheet 4 of 9 and Sheet 5 of 9):

- Three triangular truss-type legs, 250-feet long
- One triangular shaped main deck, approximately 162-foot x 174-foot maximum length and width
- Cantilever drilling derrick extending 58 feet from one end of the main deck to a height of 147 feet
- Helicopter landing deck extending 62 feet from the other end of the main deck
- Two boom cranes at heights of 100 and 120 feet

A temporary platform rig may be employed for some well completion and maintenance activities as a supplement to the jack-up rig activities. The platform rig is a smaller drilling rig that would sit directly on top of KLU Platform A instead of creating its own footprint on the seafloor. Structural details of the platform rig are yet to be determined.

#### Jack-up Drilling Rig and/or Platform Rig Installation and Activities

After KLU Platform A installation is complete, drilling operations would begin. The production wells would be drilled using the jack-up rig (or similar) cantilevered over the platform. The jack-up rig would be temporarily located onsite to perform the production-related drilling activities and then demobilize upon completion.

The platform rig (if used) would be barged to the KLU Well #1 reservoir area, raised onto KLU Platform A with the platform crane, and left in place during well completion and maintenance activities. At completion of drilling activities at KLU Platform A, the platform rig would be barged to another offshore platform site, onshore drilling site, or demobilized for storage onshore.

#### Marine Gathering Pipelines and Onshore Tie-in Pipeline Design

The marine gathering pipelines would run from the production platform to the onshore production facility, following the existing Cook Inlet Gas Gathering System (CIGGS) corridor, operated by Marathon Pipeline Company. The proposed pipeline would have the following structural design (Sheet 6 of 9 and Sheet 7 of 9):

- Two concrete coated steel pipelines of approximately 10-inch diameter (Sheet 6 of 9)
- If necessary, vibration dampers would be installed beneath the lines along the aboveground section.
- Onshore and above sea level, pipeline sections would be insulated, and a sheet metal jacket may be used to protect the insulated lines.

A single subsurface 10-inch to 12-inch tie-in pipeline would carry processed natural gas from the onshore production facility to tie into the CIGGS East Foreland Facility owned cooperatively by Hilcorp and Marathon Oil Corporation (Sheet 8 of 9). This tie-in pipeline is in a preliminary design stage, and subject to design changes.

#### Marine Gathering Pipelines and Onshore Tie-in Pipeline Installation and Activities

At the onshore production facility, the pipeline would exit the structure to run aboveground for approximately 52 feet and then would enter the ground at approximately 25 feet from the northern property boundary and approximately 630 feet from mean high water to run below the coastal bluff and emerge onto the seabed floor (Sheet 7 of 9). Horizontal directional drilling would be used to create a subsurface corridor beneath the bluff to approximately 2,500 feet beyond the

intertidal zone. Installation of the marine gathering pipeline would begin by pulling the pipe through the subsurface corridor from two offshore barges. Beyond the intertidal zone, each new segment of concrete-encased pipe would be welded to the pipeline on a lay barge and allowed to settle onto the seafloor. Flanged sections would be attached by divers to connect the marine gathering pipelines to the platform structure.

The onshore tie-in pipeline would connect to CIGGS approximately 800 feet west of the onshore property (Sheet 8 of 9).

#### Natural Gas Production Facility Design

The proposed onshore production facility would be located southwest of the proposed KLU Platform A; approximately 630 feet from mean high water of Cook Inlet on currently undeveloped land (Sheet 9 of 9). Under the current preliminary design, approximately 6 acres of fill/excavation is anticipated from the facility and related infrastructure. However, a total of about 8 acres may be disturbed by construction-related activities including development of laydown areas and vegetation clearing for utility installation. An approximately 30-foot wide access road would be extended from Rodney and Shelly's Avenue, heading east towards the onshore property.

#### Natural Gas Production Facility Installation and Activities

The facility and all related infrastructure would be constructed in upland areas without using fill in wetland areas. Nearby wetlands would be flagged and avoided (Sheet 9 of 9). Vessels containing process liquids would be contained with curbed concrete foundations to prevent runoff and drainage. All work would be performed in accordance with the enclosed plan (sheets 1-9), dated November 15, 2012.

ADDITIONAL INFORMATION: A permit was issued to Furie Operating Alaska, LLC on November 13, 2006 for exploratory gas wells in the Kitchen Lights Unit.

APPLICANT PROPOSED MITIGATION: The applicant proposes the following mitigation measures to avoid, minimize, and compensate for impacts to waters of the United States from activities involving discharges of dredged or fill material.

a. Avoidance: No discharge of dredged or fill material is proposed. There is a nearby emergent wetland that would be flagged and completely avoided (shown on sheet 8 of 9).

CULTURAL RESOURCES: The latest published version of the Alaska Heritage Resources Survey (AHRs) has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. There are no listed or eligible properties in the vicinity of the worksite. Consultation of the AHRs constitutes the extent of cultural resource investigations by the District Commander at this time, and he is otherwise unaware of the presence of such resources. This application is being coordinated with the State Historic Preservation Office (SHPO). Any comments SHPO may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work.

ENDANGERED SPECIES: The project area is within the known or historic range of the

Cook Inlet beluga whale (*Delphinapterus leucas*) and its designated critical habitat, and Steller sea lion (*Eumetopias jubatus*) and its designated critical habitat. Both species are listed as endangered.

We have determined the described activity may affect the Cook Inlet beluga whale, beluga whale designated critical habitat, and Steller sea lion. We will initiate the appropriate consultation procedures under section 7 of the Endangered Species Act with the National Marine Fisheries Service. Any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The project area is within the known range of Chinook salmon (*Oncorhynchus tshawytscha*), chum salmon (*Oncorhynchus keta*), Coho salmon (*Oncorhynchus kisutch*), sockeye salmon (*Oncorhynchus nerka*), and pink salmon (*Oncorhynchus gorbuscha*). We are currently gathering information regarding these species and have yet to make a determination of effect. Should we find that the described activity may affect the species listed above, we will follow the appropriate course of action under Section 305(b)(2) of the Magnuson-Stevens Act. Any comments the National Marine Fisheries Service may have concerning essential fish habitat will be considered in our final assessment of the described work.

TRIBAL CONSULTATION: The Alaska District fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This Public Notice serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal right or resource. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur. The decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including

the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

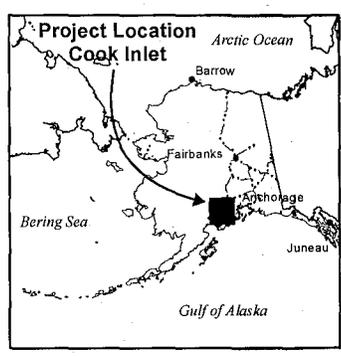
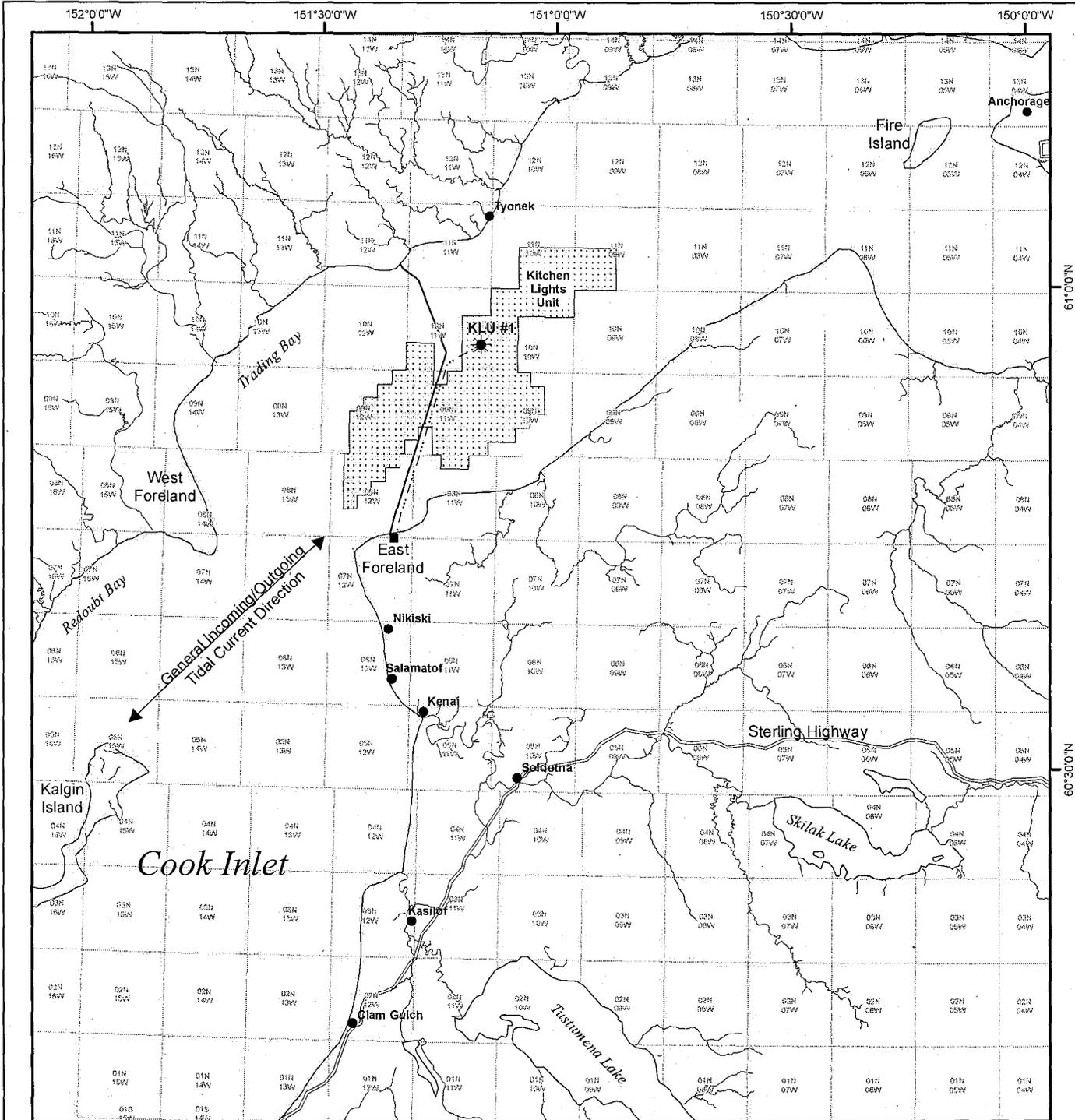
AUTHORITY: This permit will be issued or denied under the following authorities:

(X) Perform work in or affecting navigable waters of the United States -  
Section 10 Rivers and Harbors Act 1899 (33 U.S.C. 403).

Project drawings are enclosed with this Public Notice.

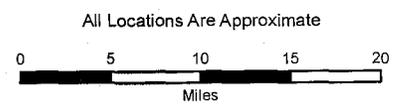
District Commander  
U.S. Army, Corps of Engineers

Enclosures

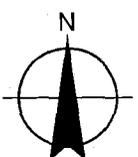


- Kitchen Lights Unit
- KLU #1
- Proposed Onshore Facility

- CIGGS Pipeline
- Proposed Pipeline
- Major Roads



NAD 1983 StatePlane Alaska 4, Feet



Furie Operating Alaska LLC  
 POA-2006-312  
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 Sheet 1 of 9

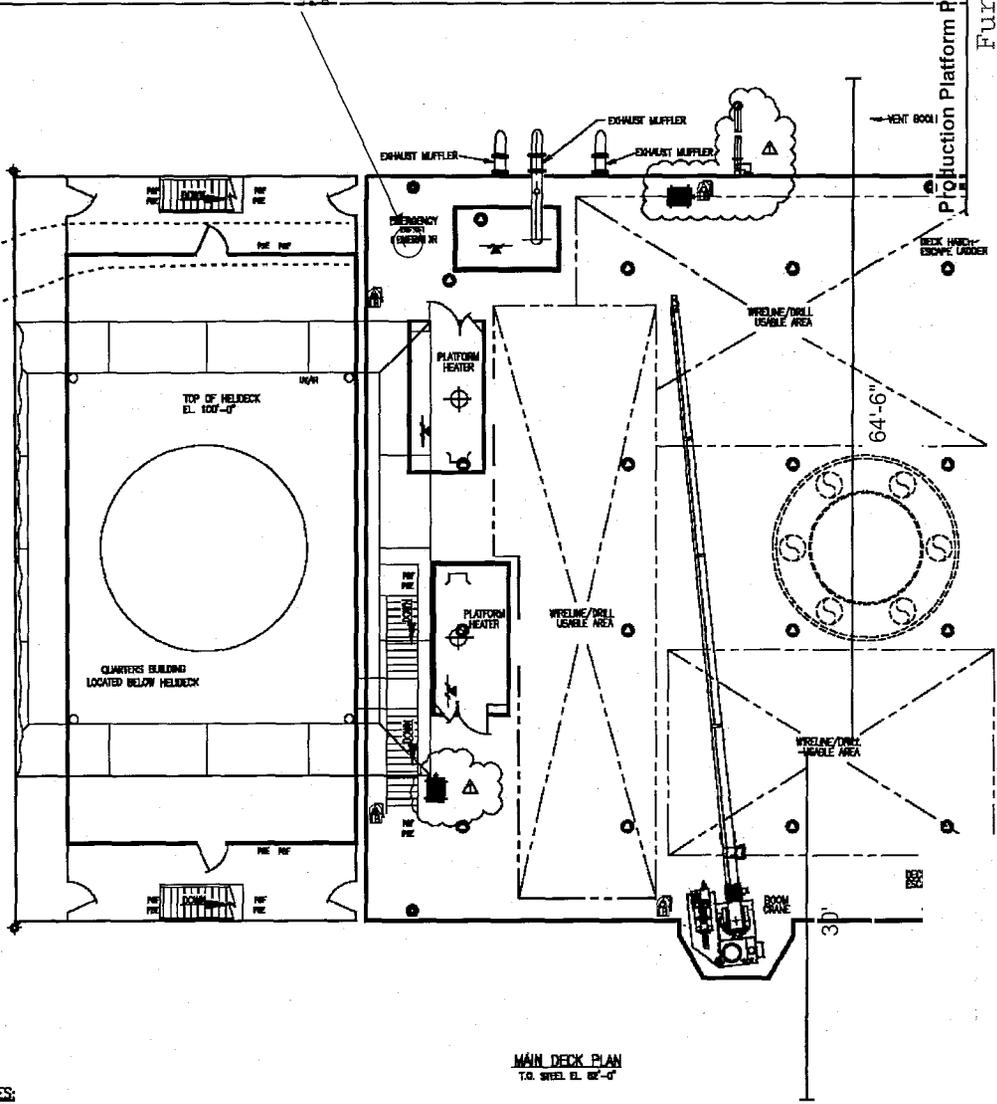
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LOCATION OF JACK-UP RIG  
 PLATFORM LIFT FROM  
 SURROUNDING PRODUCTION WELL BR



PROPOSED 10" PIPELINES

VENT BOOM



MAIN DECK PLAN  
 T.O. SHEEL EL. 02'-0"

NOTES:

ALL GAS DETECTORS ARE UNDER THE MAIN DECK FLOOR EXCEPT FOR THE GAS DETECTOR IN THE EMERGENCY DIESEL GENERATOR ENCLOSURE  
 FINAL LOCATION OF GAS DETECTORS  
 BY FIRE/GAS CONTRACTOR

APPROVED FOR CONSTRUCTION  
 8/28/2012

1	8/28/12	ISSUED FOR REVIEW	JACOB P.	JAC				
2	7/17/12	ISSUED FOR CONSTRUCTION	JACOB P.	JAC				
A	8/28/12	ISSUED FOR DR	JACOB P.	JAC				
REV	DATE	REASON FOR DR	DESIGN BY	CHECK BY	APPROV. 1	APPROV. 2	APPROV. 3	

Production Platform Plan View  
 Furie Opera  
 POA-2006-31  
 Cook Inlet  
 November 15  
 Sheet 2 of

LIST OF EQUIPMENT					
ITEM NO	EQUIPMENT TAG	DESCRIPTION	EST. (DRY) WT.	EST. (WET) WT.	EST. (WET) EQ. WEIGHT
1	ABE-7100	BY ROOM CRANE (DIESEL DRIVEN)	750	750	
2	1AH-9500	EMERGENCY DIESEL GENERATOR	4,800 LBS	4,800 LBS	
3	22Z-9100	QUARTERS BUILDING	325,000 LBS	325,000 LBS	
4	EMF-2000	PLATFORM HEATER	7,430 LBS	7,430 LBS	
5	EMF-2000	PLATFORM HEATER	7,430 LBS	7,430 LBS	
6	22Z-7300	NOSE REEL			
7	22Z-7310	NOSE REEL			

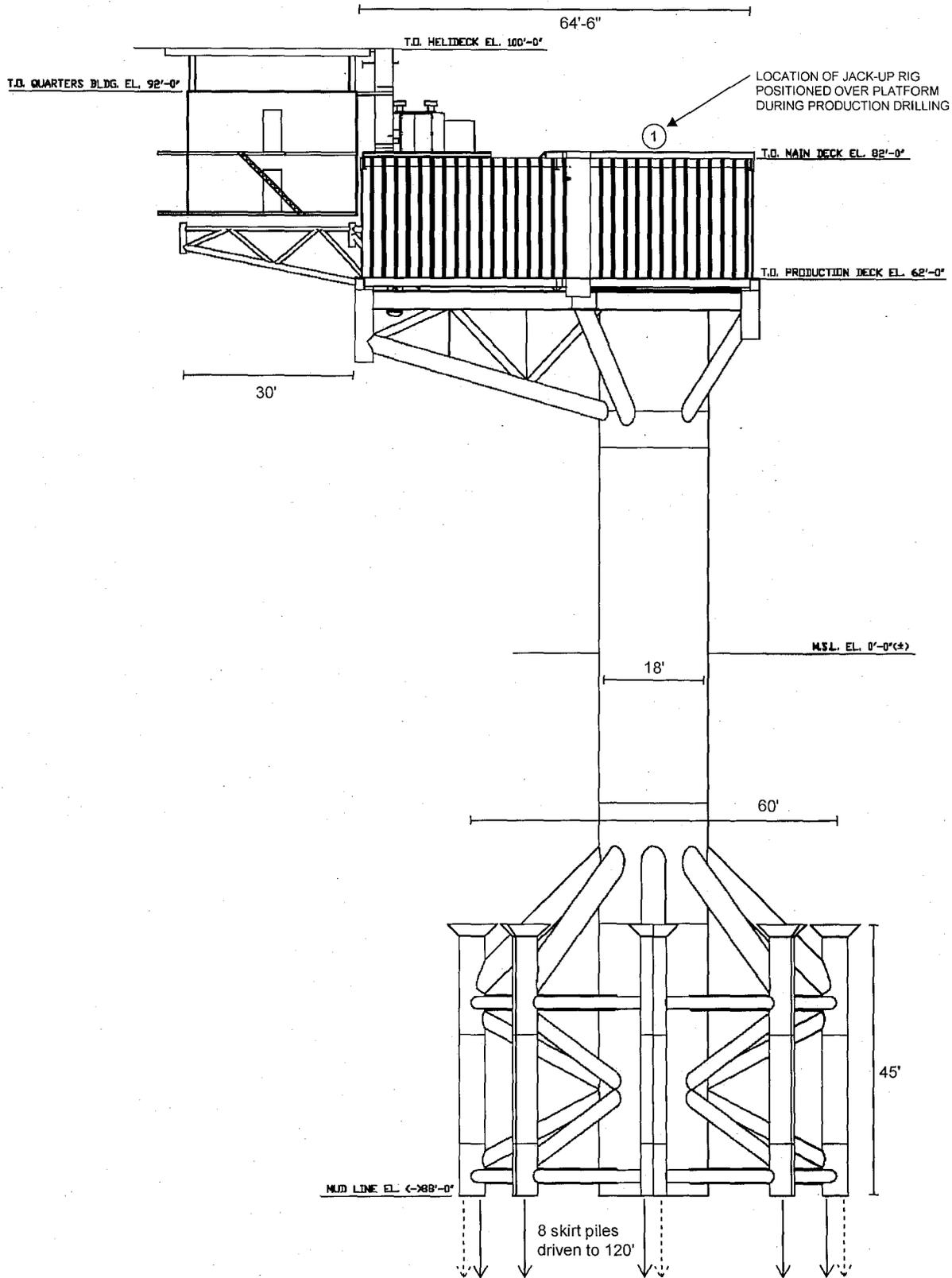
SYMBOL LEGEND

⊖ L3 - LANDING WHEEL UNIT	⊖ L3 - LANDING WHEEL UNIT PORTABLE UNIT	⊖ MANUAL EXIST STATION
⊖ LIFE VENT	⊖ GAS DETECTOR	⊖ FIRST AID STATION
⊖ STORAGE LITTER	⊖ LIFE RING	⊖ NAVIGATIONAL AID LIGHT
⊖ EMERGENCY SHUT OFF SW	⊖ FINEABLE LEAF	⊖ FOG HORN
⊖ EMERGENCY BREAK SENSITIVE	⊖ L3/L2 FIRE DETECTOR	⊖ MANUAL FIRE STATION
⊖ INTERNAL FIRE DETECTOR		

**WILLIAM JACOB MANAGEMENT**  
 Engineering & Construction Management Services

FURIE OPERATING ALASKA, LLC  
 WELLHEAD TEST PLATFORM  
 SAFETY EQUIPMENT LOCATION PLAN  
 WELDED LISTS DEVELOPMENT

MAN DECK PLAN  
 SCALE: 1/8"=1'-0"  
 NUMBER: 410104-POA-31-04-7350-001  
 SHEET 1 OF 1



Production Platform Elevation View

Elevation Looking West

Furie Operating Alaska LLC

POA-2006-312

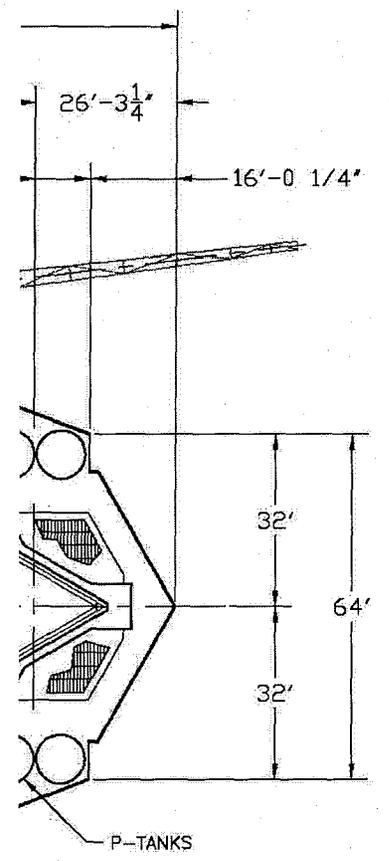
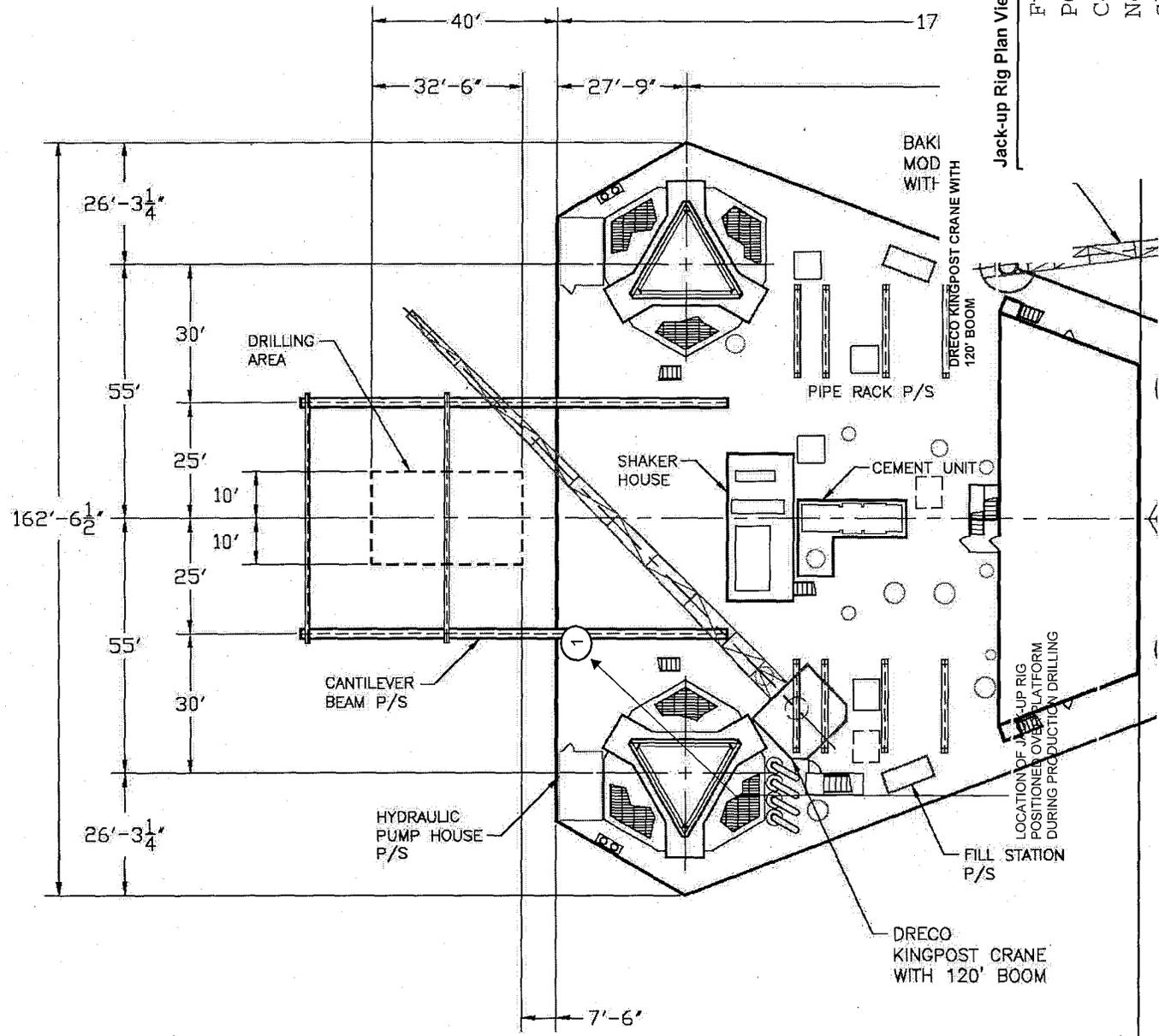
Cook Inlet

November 15, 2012

Sheet 3 of 9

Furie Oper:  
 POA-2006-3:  
 Cook Inlet  
 November 1:  
 Sheet 4 of

Jack-up Rig Plan View



NO.	DESCRIPTION:	APP'D. BY:	DATE:
1508	UPDATED DRAWING TO REFLECT SPARTAN RIG NAME CHANGE	A.C.S.	O.S.
1507	ADDED THE CRANERS PER REQUEST, WITH NEW DRECO CRANE	A.C.S.	J.L.K.
1506	REPLACED TITLE BLOCK WITH IMPROVED DESIGN	A.C.S.	O.S.

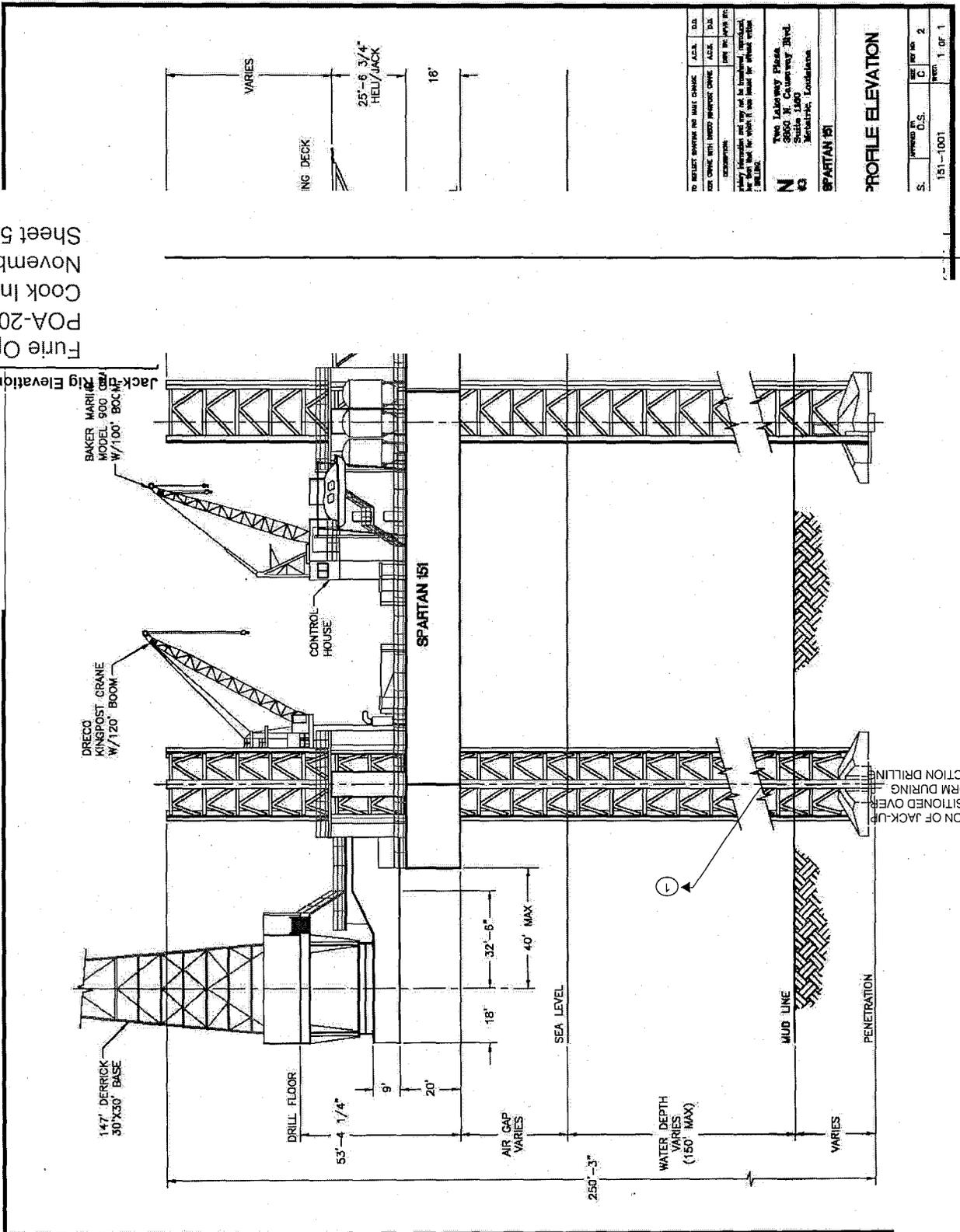
It contains confidential proprietary information and may not be transferred, reproduced, or constructed any project other than that for which it was issued for without written permission from SPARTAN OFFSHORE DRILLING.

**SPARTAN 151**  
 Two Lakeway Plaza  
 3850 N. Causeway Blvd.  
 Suite 1180  
 Metairie, Louisiana

**MAIN DECK ARRANGEMENT**

NO.	DATE	BY	APPROVED BY	SCALE	REV. NO.
105		A.C.S.	O.S.	C	3
1"=1'	DRAWING NO.	151-1003	SHEET	1	OF 1

Furte Operating Ala  
 POA-2012-312  
 Cook Inlet  
 November 15, 2012  
 Sheet 5 of 9



NO.	DATE	DESCRIPTION	BY	CHKD.
1		ISSUED FOR PERMITTING		
2		ISSUED FOR CONSTRUCTION		

TO INJECT SPARTAN 151 JACKET CRANE. A.C.A. D.O.  
 FOR CRANE WITH 100' BOOM. A.C.A. D.O.  
 EXCEPTION: FROM THE JACKET PER  
 ANY INFORMATION AND MAY NOT BE TRANSMITTED, REPRODUCED,  
 COPIED, OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN  
 PERMISSION OF THE COMPANY.

**N**  
**C**  
 Two Labyrinth Pumps  
 8000 H. Capacity 2500  
 2500 H. Capacity 2500  
 2500 H. Capacity 2500  
 2500 H. Capacity 2500

**SPARTAN 151**

**PROFILE ELEVATION**

APPROVED BY: **C** SHEET NO: **2**  
 D.S. 151-1001 REV: **1** OF **1**

Jack-Up Rig Elevation View

CONCRETE CASING WITH 3.5" THICKNESS

CONCRETE COATED EXTERIOR WALL

EL PIPE WITH THICKNESS

(O.D.) 5" WALL

T.B.D.

SEA FLOOR

APPROXIMATELY 10" DIAMETER STEEL PIPE

10"(O.D.) STEEL PIPE WITH 0.625" WALL THICKNESS

APPROXIMATELY 10" DIAMETER STEEL PIPE

Proposed Marine Gathering Pipelines Cross Section View

Furie Operating Alaska LLC  
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Furie Operating Ale  
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 Cook Inlet  
 November 15, 2011  
 Sheet 7 of 9

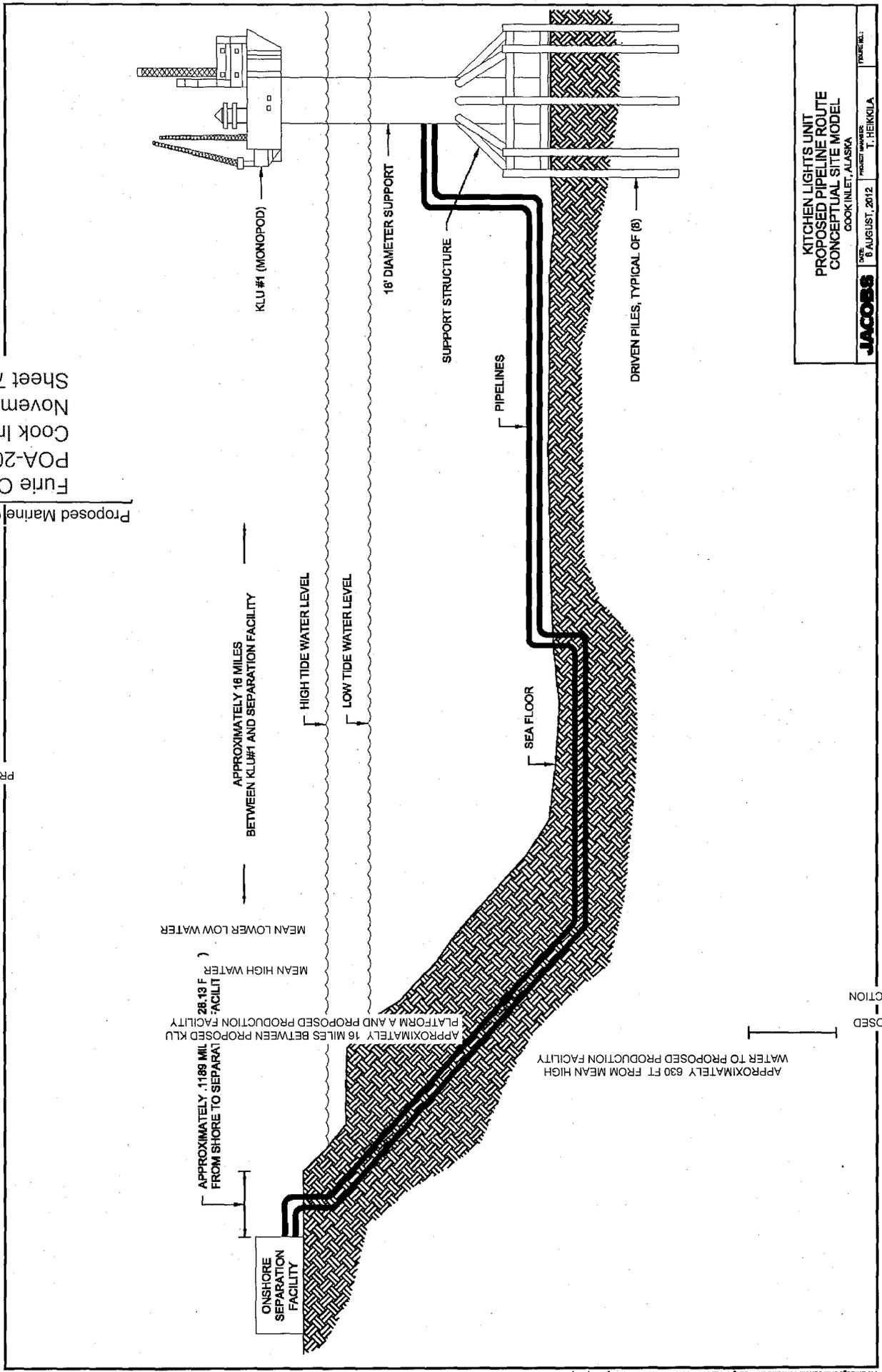
Proposed Marine Gathering Pipeline

8 D

PROPOSED PIPELINES

18 F

PROPOSED KLU

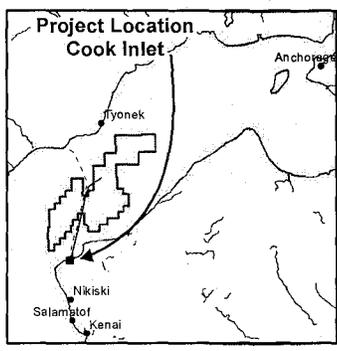
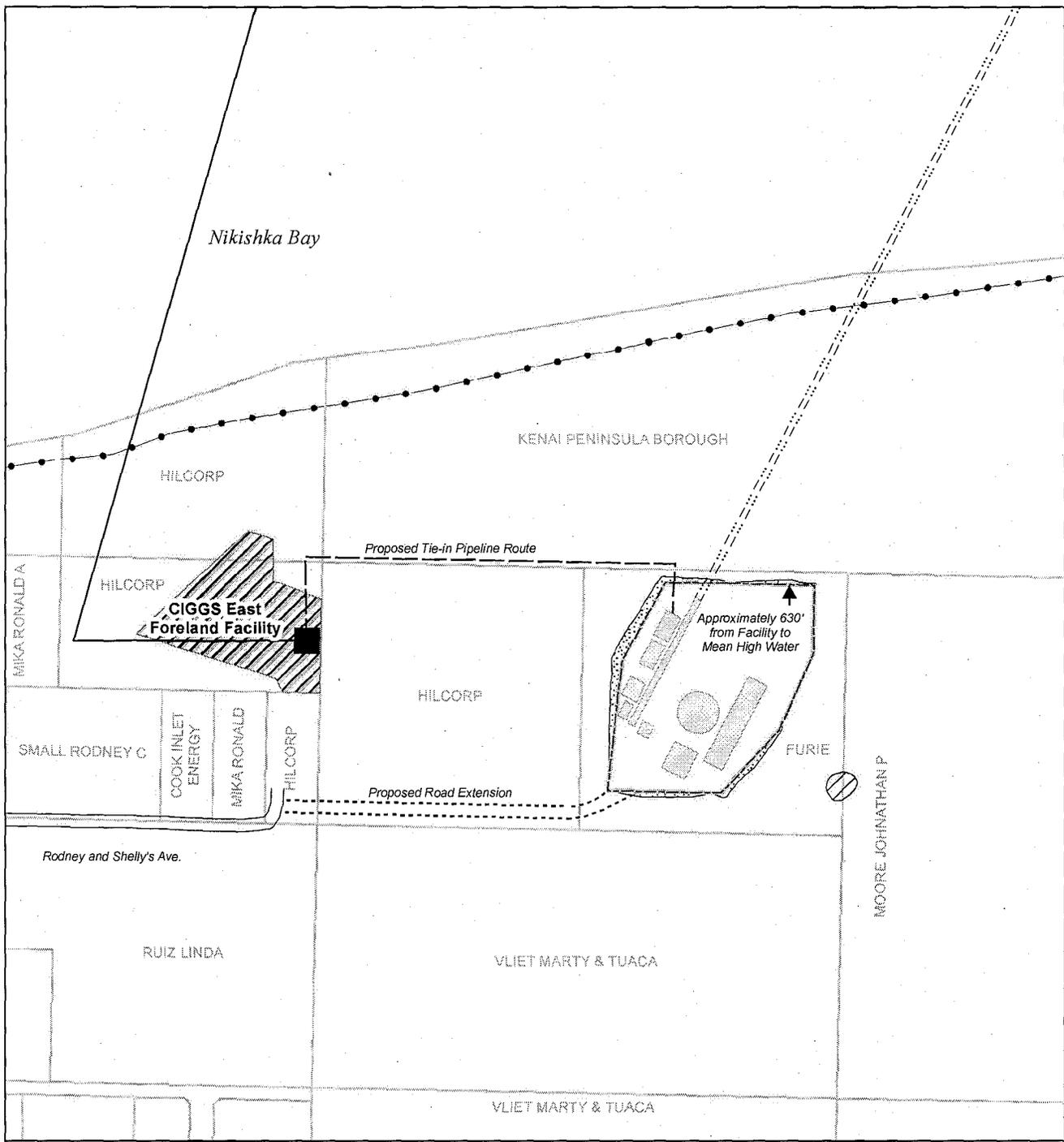


**JACOBS**  
 DATE: 8 AUGUST, 2012  
 PROJECT NUMBER: T. HEIKKILA  
 DRAWING:  
 KITCHEN LIGHTS UNIT  
 PROPOSED PIPELINE ROUTE  
 CONCEPTUAL SITE MODEL  
 COOK INLET, ALASKA

PROPOSED PRODUCTION

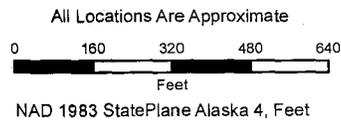
PHOTOGRAPHIC CONCEPTUAL SITE MODEL, 15 AUGUST 2012

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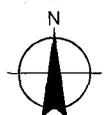
- Proposed Access Road
- - - Proposed Tie-in Pipeline Route
- Proposed Marine Gathering Pipelines
- CIGGS Pipeline
- Mean High Water
- Parcels
- Approximate CIGGS Tie-In Location

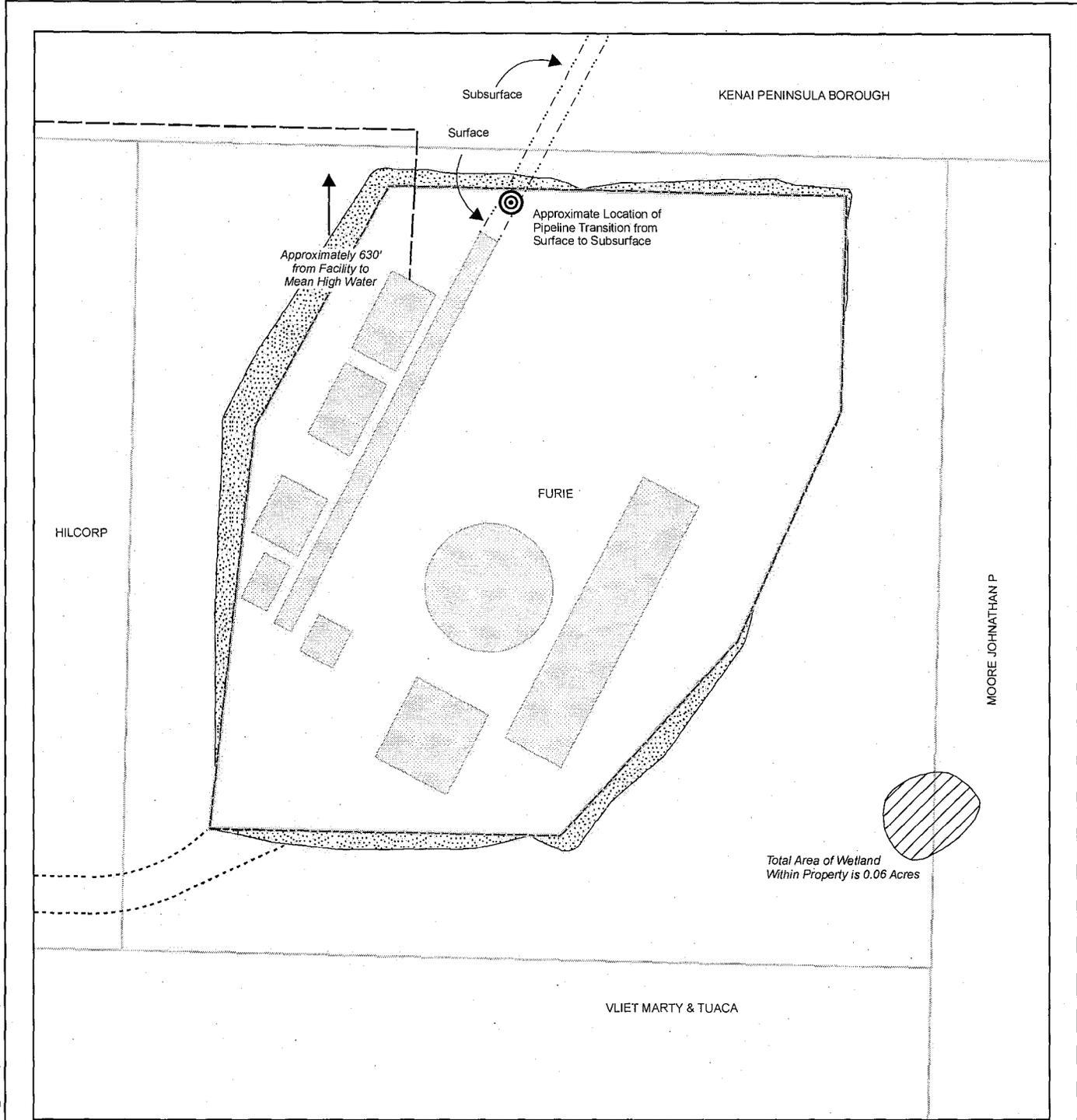
- Approximate Location of Onshore Production Facility Components
- ⊗ Emergent Wetland (Jacobs 2012)
- CIGGS Facility Location
- Production Facility Conceptual Pad Extent
- Production Facility Conceptual Cut and Fill Extent



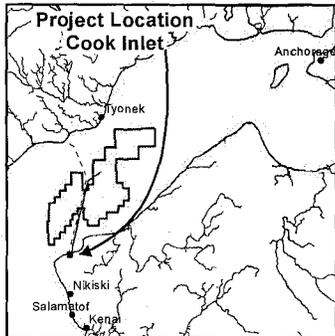
**Proposed Pipeline Tie-in Location Plan View**

Furie Operating Alaska LLC  
 POA-2012-312  
 Cook Inlet  
 November 15, 2012  
 Sheet 8 of 9





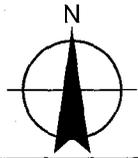
P:\Furie\USACE Section 10M\XD\Sheet\Beltg\_Furie\_PlanView\_FacilityArea\_ClosedUp.pmd\_smitm]



- Proposed Tie-in Pipeline Route
- Proposed Marine Gathering Pipelines
- Proposed Access Road
- Mean High Water
- Parcels

- Emergent Wetland (Jacobs 2012)
- Approximate Location of Onshore Production Facility Components
- Production Facility Conceptual Pad Extent
- Production Facility Conceptual Cut and Fill Extent

All Locations Are Approximate  
 0 25 50 75 100  
 Feet  
 NAD 1983 StatePlane Alaska 4, Feet



**Proposed Onshore Production Facility Plan View**

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