THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Natural Resources
DIVISION OF OIL AND GAS
550 W. 7th Avenue Suite 1100
Anchorage, Alaska 99501-3560
Main: 907.269.8800
Fax: 907.269.8939

April 9, 2018

Chris Wrobel
Permitting Coordinator
ConocoPhillips Alaska Inc.
P.O. Box 100360
Anchorage, AK 99510-0360

RE: **LONS 82-180, ConocoPhillips Alaska Inc, Kuparuk River Unit**, **DS-2G**, **Road Improvement Unit Plan of Operations Amendment Decision.**

Dear Mr. Wrobel:

The Alaska Department of Natural Resources (DNR), Division of Oil and Gas (Division), in accordance with Alaska Statute 38.05 and Alaska Oil and Gas Leasing Regulations (11 AAC 83) grants authorization to conduct activities on state lands as proposed in the Kuparuk River Unit (KRU) Plan of Operations (Plan) amendment application dated January 16, 2018 for the above referenced project.

Scope:
ConocoPhillips Alaska, Inc. (CPAI) requests approval to improve the existing gravel access road to Drill Site 2G (DS-2G). The purpose of this project is to bring the existing road up to current engineering standards for the safe and efficient movement of drilling rigs, to stabilize underlying permafrost, and to provide safer driving conditions. The project will increase the thickness of road section to approximately 6.5 feet above the ground surface and the width to 32 feet of driving surface. The new toe-to-toe width will vary from 58 to 81 feet depending on terrain. It is estimated that approximately 96,723 cubic yards of gravel will be placed on 4.35 acres of new footprints. All work will be conducted from the existing road.

Plan activities include:

- Placement of gravel using graders, front-end loaders, dump trucks, and excavator.

Location information:
KRU
DS-2G
Meridian: Umiat Township: 11N Range: 9E Sections: 29, 32
ADL(s): 025656

Agency review:
The Division provided a review and comment opportunity for the activities considered for authorization under this decision. The following government entities were notified on February 1, 2018, for comment on the Plan: U.S. Army Corps of Engineers, Alaska Department of Environmental Conservation (ADEC), Alaska Department of Fish and Game (ADFG), and DNR: Division of Mining, Land & Water (DMLW), Division of Oil and Gas, and the North Slope Borough (NSB). The comment deadline was 4:30 pm Alaska time on February 15, 2018. No comments were received.

Public notice:
Public notice and solicitation for comment was published in the Alaska Dispatch News on February 21, 2018, and the Arctic Sounder on February 22, 2018, with a deadline for comments of March 24, 2018, at 4:30 pm Alaska time. Additionally, a copy of the notice was posted on State of Alaska and Division web sites and faxes of the public notice were sent to the Nuiqsut, Deadhorse, and Barrow post offices. No comments were received.

Conditions/Stipulations:
1. A certified As-Built survey of the activity shall be provided within one year of placement of the improvement. This As-Built must be both digital and hard copy.

Please attach this amendment approval with the original decision. This unit operations amendment approval is issued in accordance with Alaska Statute 38.05, Alaska Administrative Codes 11 AAC 83.346 and 11 AAC 83.303. The Division reviewed this amendment under the unit regulation for the Plan, 11 AAC 83.346, and considers the factors set forth in 11 AAC 83.303(a) and (b). The amendment was also evaluated against the KRU agreement for conformance.

A person affected by this decision may appeal it, in accordance with 11 AAC 02. Any appeal must be received within 20 calendar days after issuance of the decision, as defined in 11 AAC 02.040(c) and (d) and may be mailed or delivered to the Commissioner, Department of Natural Resources, 550 W 7th Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918, or sent by electronic mail to dnr.appeals@alaska.gov. This decision takes effect immediately. If no appeal is filed by the appeal deadline, this decision becomes a final administrative order and decision of the department on the 31st day after issuance. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources.

This approval signifies only that the State of Alaska has no objection to the operations outlined in the Plan amendment application. It does not constitute certification of any property right or land status claimed by the applicant nor does it relieve the applicant of responsibility to obtain approvals or permits from other persons or governmental agencies that may also be required. All stipulations contained in the original lease and subsequent Plan approvals remain in full force and effect.

If activities have not commenced, this approval expires on April 9, 2021. Failure to comply with the terms and conditions outlined in the lease, the attached stipulations, and this authorization may result in revocation of this unit operations approval.

Any questions or concerns about this amendment may be directed to Natural Resource Specialist James Hyun at 907-269-8885 or emailed to james.hyun@alaska.gov.

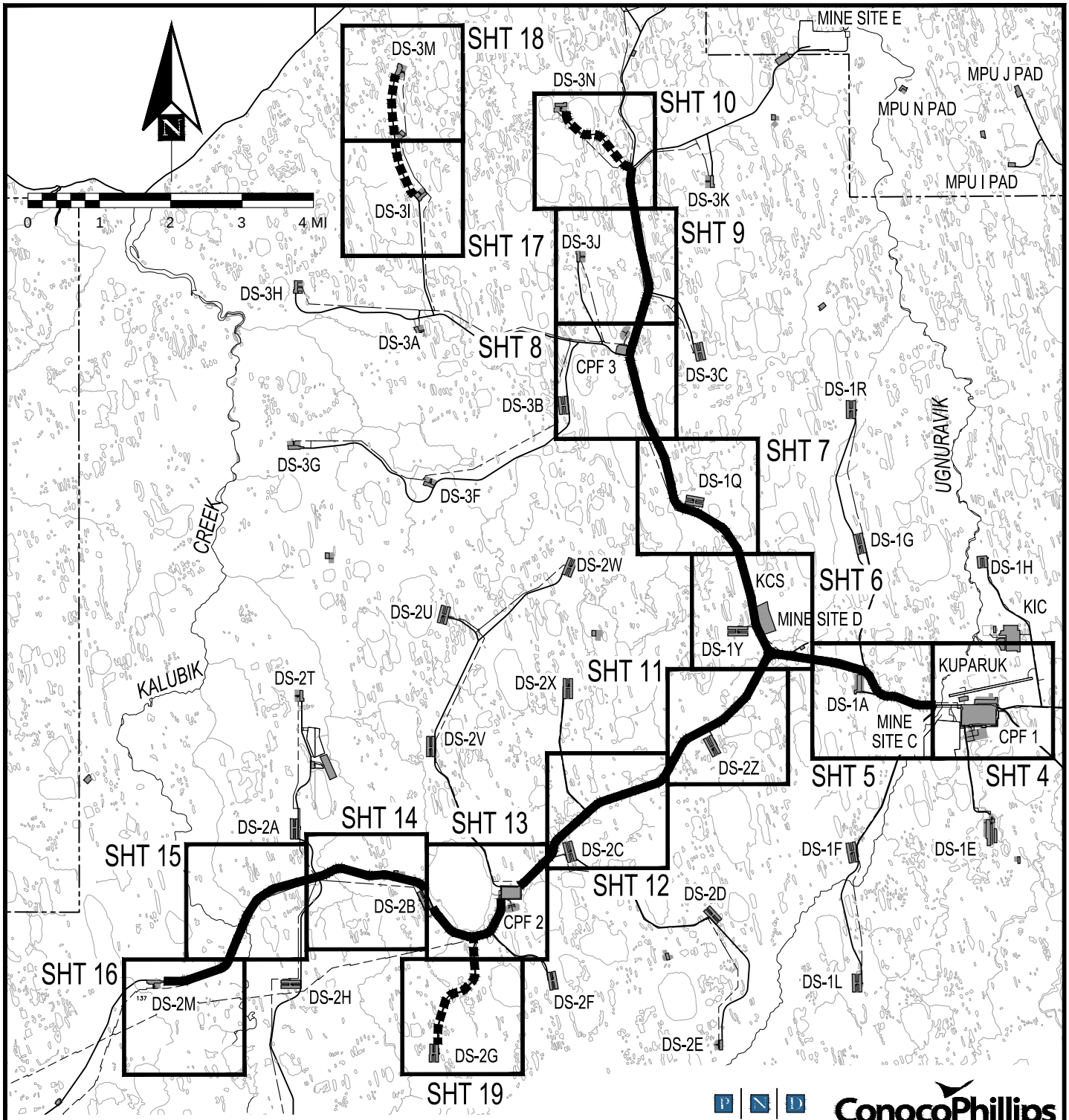
Sincerely,

Nathaniel Emery

Nathaniel Emery
Natural Resource Specialist

Attachments: Figure(s) 1-6
2008 North Slope Mitigation Measures with 2011 supplement

ecc: DOG: Graham Smith, Nathaniel Emery, Paul Blanche, and spco.records@alaska.gov
DMLW: Melissa Head, Henry Brooks, Kimberley Maher, and Becky Baird
ADFG: Jack Winters
ADEC: dec.water.oilandgas@alaska.gov and Laurie Silfven
Borough: Jason Bergerson, Josie Kaleak, and Matt C. Dunn
Other: regpagemaster@usace.army.mil



LEGEND

MAIN ROAD IMPROVEMENTS

ACCESS ROAD IMPROVEMENTS

REFERENCE: 2017
APPLICANT: CPAI
PROPOSED: GKA ROAD IMPROVEMENTS

AT: ALASKA

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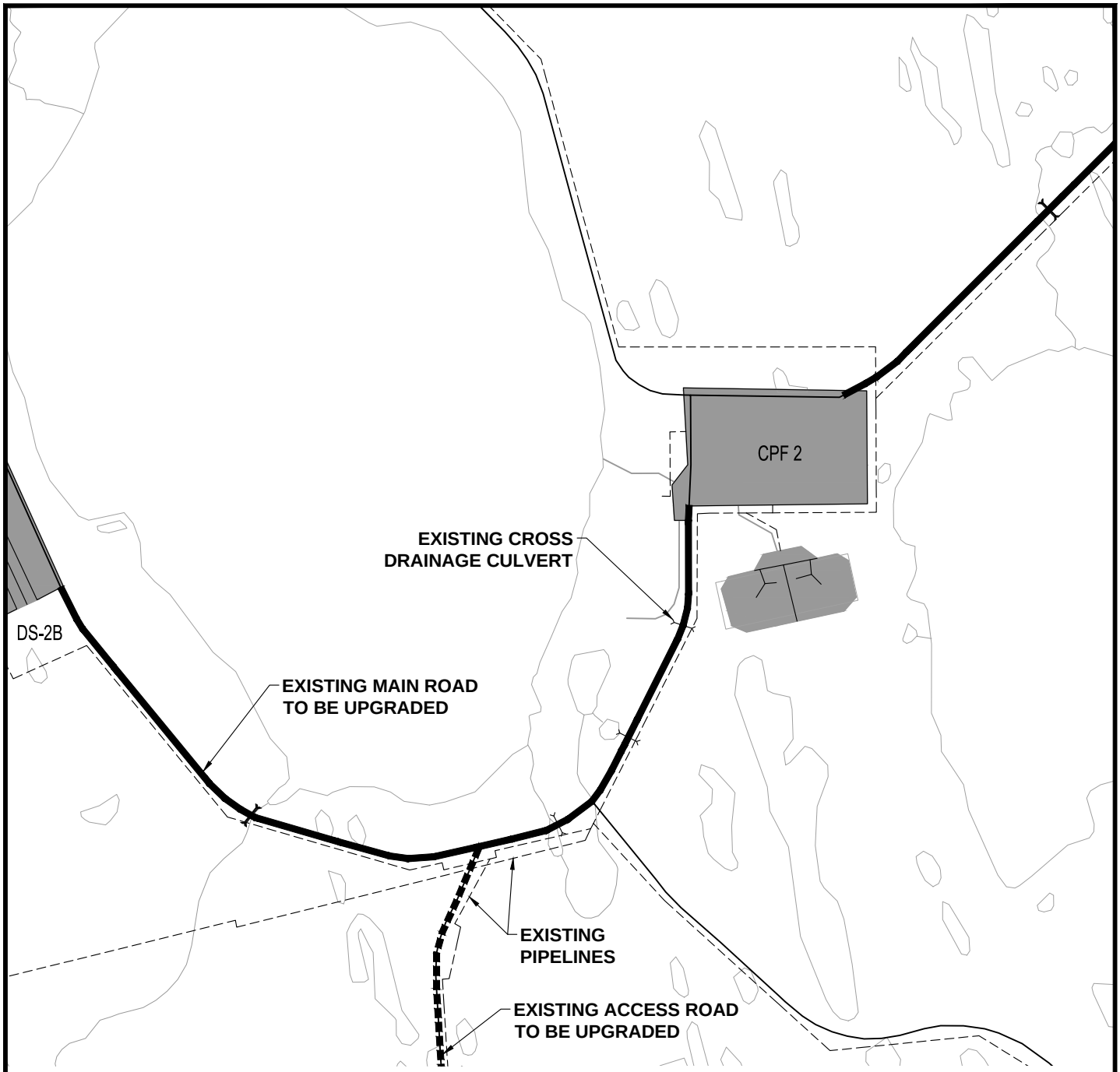
ROAD IMPROVEMENTS KEY MAP

Figure 1



ROAD IMPROVEMENTS (10 of 16)

NOTE:
EXISTING CULVERT LOCATIONS ARE BASED ON TOPOGRAPHIC SURVEY.

0 600 1200 1800 2400 FT

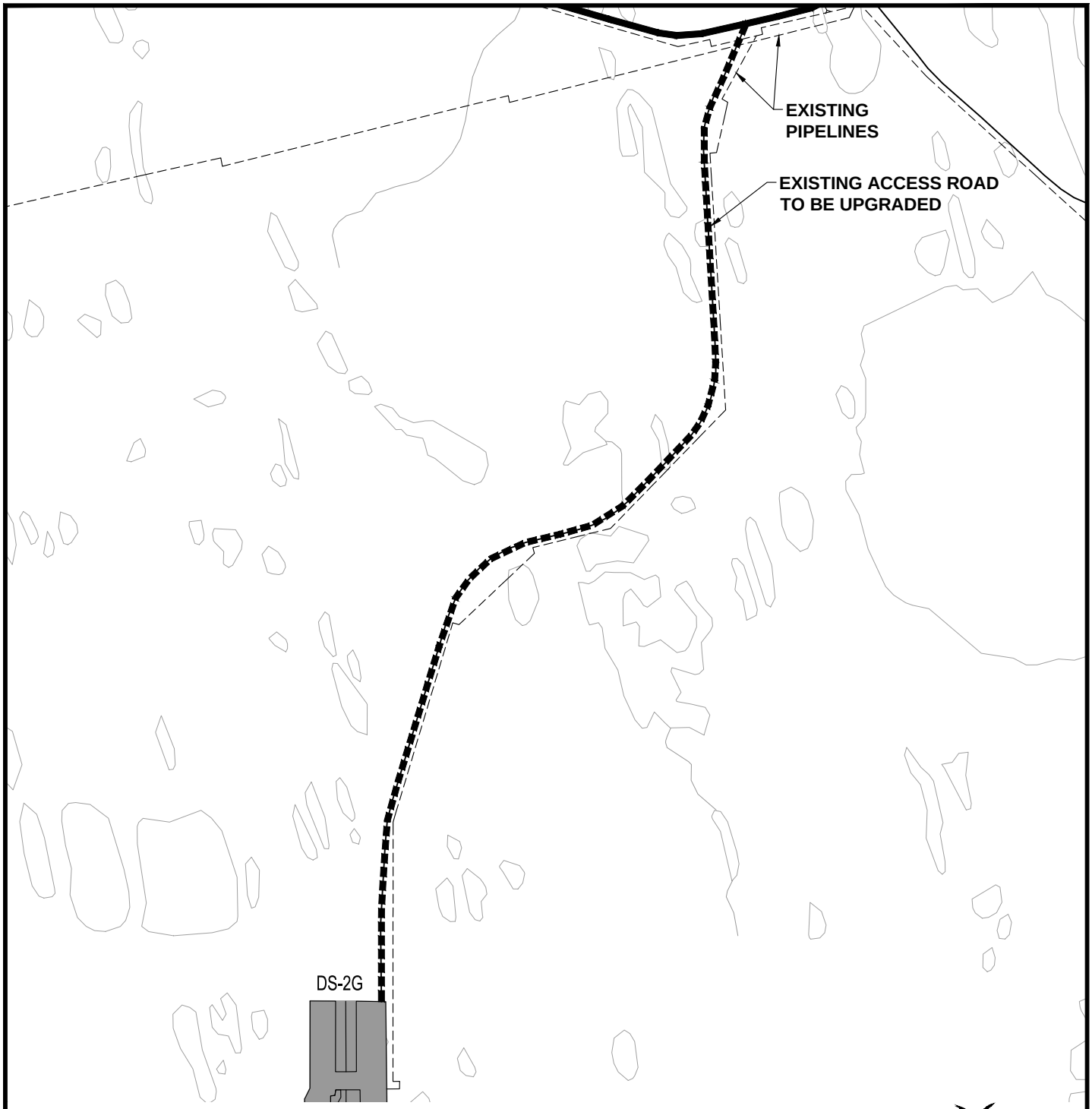
PND ENGINEERS, INC.

ConocoPhillips Alaska, Inc.

REFERENCE: 2017
APPLICANT: CPAI
PROPOSED: GKA ROAD IMPROVEMENTS

AT: ALASKA
SHEET 13 of 22 11-16-2017

Figure 2



ROAD IMPROVEMENTS
(16 of 16)

NOTE:
CURRENT TOPOGRAPHIC SURVEY HAS NOT BEEN PERFORMED ON DS-2G ACCESS ROAD.

N

0 600 1200 1800 2400 FT

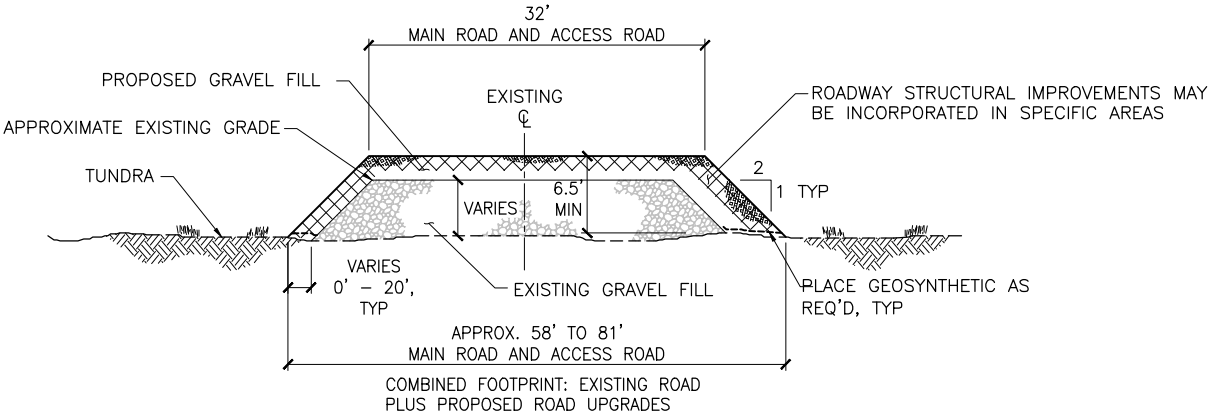
P N D ENGINEERS, INC.

ConocoPhillips Alaska, Inc.

REFERENCE: 2017
APPLICANT: CPAI
PROPOSED: GKA ROAD IMPROVEMENTS

AT: ALASKA
SHEET **19** of **22** 11-16-2017

Figure 3



TYPICAL MAIN ROADWAY AND ACCESS ROADWAY IMPROVEMENT SECTION

NOT TO SCALE

NOTES:

1. COMBINED ROAD FOOTPRINTS SHOWN ABOVE ARE APPROXIMATIONS BASED UPON TYPICAL ROAD PRISMS. ACTUAL FOOTPRINTS WILL VARY BASED UPON LOCAL TUNDRA FEATURES AND TOPOGRAPHY. ROAD WIDTHS MAY BE WIDER THAN DIMENSIONS INDICATED IN ISOLATED AREAS WHERE NATURAL TERRAIN DEPRESSIONS OCCUR, OR WHERE INFRASTRUCTURE REQUIRES A TALLER ROAD PRISM (e.g. STREAM AND PIPELINE CROSSINGS).
2. GRAVEL EXPANSION FOOTPRINT MAY OCCUR ON BOTH SIDES OF ROADWAY, AND IN SOME INSTANCES, ONLY ON ONE SIDE OF ROADWAY.
3. NEW ROAD CENTERLINE MAY NOT ALIGN WITH EXISTING CENTERLINE IN ORDER TO MINIMIZE IMPACTS TO FISH BEARING STREAMS AND LAKES, AND TO MAINTAIN A SAFE OFFSET FROM PIPELINES.
4. GEOSYNTHETIC FABRIC MAY BE INSTALLED PRIOR TO GRAVEL PLACEMENT IN ROAD FOOTPRINT EXPANSION AREAS, AS DEEMED NECESSARY.

P | N | D ENGINEERS, INC.

ConocoPhillips Alaska, Inc.

REFERENCE: 2017
APPLICANT: CPAI
PROPOSED: GKA ROAD IMPROVEMENTS

AT: ALASKA

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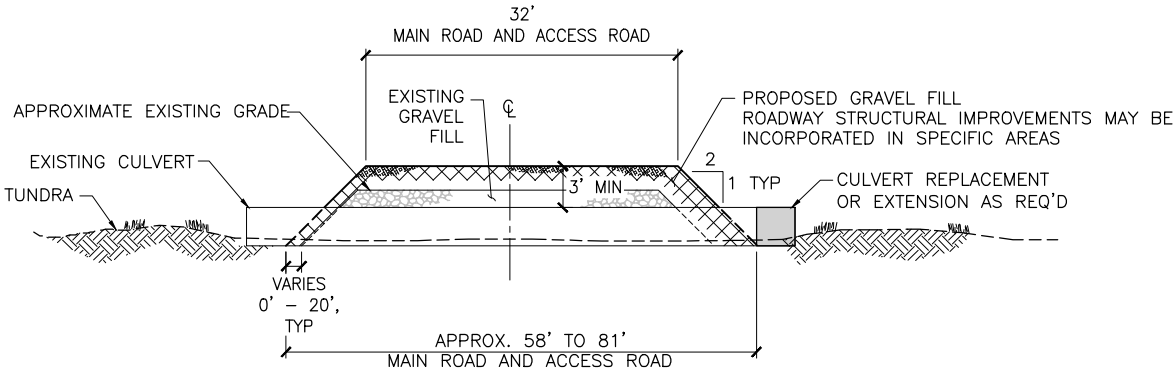
Figure 4



TYPICAL CULVERT CROSSING SECTION

NOT TO SCALE

NOTES:
1. CULVERTS SHALL BE REPLACED BY A CULVERT OF SIMILAR DIAMETER, OR EXTENDED AS NECESSARY.
2. CULVERT EXTENSIONS MAY BE REQUIRED ON ONE OR BOTH SIDES OF ROAD.
3. CULVERTS AT KNOWN FISH BEARING STREAMS SHALL NOT BE MODIFIED, EXCEPT AS DIRECTED FOR COMPENSATORY MITIGATION.
4. UP TO 200 CULVERTS MAY BE REPLACED OR EXTENDED ALONG THE PROJECT LENGTH.
5. CULVERTS MAY BE REPLACED OR EXTENDED UP TO A TOTAL LENGTH OF 120 FT.

P | N | D ENGINEERS, INC.

ConocoPhillips Alaska, Inc.

REFERENCE: 2017
APPLICANT: CPAI
PROPOSED: GKA ROAD IMPROVEMENTS

AT: ALASKA

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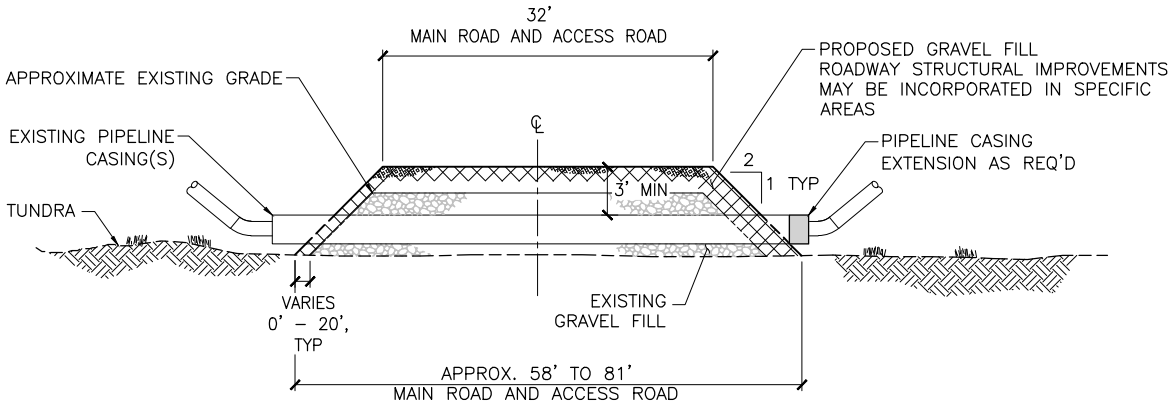
Figure 5



TYPICAL PIPELINE CROSSING SECTION

NOT TO SCALE

NOTES:
1. PIPELINE CASINGS SHALL BE EXTENDED AS NECESSARY, AND MAY BE REQUIRED ON ONE OR BOTH SIDES OF ROAD.
2. UP TO 190 PIPELINE CASINGS MAY BE EXTENDED ALONG THE PROJECT LENGTH.
3. PIPELINE CASINGS MAY BE EXTENDED UP TO A TOTAL LENGTH OF 185 FT.

P | N | D ENGINEERS, INC.

ConocoPhillips Alaska, Inc.

REFERENCE: 2017
APPLICANT: CPAI
PROPOSED: GKA ROAD IMPROVEMENTS

AT: ALASKA

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Figure 6