



U.S. Department of the Interior
Bureau of Land Management

Willow Master Development Plan

Supplemental Environmental Impact Statement

FINAL

Volume 14: Appendix E.14

January 2023

Prepared by:

U.S. Department of the Interior
Bureau of Land Management
Anchorage, Alaska

In Cooperation with:

U.S. Army Corps of Engineers
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service
Native Village of Nuiqsut
Iñupiat Community of the Arctic Slope
City of Nuiqsut
North Slope Borough
State of Alaska

Estimated Total Costs Associated
with Developing and Producing this SEIS: \$3,350,000



Mission

To sustain the health, diversity, and productivity of the public lands for the future use and enjoyment of present and future generations.

Cover Photo Illustration: North Slope Alaska oil rig during winter drilling.

Photo by: Judy Patrick, courtesy of ConocoPhillips.

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Willow Master Development Plan

Appendix E.14

Land Ownership and Use Technical Appendix

January 2023

**North Slope Borough Ordinance
Serial No. 75-06-75**

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**NORTH SLOPE BOROUGH
ORDINANCE SERIAL NO. 75-06-75**

**AN AMENDED ORDINANCE APPROVING THE
WILLOW PROJECT MASTER PLAN AND
AMENDING THE OFFICIAL ZONING MAP OF THE
NORTH SLOPE BOROUGH TO REZONE AS
RESOURCE DEVELOPMENT DISTRICT THOSE
LANDS NEEDED TO DEVELOP THE WILLOW
PROJECT**

WHEREAS, pursuant to North Slope Borough Municipal Code (NSBMC) § 19.60.060, ConocoPhillips Alaska, Inc. (CPAI) has applied for approval of its existing Master Plan for the Willow development and to amend the official zoning map to rezone from Conservation District to Resource Development District those lands that are needed for development of its Willow project; and

WHEREAS, the lands proposed to be rezoned are shown in the map attached as Exhibit 1; and

WHEREAS, in accordance with NSBMC § 19.60.060 the North Slope Borough Planning Commission held a public hearing at its meeting on December 17, 2020 to review the rezone and proposed Master Plan for the area; and

WHEREAS, at its December 17, 2020 meeting, the Planning Commission did not approve Resolution 2020-17, attached as Exhibit 2, recommending that the Assembly approve the Rezone and Master Plan, provided CPAI or any owner/operator follows the conditions, general stipulations and advisory language set forth in the Final Staff Recommendations by a vote of 2 yes and 5 no; and

WHEREAS, the Planning Commission approved a motion to return the application to CPAI for modification to rezone a limited area by a vote of 6 yes and 1 no; and

WHEREAS, the Final Staff Recommendations are attached as Exhibit 3; and

WHEREAS, the proposed rezone complies with the policies in Chapter 19.70; and

WHEREAS, the proposed rezone is in an area with adequate services, including roads, parking, boardwalks, water, sewer, garbage collection, gas, electricity, drainage, police and fire protection or the developer has agreed to provide all the necessary improvements or services for the area; and

WHEREAS, the comments from reviewing parties on the proposed rezoning have been adequately addressed; and

WHEREAS, there is a demonstrated need for additional land in the zoning district being requested; and

WHEREAS, the resulting district or expanded district will be a logical, integrated area and will not constitute spot zoning; and

WHEREAS, a master plan is available for the area to be developed; and

WHEREAS, in accordance with NSBMC § 19.60.060 the Assembly shall review and act on a rezoning by ordinance. The Assembly shall consider the application and Planning Commission recommendation; and

WHEREAS, the legal description for the areas to be rezoned to Resource Development District are as follows:

Township 9 North, Range 1 East, Sections 1, 2(NE ¼, S ½), 3(S ½), 7, 8, 9, 10, 11, 12(N ½, SW ¼), 15(N ½), 16, 17, 18, 19, 20, 21(NW ¼), 29(NW ¼) and 30(N ½, SW ¼), Umiat Meridian, Alaska.

Township 9 North, Range 1 West, Sections 2(W ½), 3, 4(E ½), 10, 11, 12, 13, 14, 15(E ½), 21(SE ¼), 22 (NE ¼, S ½), 23, 24, 25, 26, 27, 28, 29(SE ¼), 32(NE ¼), 33, 34(N ½), 35(N ½) and 36(NW ¼), Umiat Meridian, Alaska.

Township 9 North, Range 2 East, Sections 5(N ½, SW ¼), 6 and 7(NW ¼), Umiat Meridian, Alaska.

Township 10 North, Range 1 East, Sections 35(SE ¼) and 36(S ½), Umiat Meridian, Alaska.

Township 10 North, Range 1 West, Sections 2(S ½), 3(SE ¼), 9(SE ¼), 10, 11, 14(W ½), 15, 16(NE ¼), 22, 23(W ½), 26(NW ¼), 27, 28(E ½), 33(E ½), and 34, Umiat Meridian, Alaska.

Township 10 North, Range 2 East, Sections 12(SE ¼), 13(NE ¼, S ½), 23(SE ¼), 24(W ½), 26(NE ¼), 31(S ½) and 35(NW ¼), Umiat Meridian, Alaska.

Township 10 North, Range 3 East, Sections 1(SW ¼), 2(S ½), 3, 4, 5(S ½), 7, 8, 9, 10, 11, 12, 13(SW ¼, N ½), 14(N ½), 16(N ½), 17(N ½) and 18(N ½), Umiat Meridian, Alaska.

NOW, THEREFORE, BE IT ENACTED:

SECTION 1. Classification. This ordinance is a non-code ordinance.

SECTION 2. Severability. If any provision of this ordinance or any application thereof to any person or circumstance is held invalid, the remainder of this

ordinance and the application to other persons and circumstances shall not be affected thereby.

SECTION 3. Effectiveness. This code ordinance shall become effective immediately upon adoption.

SECTION 4. Approval.

1. The North Slope Borough Assembly approves the Master Plan.
1. The North Slope Borough Assembly amends the Official Zoning Map by rezoning the above legally described area of Willow from Conservation District to Resource Development District subject to the conditions, general stipulations, mitigation measures and advisory language set forth in the Final Staff Recommendations, Exhibit 3 and the Proposed Conditions of Approval In Response to Kuukpiik Comments, Exhibit 4. The Official Zoning Map and the master digital copy of the Official Zoning Map shall be updated by the NSB Planning Department to reflect this amendment.

INTRODUCED: December 1, 2020

ADOPTED: January 15, 2021


John Hopson, Jr., President
Date: 01-15-2021

ATTEST:


Sheila Burke, Borough Clerk
Date: 01-15-2021


Harry K. Brower, Jr., Mayor
Date: 01-15-2021

**NSB RESOURCE DEVELOPMENT DISTRICT
WILLOW REZONE PROJECT
DRAFT MAP ONLY**

Legend

- Current Resource Development Units
- Proposed Willow Rezone



Exhibit 1

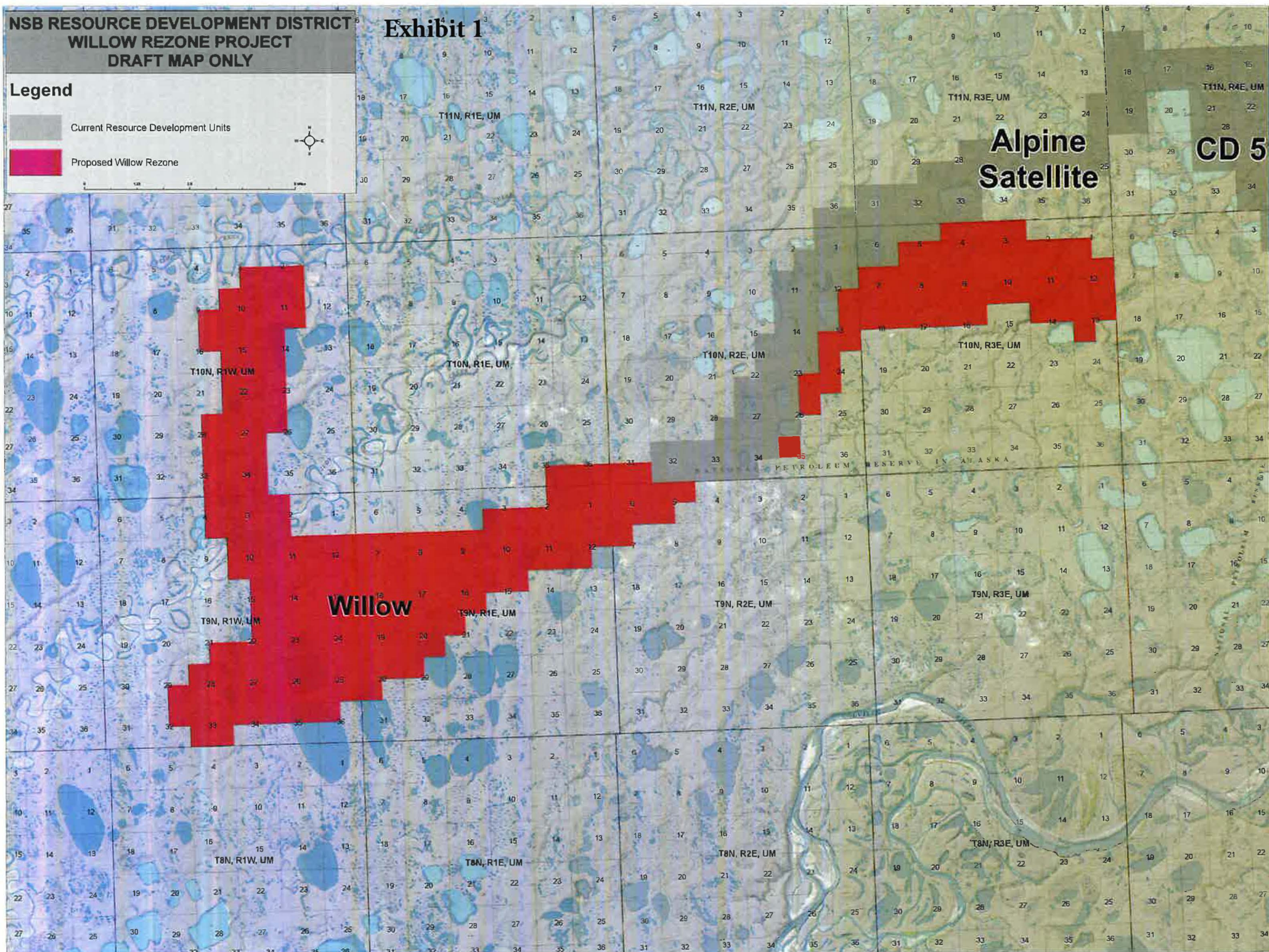


Exhibit 2

NORTH SLOPE BOROUGH PLANNING COMMISSION RESOLUTION SERIAL NO. 2020-17

A RESOLUTION RECOMMENDING THAT THE ASSEMBLY APPROVE THE MASTER PLAN AND AMEND THE OFFICIAL ZONING MAP OF THE NORTH SLOPE BOROUGH TO REZONE AS RESOURCE DEVELOPMENT DISTRICT THOSE LANDS NEEDED TO DEVELOP THE WILLOW PROJECT

WHEREAS, ConocoPhillips Alaska, Inc. (CPAI) has submitted to the North Slope Borough (NSB) an application for approval of its existing Master Plan for the Willow development and to amend the official zoning map to rezone from Conservation District to Resource Development District those lands that are needed for development of its Willow project; and

WHEREAS, pursuant to North Slope Borough Municipal Code (NSBMC) §19.30.050 the Planning Commission shall review and make recommendations to the Assembly on all rezoning requests outside the City of Utqiagvik; and

WHEREAS, the proposed rezone complies with the policies in Chapter 19.70; and

WHEREAS, the proposed rezone is in an area with adequate services, including roads, parking, boardwalks, water, sewer, garbage collection, gas, electricity, drainage, police and fire protection or the developer has agreed to provide all the necessary improvements or services for the area; and

WHEREAS, the comments from reviewing parties on the proposed rezoning have been adequately addressed; and

WHEREAS, there is a demonstrated need for additional land in the zoning district being requested; and

WHEREAS, the resulting district or expanded district will be a logical, integrated area and will not constitute spot zoning; and

WHEREAS, a master plan is available for the area to be developed; and

WHEREAS, the lands proposed to be rezoned are shown in the map attached as Exhibit A; and

WHEREAS, the Planning Commission held a public hearing at the Regular Meeting on December 17, 2020; and

WHEREAS, the Planning Commission recommends that the Assembly approve the rezone application provided that CPAI or any owner/operator complies with the conditions, general stipulations and advisory language set forth in the Final Staff Recommendations.

NOW THEREFORE BE IT RESOLVED THAT:

1. The North Slope Borough Planning Commission recommends that the Assembly approve the Master Plan.

2. The Planning Commission recommends that the Assembly amend the official zoning map to rezone as a Resource Development District the following lands needed to develop the Willow project:

Township 9 North, Range 1 East, Sections 1, 2(N $\frac{1}{2}$, S $\frac{1}{2}$), 3(S $\frac{1}{2}$), 7, 8, 9, 10, 11, 12(N $\frac{1}{2}$, SW $\frac{1}{4}$), 15(N $\frac{1}{2}$), 16, 17, 18, 19, 20, 21(NW $\frac{1}{4}$), 29(NW $\frac{1}{4}$) and 30(N $\frac{1}{2}$, SW $\frac{1}{4}$), Umiat Meridian, Alaska.

Township 9 North, Range 1 West, Sections 2(W $\frac{1}{2}$), 3, 4(E $\frac{1}{2}$), 10, 11, 12, 13, 14, 15(E $\frac{1}{2}$), 21(SE $\frac{1}{4}$), 22 (NE $\frac{1}{4}$, S $\frac{1}{2}$), 23, 24, 25, 26, 27, 28, 29(SE $\frac{1}{4}$), 32(NE $\frac{1}{4}$), 33, 34(N $\frac{1}{2}$), 35(N $\frac{1}{2}$) and 36(NW $\frac{1}{4}$), Umiat Meridian, Alaska.

Township 9 North, Range 2 East, Sections 5(N $\frac{1}{2}$, SW $\frac{1}{4}$), 6 and 7(NW $\frac{1}{4}$), Umiat Meridian, Alaska.

Township 10 North, Range 1 East, Sections 35(SE $\frac{1}{4}$) and 36(S $\frac{1}{2}$), Umiat Meridian, Alaska.

Township 10 North, Range 1 West, Sections 2(S $\frac{1}{2}$), 3(SE $\frac{1}{4}$), 9(SE $\frac{1}{4}$), 10, 11, 14(W $\frac{1}{2}$), 15, 16(NE $\frac{1}{4}$), 22, 23(W $\frac{1}{2}$), 26(NW $\frac{1}{4}$), 27, 28(E $\frac{1}{2}$), 33(E $\frac{1}{2}$), and 34, Umiat Meridian, Alaska.

Township 10 North, Range 2 East, Sections 12(SE $\frac{1}{4}$), 13(NE $\frac{1}{4}$, S $\frac{1}{2}$), 23(SE $\frac{1}{4}$), 24(W $\frac{1}{2}$), 26(NE $\frac{1}{4}$), 31(S $\frac{1}{2}$) and 35(NW $\frac{1}{4}$), Umiat Meridian, Alaska.

Township 10 North, Range 3 East, Sections 1(SW $\frac{1}{4}$), 2(S $\frac{1}{2}$), 3, 4, 5(S $\frac{1}{2}$), 7, 8, 9, 10, 11, 12, 13(SW $\frac{1}{4}$, N $\frac{1}{2}$), 14(N $\frac{1}{2}$), 16(N $\frac{1}{2}$), 17(N $\frac{1}{2}$) and 18(N $\frac{1}{2}$), Umiat Meridian, Alaska.

Passed and approved by a duly constituted quorum of the North Slope Borough Planning Commission.

INTRODUCED: _____

ADOPTED: _____

Paul Bodfish Sr., Chairman

Date

Clerk

Date:

Exhibit 3

North Slope Borough

PLANNING AND COMMUNITY SERVICES DEPARTMENT

P.O. Box 69
Barrow, AK 99723
☎ (907) 852-0320
Fax: (907) 852-0322
Email: rhoda.ahmaogak@north-slope.org



Gordon R. Brower, Director

To: Planning Commission

From: Gordon R. Brower, Land Management Administrator

Date: December 10, 2020

RE: STAFF RECOMMENDATION – NSB/RZ 21-001, Willow Rezone and Master Plan, Various Townships, Ranges & Sections, Umiat Meridian, Conservation District.

NSB Staff - employees involved in the preparation of this staff recommendation and analysis: Lilly Kilapsuk, Land Management Specialist; Price Leavitt, LMR Manager; Mabel Kaleak, Deputy Director of Planning; Brian Person, Wildlife Biologist; Gordon Brower, Director of Planning.

Project Description

Introduction

ConocoPhillips (Alaska) Inc. (CPAI) has submitted this Master Plan to support a rezoning request for the initial phase of the Willow Development area, including gravel infrastructure, regularly constructed ice roads, and other ancillary facilities required for the economic production and transportation to market of oil and gas resources from the BTU while protecting important surface resources and ensuring safe operations.

CPAI requests that the North Slope Borough (NSB) rezone 37,654 acres of land to Resource Development District (RDD). These include all lands underlying proposed gravel roads, gravel pads, infield pipelines, annual ice roads, and ice pads to be constructed in the first phase of development (Phase 1). The rezone request does not include: (1) facilities already within an RDD or (2) lands underlying proposed drillsites Bear Tooth 4 (BT4) and Bear Tooth 5 (BT5) and their associated roads and pipelines (Phase 2), although these facilities and activities are described in this Master Plan. CPAI will submit a rezoning request for Phase 2 development under separate cover prior to beginning activities.

An Environmental Impact Statement (EIS) has been prepared by the U.S. Department of the Interior's Bureau of Land Management (BLM) in support of the National Environmental Policy Act (NEPA) process to evaluate the Project facilities located on leased federal lands on the North Slope of Alaska in the Northeast National Petroleum Reserve-Alaska (NPR-A), within the NSB

(BLM 2019-2020). This Master Plan is based on CPAI's proposed action. For cross reference, the proposed action is described as Alternative B and Module Delivery Option 3 in the Willow Master Development Plan Final EIS (BLM 2020). A final Record of Decision (ROD), anticipated to be published in September 2020, has not been issued for the Project as of the date of this submittal. To support consistency between authorizations, CPAI has proposed mitigation measures that were developed to meet multiple agencies' requirements.

Project Overview

The Project includes the Willow Central Processing Facility (WCF) and a total of five drillsites, three drillsites in Phase 1 and two drillsites in Phase 2. Support facilities include the Willow Operations Center (WOC), airstrip and apron, four valve pads, four pipeline pads, one water source access pad each at the constructed freshwater reservoir (CFWR) and at Lake L9911, and a communications tower pad. The Project will be connected to the GMTU by pipelines and gravel road. The pipelines and gravel roads will also connect all drillsites to the WCF. Gravel road features include seven bridges, up to three subsistence boat ramps, and eight subsistence tundra access pullouts. The Project also includes development of two gravel mine sites and the CFWR. The CFWR will serve as the primary fresh water source for Project facilities. Ice road and ice pads will be used to support project construction, including seasonal connection to the gravel mine sites, and to facilitate mobilization of WCF and drillsite modules from Oliktok Dock, within the Kuparuk River Unit (KRU), via a heavy-haul ice crossing of the Colville River near Ocean Point. Table 4-1 summarizes the major Project components.

Location

Project	Township	Range	Section(s)
Willow RDD Proposed Rezone	9 North	1 East	1, 2 (NE ¼, S ½), 3 (S ½), 7, 8, 9, 10, 11, 12 (N ½, SW ¼), 15 (N ½), 16, 17, 18, 19, 20, 21 (NW ¼), 29 NW ¼, 30 (N ½, SW ¼)
	9 North	1 West	2 (W ½), 3, 4 (E ½), 10, 11, 12, 13, 14, 15 (E ½), 21 (SE ¼), 22 (NE ¼, S ½), 23, 24, 25, 26, 27, 28, 29 (SE ¼), 32 (NE ¼), 33, 34 (N ½), 35 (N ½), 36 (NW ¼)
	9 North	2 East	5 (N ½, SW ¼), 6, 7 (NW ¼)
	10 North	1 East	35 (SE ¼), 36 (S ½)
	10 North	1 West	2 (S ½), 3 (SE ¼), 9 (SE ¼), 10, 11, 14 (W ½), 15, 16 (NE ¼), 22, 23 (W ½), 26 (NW ¼), 27, 28 (E ½), 33 E ½), 34
	10 North	2 East	12 (SE ¼), 13 (NE ¼, S ½), 23 (SE ¼), 24 (W ½), 26 (NE ¼), 31 (S ½), 35 (NW ¼)
	10 North	3 East	1 (SW ¼), 2 (S ½), 3, 4, 5 (S ½), 7, 8, 9, 10, 11, 12, 13 (SW ¼, N ½), 14 (N ½), 16 (N ½), 17 (N ½), 18 (N ½)

Chronology of Events

- May 18, 2020 –Pre- application meeting with ConocoPhillips.
- June 9, 2020- Willow Saturation Conference meeting regarding Studies with CPAI.
- July 8, 2020- Willow Saturation Conference meeting regarding Rezone Process with CPAI.
- July 29, 2020- Willow Master Plan Page Turn meeting with CPAI.
- August 31, 2020- 2nd Willow Master Plan Page Turn meeting with CPAI.
- September 17, 2020- Last Willow Master Plan Page Turn meeting with CPAI.
- September 22, 2020- Master Plan application received from CPAI.
- October 28, 2020- Virtual Scoping Meeting was held.
- December 3, 2020- Scoping Meeting via teleconference was held.
- December 4, 2020- Stakeholder Meeting via teleconference was held.

Public Comments

In addition to the opportunity to provide written comments based on the draft recommendation, three opportunities for public comments were held to collect Nuiqsut concerns about this project, prior to meeting with the NSB Planning Commission. The first opportunity was a virtual scoping meeting held on October 28, 2020 during ConocoPhillips update meeting to the Community. The second opportunity was a scoping meeting via teleconference on December 3, 2020 and the third opportunity was the Stakeholder Meeting via teleconference on December 4, 2020, with community stakeholders from the City of Nuiqsut, the Native Village of Nuiqsut and Kuukpiik Corporation in a joint meeting with Borough officials and Conoco Phillips. The comments and concerns from those meetings are listed below.

October 28, 2020- Virtual Scoping Meeting

During the Virtual Scoping Meeting on October 28, 2020, NSB Planning Department Staff discussed the project with the residents of Nuiqsut. Comments focused on the need for baseline information, monitoring of project effects, and ensuring local economic benefits.

Residents of Nuiqsut had the following comments/questions;

- Who will monitor these sites for ground failure if the infrastructure will settle over the years after construction of new infrastructure? There are many changes of permafrost and concerns that this new infrastructure will create more change to the existing permafrost I areas so it's critical to have monitoring for changes to the wetlands as well.
- Request to replace a culvert by the fire station in Nuiqsut.
- There is an ice road 2 miles from Alpine Resupply, another ice road from Meltwater to Ocean Point the onto Willow, why going south vs. using the Alpine Resupply?
- Questions about the boat ramp locations.
- What significant changes to BT4 & BT5 do you think may happen between now and when you try get approval for them in a few years?

December 3, 2020 Scoping Meeting via Teleconference:

This was a teleconference meeting with the residents of Nuiqsut and The Planning Department to collect comments and concerns from the community. This meeting was held for the benefit of Nuiqsut residents, to give due deference to their comments and concerns.

- Concerned it is a quick process, need to monitor the permafrost conditions and it vitally important to region as it holds the wetlands and ecosystems together.
- We will have hard time hunting, been hunting since we came to Nuiqsut, the development is heading towards the west.
- The caribou follow the Price River to Teshekpuk, fall time they use that trail a lot. There's lots of water fowl. That area the animals use, now they are moving different.
- Our hunting grounds are running out, oil industry is exploring too much, so we can't hunt.
- Atqasuk and Barrow will feel the hurt we've been feeling.
- The oil industry lied to us, they said we would have a road before Alpine was built, to this day there is still no road.
- When industry spill diesel or other fluids, they do not clean it up, they don't report it, when we stop while travelling we can smell the diesel that was spilled.
- Large project for the area they are proposing and the processing facility, felt the impacts from the satellites from Alpine and the stipulations make it easier for CPAI to do work in their area.
- They are going on their rivers which go against what was stated before.
- Very large project, too big.
- Multiple residents stated the fish caught today, they are sick, who has the money to the studies that were given to the NSB wildlife because there is no funding, the funding should come from the industry and made available to do the study on the fish

- They are hitting Fish and Judy Creek in Willow Project but they are still feeling impacts from Alpine, GMT1, GMT2
- When they have a new road they have to go far for the caribou, no one is enforcing the 15 MPH when caribou are around, no communications.
- Why is this happening during a pandemic lockdown?
- Great concerns with the processing facility, it's all about the taxation.
- Nanushuk it was denied from Planning Commission, but approved by NSB Assembly.
- Cost of living and hunting is a better option than money from taxation
- Today there are open lakes and rivers are flowing and these permits are being approved by NSB Planning, there is no oversight from the panel.
- There are lawsuits from people who don't even visit the community, using elders' names, some are for development but it needs to be safe development, it is going too fast, need to slow down.
- The only people they see getting jobs are the leadership and no training opportunities for the local residents of Nuiqsut.
- No one is adhering to the stipulations that are in the permits like the high water marks (light props near them and not contained properly and they are fueling up on the lakes.
- The infrastructures are like castles to me.
- Traditional knowledge is never used, NSB would rather use science. Quit playing politics with my subsistence resources.
- Put the shareholders to work.
- If they can hire 3 locals for the same position and split the position to 8 hours a day instead of 12 hours a day, it would give the employee a paycheck and more time to subsist.
- Industry should provide us with work gear, locals have to get their own and when others work they are handed work gear.
- Security needs to get stricter. A lot don't abide by the rules. We see what they do out there; it looks good on black and white but they don't follow the rules.
- Mitigation process, we get funding at the City but they should give separate funds for the Aqpaaq Fund and the Search and Rescue.
- Willow project should be held off until we figure out what's going on in our ecosystem. Opposing the Willow project.
- Need to consider their way of life.
- The demand for oil is not at a high right now, should hold off on this project.
- The caribou may get hurt, we don't know yet. Meltwater pipelines are too low, the caribou can't cross. They should listen and make the pipelines at least 7 feet high so they can cross under.
- Willow rezone is going too fast, when looking at the documents, they are thick, need time to review.
- They do not want any adverse impacts on their environment they want a safe and sound development.

- Development is going too fast, concerned because the school children see the development from their classrooms.
- Concerned that 1.7 million pounds of nitrous oxide has been emitted that causes respiratory issues, the worst of it is that stats of children being affected and concerns that their learning is being impacted, and their development as well.
- The village gets some jobs but it should not be in lieu of their health.
- Money in the pocket is not worth their lives and their health.
- The number of caribous caught has decreased over the years, quite a bit of caribou are getting sick, sent samples in and never hear anything back. Years back there was thousands of caribou all the time and now it's non-existent.
- In the winter time there is green haze above the industry areas but the other way there is none and that haze falls to the ground and the caribou eat that.
- Slow down the process.
- Blasting from the ASRC Mine Site is impacting the fish in the Colville River, and the permafrost changes the ground within the community affecting the infrastructure, there are a lot of water and sewer leaks and breaks, homes becoming uneven.
- Immunological changes not only in people but the wildlife too. We do not have the health facilities to monitor or mitigate their health effects.
- North Slope Borough gets the taxations, but Nuiqsut has to fight for their community monies, they get no funding, it all goes to Barrow.
- Opening up of NPR-A needs improvement, but yet no changes like Barrow. Need to slow down the process because they still haven't seen anything on GMT2 pipeline yet, they want it done right away to benefit their local governments and tribes.
- NSB Wildlife needs to step up with all the funding for studies they get.
- the proposed Willow rezone is huge 350 plus acres of wetlands, processing facilities and three satellites. NSB is on the fast track during this pandemic, people in the village got Covid19.
- Willow hasn't been fully funded yet and it will be funded 3-4 years before its first oil production.
- The North Slope Borough is financially secured, so this project can be held off, it needs to slow down.
- The village is concerned with the impacts they live with, their mitigation needs to be fixed because the impacts are so large. Alpine has 1 Township and Willow will be 7 Townships big.
- Caribou displacement concern, new infrastructure is taking the homes of the wildlife out there.
- Smog and air pollution hurts our children's health today.
- Slow down the development.

- Pandemic going on now world wide.
- Growing up here, seeing their way of life without Alpine because of the Colville River and their way of life.
- Have to hear our leaders repeat over and over at every meeting to slow down the process.
- Nigliq bridge is one of the largest in Alaska.
- Nuiqsut was founded 50 years ago, without land entitlement the NSB would not get the funds they and the 7 villages get funds from ASCR because of Nuiqsut.
- Defer the rezoning until there is progress to determine more mitigation of impacts and their subsistence lifestyle too.
- Too many impacts in their social lives and wildlife and not enough programs to protect them.
- Caught a yellow fish that was bleeding, cannot hunt where they normally hunt because out of the 16 fish caught all of them had sores on them. Sent to NSB Wildlife and was told there was no funding, yet there is NPR-A funding that they receive. The residents consume these fish and no studies done, meaning the residents are eating those fish.
- Losing their subsistence lands to infrastructure.
- Children don't have much.
- The residents want more inspections to see how their daily life is impacted especially the directors who approve these permits, social programs need to come to their community.
- Should consider the article how science got trampled about ANWR. NSB Planning needs to read what the whistleblower who said DOI did not hear from the residents, the permittees and inspectors are responsible for this work.
- Everything is politicized when it comes to development. This is about our subsistence way of life not development.
- Read all the studies, all agencies are fast tracking this project at the expense of Nuiqsut residents, their way of life is being affected, consider the humans more than the wildlife.
- They are prepacking out there even though we still have fish nets out there, there are tuckers out there already.
- Need to think of the residents and slow it down to evaluate the impacts of GMT1 and GMT2.
- Inupiaq from time immemorial are nomadic people and live by the cycle of life which are more important to our territorial wildlife, subsistence lifecycle for harvesting, we depend on it, we know the climate change cycles as well, and the erosion that occurs happened before Alpine, stars were used for travel, the earth tilting was noticed, Inupiaq had always been nomadic, studies need to be done to know how their species have changed so much.
- active subsistence hunter and has two hunting daughters (9&12), they actively subsist to connect to their ancestors, her daughter eats fish every day, they cook and eat subsistence food every day
- one of my children has asthma as well and since eating more subsistence has lowered since the Covid pandemic. slow down from the beginning of the year there is a difference in asthma attacks as before it was more common with industry was running full force.

- With Willow being on the west side it will impact their health because of the green haze in the winters, that haze settles on their land which impacts subsistence, they want their air quality tested.
- This needs to be slowed down because you know it will not stop there, it will go to the south of them as well, hear their cry for their people and children.
- Adaptation cannot be accomplished for their community with industry growing so much, there is no Post Office and no card reader at their fuel station, no freight delivery building, no access to fresh water lake to grow - it is like a can of sardines, professional office space is needed to interact with community and industry they are surrounded by.
- the only way Inupiaq survived was through working together with one another and if everyone would work together including the industry and look at the impacts that divert their way of life it can be done and they will survive, communication is key to work with one another from the federal government to the tribe and the residents, and not only for NUI but all of the NSB villages for generations to come, we are a lost people if we don't have our way of life, we need to know our way of life to be able to move forward as this project will move forward.

December 4, 2020 - Stakeholder Meeting via teleconference:

This was a meeting with Nuiqsut Community Leaders, Department of Wildlife Management, Planning Department staff and CPAI to discuss the rezoning request. Both this meeting and Scoping meeting were held for the benefit of Nuiqsut residents, to give due deference to their comments and concerns.

- Land Administrator gave an overview of the objectives from the rezone process including a timeline of events.
- Notice requirements were only put out less than 72 hours for the scoping meeting, may break ordinances and is unfair all the while being amongst the Covid Pandemic.
- Haven't felt the impacts from GMT1 and now GMT2 is still coming along.
- It is a constant issue for the migration for the caribou.
- How can we make comments when we haven't felt the full effects of industry to the East of them, especially during Covid. *Response-* only ordinance we need to follow is for when Planning Commission meets and only bodies of decision making for the public notices.
- Doesn't understand why ConocoPhillips is going into Willow without finishing GMT2 yet.
- Title 19 is the drive for the comp plan to be adopted by the village and this comp plan hasn't been approved yet which drives their local project, so the NSB has no direction from the residents to even move forward with projects.
- The PaisaNich hasn't been approved either and hasn't been brought up with this process, there should not be any approval of permits in their region until these are approved by the assembly. *Response-* The approval from the City of Nuiqsut is moving forward for the resolution and the North Slope Borough has used those documents. (comp. plan and PaisaNich) when doing work for the NSB, in the absence of those the NSB has worked to

their best with local residents to develop the recommendation to the Planning Commission.

- Resources for the residents including the wildlife is more important and we want to know how engaged they are in reflection of the rezone.
- In the past, Alpine was supposed to have only so many flights and they are going against that, with the new airport for Willow and that effects the caribou migration.
- This rezone supports the NSB monetarily but please hear us residents, slow the process down.
- In relations to subsistence, Nuiqsut will be the only people who will be affected by Willow and it's 1/3 bigger then Alpine; the impacts are going to be huge, we rely on subsistence for out daily diet and health, Willow hasn't even gotten full funding but yet they are trying to submit their application for rezone. This is too fast tracked by the North Slope Borough and industry. The NSB is not hurting financially with the taxation, they will not get funds for another 3 to 4 years down the road.
- *Response-* Reclassification of land from conservation to development is needed for them to work on the lands and they cannot get permits until this occurs. When an application comes in the NSB has to process them all in the same manner. permits expire if no work is done for the first 12 months. (gave an example of CD5 permits crossing each other out that occurred). it's good to know the submitted criteria for all permits to follow and the NSB Mayor has to be involved too and per Title 19, the Land Management Administrator has exhausted all extensions they can and there needs to be an amendment to change this.
- Why is NSB doing a rezone when the applicant doesn't even have funds to do the activities in the permits? why can't this be done in portion while they secure the funding needed to ensure it is done right for both parties? *Response-* Title 19 is clear for applications for rezone, all at once and not piece meal a project. Kuukpik as a land owner has a lot of sway in these rezones in lad, title 19 doesn't take in whether or not there is funding secured.
- Willow is in Federal lands and adjacent to Kuukpik lands, they were told Alpine would be a very small footprint 27 years with no other satellite, but in the end GMT1 and GMT2 has more and is a larger footprint, they are running out storage space for their stuff and it will happen again, they are just not feelings the effects of more satellites and GMT1 and GMT2 has no roads yet and then another Willow project comes along and it is a lot bigger than Alpine, 92 some acres back then and now Willow may be up to 3700 acres of land, if Willow goes forward we request no satellites to go up, Kuukpik is landowner for 70,000 acres in the NPRA and adjacent to Willow they are neighbors to us, all of us around Teshekpuk Lake rely on that caribou herd.
- Meltwater pipeline is too low so that is deterring the migration of the caribou and other wildlife.
- Fast track pushing it to the limit.
- Virtually passed, due to Covid-19, Inaugural, new administration, new regulations, pushing it due to a new administration coming in. We need to slow down the process. Fear of the next administration coming on board.

- *Response-* We are obligated to the submittal of an application, if we don't act on it, it will move ahead on it's own.
- NSB Wildlife needs to step up, caribou studies, they need to do the studies now.
- NSB holds the steering wheel that ConocoPhillips turns in for the applicants and this stakeholder meeting is for the hearing of the residents who are effected.
- We try to work with ConocoPhillips but they are rushing, this is an emergency situation, in person public hearing is not allowed, they are wanting to go ahead with Willow rezone, we want to extend it. NPR-A opened and NSB got funds from taxes. We got land management but not on Kuukpik lands, Slow it down.
- *Response-* Due to hunker down order, we got extension to December. our Title 19 is law, we have to abide by it, we can get the NSB Mayor to lift the deadlines.
- Why can't there be an ordinance that says, "no other development until this current project is done"?
- Resident asked if ConocoPhillips had any meetings or conversations with any of the NSB Assembly or the Planning Commissioners regarding Willow rezones or permits?
- *Response-* There were updates to the Assembly the end of August 2020 and the Planning Commission updates were given as well throughout the entire process.
- Are Jim Browdie and Connor Dunn still on? Depiction on the maps on how to narrow down how Willow is; as you move away from oil and gas fields an there are many impacts that will be met as there are long distances from main industry fields; what is the status for the bridge crossing? How many now?
- *Response:* There are 20 crossings.
- Stakeholder asked where is the details of the dams where they begin and end? part of the continuity of communications as you go across the tundra.
- *Response:* the detail will be for the PC meetings and it is in detail of the EIS will be discussed once CPAI is done with their presentation including giving deference to the stakeholders.
- Concern about the new gravel pit, how can the residents get access to gravel for the local residents?
- *Response:* Still working with BLM to secure the gravel including extraction and they will explore options and can't answer the questions just yet. The willow gravel source is farther away from Nuiqsut.
- We have more west winds than east winds now and being surrounded is a huge issue to have industry on both sides of them and they brought this up before without an answer before.
- *Response:* there is a benefit moving farther away from Nuiqsut and prevailing winds are NE and they do understand about it and one thing they are looking at is a small scale of mining technique which is a vehicle gravel miner to mine the gravel seam and to reduce blasting.
- they go hunting where their new Willow and there are displacements of their subsistence hunters as they are moving more west. Concerned they didn't have a meeting with those

villages to the west of them as well.

- air emissions concern, and if there is a new way to monitor he hasn't heard of that, work for the jobs and projects are done by the community contractors within their area and the hiring of residents in the industry
- funding questions about the project from CPAI headquarters and the economical stance of price of oil.
- stated this at scoping meeting last night, but will repeat in front of CPAI today; adaptation is needed while their community is struggling for space and they see campsites and infrastructure going up and the community has very little.
- Comments of lack of support from NSB wildlife and samples of sick animals with the lack of funding to even study the sick wildlife, also the inspections of violations of permits and not penalties given when violations are being spotted by local NSB employees, no consequences of reports for violations as well.
- high grounds of caribou for insect relief which is right at GMT2 and Willow for their migration route onto Teshekpuk for birthing of calves and these is right in their ROW, they are in competition for these types of lands for caribou relief.
- when ice bridges are done there is ice at the bottom of the river that build a wall across the Colville river and it is a concern when they build walls and the fish go through that river for migration and if there is a wall of ice it is impassable for the wildlife and 20 years of this being on the Nigliq Channel is concerning that need to be addressed as wildlife need the ROW for the waterways as it affects the surrounding lakes like Eli is stating,
- what about the impacts to the people and their health issues of the NUI residents, and the mitigation funds don't show the price of a life and the impacts.
- there are a lot of impacts to the residents and we have to encounter the adaptations and there are many more social impacts and they don't have a village counselor and how do they tell the children how the impacts and changing are happening all around them all the time sometimes people get angry about all them and no one is helping them.

19.60.060 Rezoning

Rezoning is changes to zoning district boundaries as shown on the official zoning map. Rezoning application must show compliance with specific provision of NSBMC Title 19. Below are listed the standards for all rezoning applications.

Rezoning Requirements

- Rezoning of an area less than one acre shall not be considered unless the rezoning involves the expansion of an existing zone. Streets or other rights-of-way shall not be included in calculating the minimum area for a rezoning. The area to be rezoned shall be a logical, integrated area. (NSBMC § 19.60.060(B))
- The application, acceptance and notice procedures for a rezoning shall follow the procedures set forth for conditional use in Chapter 19.60. The Planning or Zoning Commission's affirmative recommendations shall be forwarded to the Assembly. (NSBMC § 19.60.060(C))

- The Planning or Zoning Commission as appropriate shall hold a public hearing on the rezoning application. The Planning or Zoning Commission shall approve or disapprove the application or return it to the developer for modification or corrections, based on the requirements of this title, within 60 days of its acceptance by the Administrator, unless the developer consents to an extension of the 60-day period. If the Planning or Zoning Commission fails to act within the 60-day period, the recommendation shall be considered for approval and the application shall be forwarded to the Assembly. (NSBMC § 19.60.060(D))
- The Planning or Zoning Commission shall make a recommendation based on written findings that each of the following criteria have been addressed:
 1. The proposed rezoning must comply with the policies in Chapter 19.70 unless the policies are amended under the provisions in § 19.60.070;
 2. The proposed rezoning is in an area with adequate services, including roads, parking, boardwalks, water, sewer, garbage collection, gas, electricity, drainage, police and fire protection or the developer has agreed to provide all the necessary improvements or services for the area;
 3. The comments from reviewing parties on the proposed rezoning have been adequately addressed;
 4. There is a demonstrated need for additional land in the zoning district being requested;
 5. The resulting district or expanded district will be a logical, integrated area and will not constitute spot zoning; and
 6. An approved master plan is available for the area to be developed. (NSBMC § 19.60.060(E)).

NSBMC 19.60 & 19.70 Analysis

Based in the information provided by the applicant, CPAI, and the results of the Scoping and Stakeholder meetings, NSB Planning Staff after thorough review will provide a NSB response to each applicable policy. The NSBMC provisions are in **bold**. The responses from CPAI to NSBMC 19.60 & 19.70 are in *italics*, followed by the staff responses are in plain text.

NSBMC 19.60.040 Approval Criteria

A conditional use or development will be granted if all of the standards set forth below are met. The approval shall include a written finding that the proposal can occur consistent with the Borough Comprehensive Plan, can occur harmoniously with other activities allowed in the district and will not disrupt the character of the neighborhood. Such findings and conditions of approval shall become part of the record and the case file.

- (A) **Policies.** The proposal is substantially consistent with the policies of Chapter 19.70.

NSB Response: A staff analysis of Chapter 19.70 is provided as the basis for making the recommendation. The Chapter 19.70 analysis will be labeled CHAPTER 19.70 Borough Policies for ease of review.

(B) Reviewing parties. Consideration has been given to the comments and recommendations of reviewing parties.

NSB Response: No written comments have been received at the time this memorandum was written. The NSB did conduct two meetings with Nuiqsut residents to collect their concerns about this project. The first was the Scoping meeting held in Nuiqsut on August 13, 2018 and the second was a meeting with key Nuiqsut leadership stakeholders, the Department of Wildlife Management, the Planning Department and CPAI in Utqiagvik on September 7, 2018. The purpose of both meetings were to allow Nuiqsut community members and leaders to review the proposed rezoning in detail and account for their comments and concerns, giving them priority.

(C) Villages. For approvals within the villages or their areas of influence, due deference has been given to the opinions of residents of the village and the proposal is in conformance with adopted village plan policies.

NSB Response: Due deference has been given to the concerns of residents of Nuiqsut. There will be further discussion about the application of the Nuiqsut Paisanich as a cultural approach to adapting the development of resource development to the Inupiat way of life on the Colville River.

(D) thru (J) - N/A (Not Applicable)

(K) Historic and cultural resources. Proposals shall not disturb traditional activities or values at historic or cultural sites identified in published studies or by the Commission on Inupiat History, Language and Culture. The proposed development shall not impact any historic, prehistoric or archaeological resource prior to the assessment of that resource by a professional archaeologist.

NSB Response: comments are provided under NSBMC 19.70.050(E - G) later in this memorandum.

(L) Watershed protection. The proposal shall provide for the conservation of natural features such as drainage basins and watersheds, permafrost stability and the general environment of the area. The proposal shall provide for the protection of watershed areas during and after construction. Conditions of approval shall be designed to minimize or eliminate siltation, road and surface runoff, and pollution of the water supply.

NSB Response: CPAI has sufficiently addressed watershed and drainage concerns for their GMT2 development and continues to monitor and repair their existing roads and facilities to ensure there is adequate environmental protection for Nuiqsut's watershed.

(M) thru (N) - N/A (Not Applicable)

- (O) **Tundra travel.** Vehicles shall be operated in a manner such that the vegetative mat of the tundra is not disturbed and blading or removal of the tundra vegetative cover is prohibited. Snow ramps, snow/ice bridges or cribbing shall be used to cross frozen water bodies to preclude cutting, eroding or degrading of their banks. Snow ramps and snow/ice bridges shall be substantially free of soil and debris and of sufficient thickness to support vehicles. Snow/ice bridges must be removed or breached, and cribbing removed after final use or prior to breakup, whichever occurs first. Frozen water courses shall be crossed at shallow riffle areas, if such areas exist. Where those areas do not exist, an environmentally preferred location will be identified. Vehicles shall not be abandoned. A minimum of six inches of snow or ice on 12 inches of frozen ground is required for tundra travel.

NSB Response: While this rezoning application does not specifically call out Tundra Travel, it will be an inherent part of the construction of the Willow facilities, access roads and pipeline. It is also an integral part of maintaining the rest of the Alpine and associated developments. Staff will work with CPAI to ensure adherence to the NSB regulations on Tundra Travel during construction and field operations.

NSBMC §19.60.060 – REZONING

Rezone area: Is the area to be rezoned at least an acre, or if less, is it expanding an existing rezone? NSBMC §19.60.060 (B).

CPAI Response: Yes. The proposed rezone area consists of 37,654 acres adjacent to the existing Alpine Satellite Resource Development District (RDD). If approved, the Willow RDD would be additive to the Alpine Satellite RDD and expand the overall acreage of the North Slope Borough (NSB) RDD within the National Petroleum Reserve-Alaska (NPR-A).

NSB Response: We concur with the comments offered by CPAI.

Adequate Services: Are there adequate services, including roads, parking, boardwalks, water, sewer, garbage collection, gas, electricity, drainage, police and fire protection, or has the developer has agreed to provide all the necessary improvements or services for the area? NSBMC §19.60.060 (E)(2).

CPAI Response: Yes. Where there is currently no permanent infrastructure with the proposed rezone area, the developer, ConocoPhillips Alaska, Inc. (CPAI) proposes to establish all necessary improvements and/or services, as described in the Willow Development Master Plan (Master Plan). This includes access roads; work vehicle parking and equipment staging areas; utilities (water, wastewater, gas, electricity, and waste management); infield security, fire protection, and emergency medical treatment services; and other municipal type functions.

NSB Response: We concur with CPAI's response. : We agree with the CPAI statement of adequacy of services, but there were Nuiqsut concerns raised about solid waste handling in the Colville Delta and the adequacy of those facilities. At some point soon, the NSB, BLM and CPAI will need to

address solid waste handling and disposal. Working together a modern, more appropriate solution to solid waste handling should be adopted.

Demonstrated need: Is there a demonstrated need for additional land in the zoning district being requested? NSBMC § 19.60.060 (E)(4).

CPAI Response: Yes. CPAI has demonstrated the need for rezoning the proposed Willow RDD by: (1) securing oil and gas leases, (2) conducting approved exploration and appraisal activities, (3) determining that oil and gas resources can be economically recovered and (4) designing oil and gas development infrastructure and facilities. The proposed Willow RDD includes areas that will support the Willow Development project (Project) infrastructures and activities.

NSB Response: We concur. CPAI's statement about the adequacy of the amount of land requested for this rezoning. We have also worked with CPAI to verify the current zoning status on existing lands with the RDD zoning designation.

Spot Zoning: Will the expanded zoning district be a logical, integrated area that will not constitute spot zoning. NSBMC § 19.60.060 (E)(5).

CPAI Response: Yes. The proposed Willow RDD is adjacent to the existing Alpine Satellite RDD, along its western and southern borders. Rezoning the additional area would integrate the proposed Willow RDD with the existing NSB RDD. The expanded district would be a logical, contiguous area that supports similar land uses and activities.

NSB Response: This request does not constitute spot zoning. CPAI proposes a logical and integrated and minimum rezoning.

Master Plan. Is there an approved master plan or was one submitted as part of the application? NSBMC § 19.60.060 (E)(6).

CPAI Response: Yes. The proposed Master Plan is included in this application package.

NSB Response: CPAI has submitted a consolidated masterplan for the Willow Rezone.

NSBMC CHAPTER 19.70: - BOROUGH POLICIES

The policies in NSBMC Chapter 19.70 are applicable to the approval of all development and uses within the Borough. Economic development and area-wide policies are applied to all lands and waters within the Borough boundary. Village, Coastal Management and Transportation Corridor policies are applied to approvals within their respective areas.

§ 19.70.020 - VILLAGE POLICIES.

The following policies are intended to guide the approval of development and uses in the village districts:

Village Policies. Is the project consistent with all applicable village plans or policies? NCBMC§19.70.020 (A-B).

CPAI Response: Yes. The Project is within the NSB Area of Influence, Nuiqsut Village Area of Influence, and Anaktuvuk Pass Area of Influence. The Project has been evaluated for consistency, including the zoning and land use provisions, and found to have no conflicts with the applicable plans: North Slope Borough Comprehensive Plan 201-2039, Final Draft Nuiqsut Comprehensive Plan (2015-2035) (NSB2016a), and the Final Anaktuvuk Pass Comprehensive Plan 2016-2036 (NSB 2016b).

NSB Response: The NSB Area of Influence is Nuiqsut.

Employment: Will the project provide local employment for Borough residents? NSBMC §19.70.020(D) and §19.70.030(B)

CPAI Response: Yes. CPAI has an active workforce development program committed to hiring Kuukpik shareholders, Nuiqsut residents, North Slope residents, and Alaska Natives. Local resident hiring in Nuiqsut is coordinated with Kuukpik Corporation to identify and place qualified individuals interested in working on CPAI projects. CPAI also provides funding for a local employment coordinator position with Kuukpik Corporation.

NSB Response: NSB encourages local employment opportunities for NSB residents that express an interest in work. The construction of the Willow site by CPAI has significant opportunities to employ local residents with trades such as Welding, Heavy Equipment Operators, Laborers, and Mechanics from within the North Slope and can also provide opportunities to participate at a contractor level. Additionally, the operational needs of Willow may provide additional opportunities on maintenance throughout the production life of Willow. The NSB will require regular employment reporting to monitor the CPAI hiring policies and practices regarding NSB residents.

§ 19.70.030 - ECONOMIC DEVELOPMENT POLICIES.

Flexibility: Will flexible employment procedures allowing for subsistence leave be used? NSBMC § 19.70.030(C).

CPAI Response: Yes. Due to the nature of CPAI's development work, local residents are provided with opportunities to work on a seasonal basis, affording them the option to pursue subsistence activities during the off-work seasons. Additionally, rotational schedules and shift work (typically two weeks on, two weeks off) also gives residents the opportunity to subsistence hunt and fish during their time off during employment.

NSB Response: Subsistence is the way of life on the North Slope. Subsistence is defined according to Title 19 as an activity performed in the support of the basic beliefs and nutritional needs of the residents of the Borough and includes hunting, whaling, fishing, trapping, camping, food gathering, and other traditional and cultural activities.

The NSB supports NSB resident employment with CPAI and its contractors that provide NSB residents the opportunity to gain experience and expertise on a long term basis. There should be no difference in employment conditions for NSB residents than those employment conditions offered at CPAI and its contractor employees. It is unacceptable to relegate NSB residents to seasonal position only to address subsistence pursuits.

Training: Will job training programs be provided for Borough residents? NSBMC § 19.70.030(D).

CPAI Response: CPAI and its contractors assist with scholarships, career training, and internship opportunities to further expand local workforce capabilities and ensure that local residents are hired and retained. We work closely with our contractors to provide training, apprenticeship and internship opportunities for local residents to prepare for full-time positions in the oil and gas industry. As the programs are completed, individuals are considered for full-time employment if positions are available. If positions are not currently available, CPAI and its contractors maintain records of individuals who have completed the various programs for consideration of potential future employment opportunities.

NSB Response: NSB emphasizes contracting with the North Slope contractors. Training is always available and the training can be beneficial when it is utilized in a way that supports employees and/or residents pursuit of credentials to work in a higher up position. CPAI has indicated within their application, the intent to utilize the training programs for shareholders of Arctic Slope Regional Corporation (ASRC), Kuukpik and UIC Corporations. The training programs include on the job training for field-based positions including all areas of operations and construction operations. New hires are assigned to mentors who assist in training and guidance. Trained employees are primary candidates for CPAI operator hires.

Suppliers: Will local suppliers or subcontractors be used? NSBMC§19.70.030 (A)

CPAI Response: Yes. CPAI recognizes the importance of doing business locally and strives to procure goods and services from local Alaskan businesses whenever possible. CPAI is committed to giving local contractors and suppliers the opportunity to participate in its projects through competitively bidding contracts where appropriate. This strategy has been successful in awarding a substantial number of contracts to local and Native-owned businesses. CPAI maintains local offices in Nuiqsut and Utqiagvik and has staff dedicated to maintaining relationships in North Slope communities. CPAI's Economic Development Plan (EDP) details programs, scholarships, and employment and procurement process in place to encourage local employment opportunities. Consideration will be given to qualified suppliers and subcontractors within the NSB for work, which can be accomplished through a competitive bidding process.

NSB Response: NSB supports and encourages CPAI to use local suppliers and contractors.

**Arts: Will uses/developments directly relate to or encourage Inupiat arts and crafts?
NSBMC§19.70.030(E).**

CPAI Response: CPAI's operations do not directly relate to Inupiat arts and crafts. However, Nuiqsut residents are provided opportunities to sell arts and crafts to CPAI employees and our contractor's employee lodging at Alpine and at the Kuukpik Hotel in Nuiqsut. CPAI personnel and CPAI contractor's employees who visit North Slope communities often purchase local arts and crafts.

NSB Response: NSB supports Inupiat Arts and Crafts made by local artists. The NSB encourages the applicant to consider Inupiat arts and crafts for display in its facilities and offices that reflect local art, when opportunities arise. CPAI offers opportunities for sale of Inupiat arts and crafts at its Alpine and associated developments.

Local Energy. Will uses/developments use locally obtained energy? NSBMC§19.70.030(F).

CPAI Response: Yes. CPAI utilizes locally obtained and produced natural resources in its construction and operations activities on the North Slope.

NSB Response: We concur with CPAI's response. While the natural gas supplied to Nuiqsut has greatly reduced dependence on diesel fuel.

**Low-Cost Energy: Will uses/developments contribute to a lower-cost fuel or power?
NSBMC §19.70.020(C).**

CPAI Response: No. Willow will not directly contribute to lower-cost fuel or power beyond what is currently provided. For background, CPAI provides up to one-million cubic feet of natural gas per day to the community of Nuiqsut at no cost per contractual agreements with Kuukpik. Gas deliveries started in 2008, after construction of the Nuiqsut gas Pipeline and natural gas infrastructure in the village by the North Slope Borough (NSB). This infrastructure is operated and maintained by the NSB and the Natural Gas Cooperative. Ninety-nine percent of Nuiqsut households are now connected to natural gas and Nuiqsut enjoys some of the lowest energy bills in the nation (\$25.00/month for gas). This frees up the household budgets to participate in subsistence activities and provide for families.

NSB Response: We concur.

Revenue: Will uses/developments generate tax revenues that exceed NSB's expenditures on these developments/uses? NSBMC§19.70.030(G).

CPAI Response: Yes. CPAI's oil and gas exploration, production, and construction, activities generate tax revenues for the NSB and the State of Alaska. In addition to NSB property tax, finding and developing additional oil fields provide revenue and benefits to the NSB in the form of jobs, increased infrastructure, education funding and to Kuukpik and ASRC Shareholders in

the form of royalties and dividends. Federal revenue (sales, rentals, bonuses, and royalties) associated with the Project contribute to the NPR-A Impact Mitigation grant program.

The NPR-A Impact Mitigation Grant fund is mandated by Congress. Under federal law adopted in 1980, 50% of the money received from "sales, rentals, bonuses, and royalties" from the NPR-A must be paid to the State specifically to be used as follows: "for (a) planning, (b) construction, maintenance and operation of essential public facilities, and (c) other necessary provisions of public service: Provided further, [t]hat in the allocation of such funds, the State shall give priority to use by subdivisions of the State more directly or severely impacted by development of oil and gas leased under this Act." To date, this program has contributed over \$150 MM to NSB communities of Nuiqsut, Atkasuk, Wainwright, Utqiagvik, and Anaktuvuk Pass. The Project has the potential to contribute hundreds of millions of dollars of federal royalty during the life of the field. The actual amount will depend on wells drilled, production, price, and other variables.

NSB Response: It is anticipated that this development will generate local tax and other revenues in excess of the NSB's expenditures on this development.

§ 19.70.040 – OFFSHORE DEVELOPMENT POLICIES.

Not Applicable.

§ 19.70.050 - COASTAL MANAGEMENT AND AREA-WIDE POLICIES.

The Borough has developed these policies that identify general and specific courses of action to achieve region-wide Comprehensive Plan goals and the implementation of its Coastal Management Program. The policies in this section are a guide for the actions and programming of agencies and organizations currently active or anticipating development activities anywhere in the Borough. All development and uses must comply with each of the policies set out in this section unless the Administrator finds that the policy is not applicable.

Demonstrated Need: Is there is significant public need for the proposed use and activity? NSBMC § 19.70.050(J)(1).

CPAI Response: *Yes. Development will provide benefits to local, State, and national economies through local hire for jobs created during construction and operations, tax revenues, revenue sharing, royalties, and new resources to help meet U.S. domestic energy demands.*

NSB Response: We concur with CPAI's statement

Will the project avoid depleting subsistence resources below the subsistence needs of the local residents of the Borough? NSBMC §19.70.050 (A).

CPAI Response: *Yes, CPAI acknowledges the importance of ensuring that development projects do not deplete subsistence resources. Many aspects of the Project design and many of the associated mitigation measures are adopted specifically to protect subsistence resources.*

Examples include an optimized gravel footprint to limit habitat disturbance, road and pipeline layouts that avoid a corralling effect on caribou, and fluid storage and transfer measures that protect against contamination. For decades, CPAI has funded scientific studies on subsistence resources such as whitefish and caribou to ensure good data are available for permitting, operations and other purposes. Using this and other data, the BLM and cooperating agencies (including the North Slope Borough) considered potential effects of the project on vegetation, fish, birds, mammals in the Willow MDP Final Environmental Impact Statement (FEIS). The FEIS does not find that the Project would cause depletion of subsistence resources.

NSB Response: We concur with CPAI. In addition, please see the stipulation and mitigation measures below.

19.70.050 (B) - (C) Not Applicable

Will the project avoid precluding reasonable access to subsistence resources? NSBMC §19.70.50 (D).

CPAI Response: *Yes. CPAI avoids precluding access to subsistence resources through both Project design and proposed operational measures. Nuiqsut residents and Kuukpik shareholders may use CPAI-operated gravel roads and ice roads in the Kuukpik Withdrawal Area. This increases the travel opportunities for access to subsistence resources. For roads outside the Kuukpik Withdrawal Area, all North Slope residents may use CPAI-operated gravel roads and ice roads consistent with current safety policies. The Project access road has been designed to include eight subsistence access ramps and vehicle pullouts that allow users to cross the road safely in order to access the areas on either side.*

CPAI has developed processes to consult with subsistence users regarding planned oil and gas activities, including by employing local Subsistence Representatives and Ice Road Monitors on the ground who can advise on how to avoid interfering with subsistence activities. CPAI has improved the effectiveness of its ice road cleanup program to reduce helicopter flights for stickpicking and established a daily call-in service to share updates on aircraft activity. Flights associated with the Project will be farther away than the existing operations; however, CPAI will continue to coordinate helicopter-based studies with other users when possible. These coordination protocols which have been developed in cooperation with North Slope residents and stakeholder groups to minimize impacts on subsistence use and access, will be adopted as part of the Project.

As an additional voluntary mitigation, CPAI has committed to building up to three boat launches to provide subsistence access- pending community feedback regarding location and overall support- at the Tinmiaqsiugvik River Bridge (existing), Judy Creek and Fish Creek. By creating road access to a boat launch, the Project will increase access to subsistence resources in river corridors.

BLM's ANILCA Section 810 Analysis states that, "The totality of limitations on subsistence access associated with the Project, particularly during the 7-year construction phase but lasting

through the life of the Project, would constitute a substantial restriction on subsistence access for Nuiqsut residents.” This finding is largely based on an expectation that hunters will avoid hunting near Project infrastructure, and that such avoidance constitutes a restraint on access. CPAI believes that BLM has overstated the potential impacts, minimized the countervailing benefit of hunters using the roads, subsistence access ramps, and boat launches to access the BTU area. BLM itself acknowledges further in the FEIS that, “None of these impacts is expected to affect all subsistence hunters equally, and many of these impacts are uncertain.” (FEIS, Appendix G, ANILCA Section 810 Analysis, page 25).

Nuiqsut subsistence hunters will have access to the roads to hunt and subsistence ramps and pullouts will be provided; the Willow project will not preclude access to subsistence resources.

NSB Response: While we agree with CPAI’s statement, we believe there is a greater need for studies. Please see the stipulations and mitigations measures below.

Will the project avoid depleting the productivity of subsistence resources and their ecosystems? NSBMC §19.70.050 (J)(3)(a).

CPAI Response: *Yes. CPAI avoids depleting the productivity of subsistence resources and their ecosystems through measures incorporated into the Project planning, design, and operations, which were and will continue to be informed by environmental studies. CPAI implemented an ecosystem-wide approach to collecting baseline data.*

Baseline studies include:

- 15+ years of caribou surveys
- 4 years of Yellow-billed loons surveys for nesting and brood production
- 4 years of aerial pre-nesting Spectacled eider surveys
- 4 years of fish stream crossing surveys to examine seasonal distribution and composition of fish populations
- Habitat mapping, wetlands classification, and sensitive plants identification
- 4 years of hydrology monitoring for stream crossings
- Marine water quality sampling
- Marine Bathymetry
- Harrison Bay nearshore fish abundance and species composition
- On-water pinniped surveys
- Funded additional ASAAM Survey transects
- Aerial imagery and LiDAR collected in 2018
- Winter engineering studies for Ocean Point

The information collected was used to inform the Project engineering and design, including how to minimize environmental impacts, consistent with land use and permitting requirements. The information was also used for analysis of productivity in the FEIS, especially in Section 3.8

(Water and Water Resources) and Section 3.9 (Wetlands and Vegetation). Hydrologic flow and connectivity will be maintained by bridges and culverts. Animal movement will be facilitated by 7-foot height requirements on pipelines, and the abundance of caribou is not expected to be impacted by the project (FEIS Section 3.16.2.3.1). In FEIS Section 3.12 (Terrestrial Mammals), the potential for habitat disturbance and impact on caribou is recognized, particularly in Section 3.12.2.3.1 (FEIS Page 175). Recognizing the limited habitat disturbance in context, the following conclusion is reached: "Because the habitats lost are not unique and occur throughout the analysis area and the ACP [Arctic Coast Plain], caribou would likely move to similar habitats nearby." See Supplement D, Willow Development Project Avoidance and Minimization Measures for an extensive list of how CPAI proposes to avoid, minimize, and mitigate impacts, thereby avoiding the depletion of subsistence resources and their ecosystems.

NSB Response: Please see the stipulations and mitigations measures below.

Has the project identified all cultural or historical sites, including sites where traditional activities take place? NSBMC §19.70.050(E).

CPAI Response: *Yes. CPAI retains the services of professional archaeologists and cultural anthropologists, who identify cultural and historical sites and confirm the location(s) of documented traditional land use areas and cultural artifacts within the proposed project area. These data have a limited distribution to maintain the integrity of the area(s), with submittal of this information to the Alaska Department of Natural Resources (ADNR) Office of History and Archaeology, the Inupiat History Language and Culture (IHLC) Commission and Traditional Land Use Inventory (TLUI) and the local Native village leadership. Formal coordination and consultation with the State Prehistoric Preservation Office/r (SHPO) through the ADNR Office of History and Archaeology (OHA), BLM and the NSB IHLC TLUI office/coordinator and Planning Department will be conducted for new projects prior to construction. The NSB, State and local entities will be notified immediately if prehistoric, historic or archaeological objects are discovered during construction or operations.*

NSB Response: We concur with CPAI's statement.

Will the project avoid interference with cultural or historical sites, including sites where traditional activities take place? NSBMC §19.70.050(F), §19.70.050(G).

CPAI Response: *Yes. CPAI's project will be modified as needed to avoid impacting any identified areas of cultural significance from cultural resource studied and clearances discussed above. Federal, state, and local entities including NSB, will be notified immediately if prehistoric, historic, or archaeological objects are discovered during the proposed project.*

NSB Response: We concur with CPAI's statement.

Air and Water Quality Protection: Will development comply with state or federal land, air and water quality standards? NSBMC §19.70.050 (H), §19.70.050 (I)(3).

CPAI Response: Yes. CPAI will secure the appropriate State and Federal permit authorizations and comply with all terms and conditions, including land, air and water quality standards.

Federal: The Bureau of Land Management (BLM) has developed land use standards that are described in the NPR-A Integrated Activity Plan (IAP) and will be applied to permit authorizations for the Project. The Project has been designed to be consistent with existing Best Management Practices (BMP) with few waiver requests, for which CPAI has proposed an alternative mechanism for achieving the objective of the BMP.

State: The Alaska Department of Environmental Conservation (ADEC) has primacy for regulating air and water quality. The Project has been designed so that air emissions do not exceed the Alaska Ambient Air Quality Standards (AAQS); ambient air quality monitoring measurements are collected regularly from a monitoring station in Nuiqsut. CPAI has submitted an antidegradation analysis describing how the Project will meet water quality standards under Section 401 of the Clean Water Act. Surface water discharges will be monitored per the Alaska Pollutant Discharge Elimination System (APDES) permit; CPAI will develop and operate according to an approved Storm Water Pollution Prevention Plan (SWPPP).

NSB Response: There continues to be community concerns about air quality in Nuiqsut. Community members and stakeholders alike mention what they perceive to be deteriorating air quality in the community. To that end, we require:

- CPAI continue its analysis of the data obtained from its air quality monitoring station in Nuiqsut and the station installed at CD4 in 2009 to evaluate incremental changes in air quality in the Nuiqsut area.
- CPAI seek EPA guidance and conduct accepted air National Ambient Air Quality Standards (NAAQS) attainment demonstration modeling that will integrate and take into account its monitoring data regarding criterion pollutants including PM2.5 when appropriate models are available.
- Prior to drilling, CPAI provide a detailed plan, using commercially reasonable means, to mitigate the risk of Clean Air Act violations or harm to the public health.

Noise Mitigation: Will vehicles/vessels/aircraft avoid disturbance of areas where noise-sensitive species are concentrated at times when such species are concentrated? NSBMC §19.70.050 (I)(1).

CPAI Response: Yes. CPAI uses mufflers to abate noise from exhaust systems of engines. Additionally, CPAI aircraft, when flying over BLM lands, must abide by the measures set forth in the National Petroleum Reserve-Alaska (NPR-A) Final Integrated Activity Plan/Environmental Impact Statement (BLM 2012), particularly Best Management Practice (BMP) F-1 which

establishes a minimum flying altitude of 1,500 feet to minimize the effects of low-flying aircraft on wildlife. To the extent practicable, all CPAI aircraft would maintain an altitude greater than 1,500 feet, excluding takeoffs and landings, from caribou and muskoxen concentrations. A concentration means numbers of animals more than the general density of those animals found in the area. Lastly, CPAI will avoid harassment of nesting bird species and remain outside of the buffer zone.

NSB Response: CPAI has shown willingness to adjust their aircraft and other noise sources based on the concerns raised by community members.

Will industrial and commercial development be served by solid waste disposal facilities that meet state and federal regulations? NSBMC §19.70.050(I)(4).

CPAI Response: *Yes. Food wastes would be incinerated on site or at Alpine or, if non-burnable, will be recycled or transported to a landfill facility at Deadhorse, Fairbanks, or Anchorage. Hazardous and other solid wastes associated with the Project will be managed under Alaska Department of Environmental Conservation and U.S. Environmental Protection Agency (EPA) regulations, BLM, BMPs, and the NSB Municipal Code, where applicable.*

NSB Response: While we concur with CPAI's statement, the real issue at hand is the increasing distance from of the Deadhorse Regional Landfill and the need to create a new solid waste disposal facility closer to the new oil developments that are occurring and will continue to the West of the Colville River. The disposal methods that were used in the early days of Alpine are too limited to address the growing solid waste disposal needs of this region of the North Slope and as such, CPAI needs to engage the NSB and BLM on developing a regional solid waste solution for the Greater Colville area.

If the development is not on a central sewage system, will a facility be installed to impound and process effluent to meet state and federal quality standards? NSBMC §19.70.050(I)(5).

CPAI Response: *Yes, Domestic Wastewater treatment infrastructure will be located at the Willow Operations Center (WOC) Sanitary wastes generated from the various camps will be hauled to the wastewater treatment facility. The treated wastewater will be disposed of in the Underground Injection Control Class I disposal well located at the WOC, hauled to and disposed of at another approved disposal site, or, in an emergency, discharged under Alaska Pollutant Discharge Elimination System (APDES) General Permit AKG332000.*

NSB Response: We concur with CPAI's statement.

NSBMC 19.70.050(I)(6-10) - Not Applicable

Will impermeable lining and dikes be installed for all oil and fuel storage facilities with a capacity of 660 gallons or larger? NSBMC §19.70.050(I)(11).

CPAI Response: *Yes. Fuel and oil storage will comply with local, State and Federal oil pollution prevention requirements, according to an Oil Discharge Prevention and Contingency Plan (ODPCP) and Spill Prevention, Control, and Countermeasure (SPCC) Plan. Secondary containment for fuel and oil storage tanks will be sized as appropriate to container type and according to governing regulatory requirements in 18 AAC 75 and 40 CFR Part 112. Fuel and chemical storage associated with the Project will be managed under BLM BMPs.*

NSB Response: We concur with CPAI's statement, contingent upon the Oil Discharge Prevention and Contingency Plan (ODPCP) and Spill Prevention, Control, and Countermeasure (SPCC) Plan.

Are uses and developments that could impact water quality (such as hazardous materials and waste storage) at least 1500 feet from water bodies? NSBMC §19.70.050 (J)(3)(d).

CPAI Response: *Yes. Hazardous materials and waste are planned to be stored at least 1,500 feet from any waterbody.*

NSB Response: We concur with CPAI's statement. The NSB will require refueling of any kind that occurs within 1500 feet of a waterbody will be done by two trained fuel technicians, after appropriate absorbent pads and drip pans have been placed.

Will transportation facilities, including pipelines, avoid obstructing wildlife and allow wildlife? NSBMC §19.70.050 (J)(3)(f). and §19.70.050(L)(5).

CPAI Response: *Yes. Transportation facilities, including roads and pipelines, have been configured to avoid obstructing wildlife. All Project pipelines will parallel gravel roads, when possible, typically at a distance from the roadways of 500 to 1,000 feet, which will facilitate routine visual observation and investigation of pipelines. Pipelines will rest on common horizontal support members, atop vertical support members (VSMs) placed approximately 55 feet apart and will be a minimum of 7 feet above ground (including any suspended cables). The Project pipelines have also been designed to avoid VSM placement in streams.*

NSB Response: We concur with CPAI's statement.

Will transportation facilities and utilities be consolidated to the maximum extent possible to avoid duplication? NSBMC §19.70.050 (J)(3)(h).

CPAI Response: *Yes. The Project has been designed to consolidate transportation facilities and utilities to the maximum extent possible to avoid duplication. The proposed gravel airstrip will support air traffic for the entire field and will be of sufficient length to accommodate Bombardier Q400 aircraft, which are capable of carrying more passengers than the Twin Otter or CASA, which have historically been the aircraft used for crew change out of Alpine. CPAI's acquisition of the Q400s consolidates crew change flights and reduces the overall number of fixed winged aircraft flights by 50%. The Willow Central Processing Facility (WCF) will process all produced*

fluids and feature a power plant that delivers power to each drillsite. Water and wastewater treatment will be conducted at the WOC.

NSB Response: Anything that is not shown on the approved master plan for Alpine and associated developments, especially ice roads that require development permits, will be closely scrutinized to ensure reasonable efforts are made to use existing facilities.

Does the project avoid mining on beaches, barrier islands or offshore shoals or demonstrate that no feasible and prudent alternatives exist? NSBMC §19.70.050 (J)(3)(i).

CPAI Response: *Yes. CPAI avoids mining on beaches, barrier islands, and offshore shoals by using the proposed Willow mine sites, which are located onshore southeast of Greater Mooses Tooth One/Mooses Tooth 6 (GMT1/MT6).*

NSB Response: We concur with CPAI.

Does the project avoid placement of structures in floodplains subject to a 50-year recurrence level and in geological hazard areas? Or has applicant demonstrated that no feasible and prudent alternative exist? NSBMC §19.70.050 (J)(3)(j).

CPAI Response: *Yes, CPAI can demonstrate that no feasible and prudent alternative exists to locating a portion of the support infrastructure (i.e. pipeline and gravel pipelines pad) within the Colville River floodplain. Drillsite pads must be located within the area of the reservoir; however the Project features an overall reduced gravel footprint by using horizontal directional drilling technology to access the reservoir.*

NSB Response: We concur with CPAI's statement.

Will development be located, designed and maintained so as to prevent significant adverse impacts on fish and wildlife and their habitat, including water circulation and drainage patterns and coastal processes? NSBMC §19.70.050 (R)(2).

CPAI Response: *Yes. CPAI redesigned the Project in response to concerns about how the proposed Offshore Staging Area, a temporary gravel island used for module delivery and transportation, would affect coastal processes and marine subsistence species. Instead, CPAI will utilize the existing gravel road network from Oliktok Dock and ice roads for module haul to minimize potential impacts. See Supplemental D, Willow Development Project Avoidance and Minimization Measures for an extensive list of how CPAI proposes to prevent significant adverse impacts on fish and wildlife and their habitat, including water circulation and drainage patterns.*

NSB Response: Key to accepting this provision will be the implementation of the wildlife, water bird and fish studies earlier specified in this memorandum to verify there continues to be no significant adverse impacts.

Will resource extraction support facilities, including administration offices, operations, residence, and other uses not absolutely required in the field be located in a designated service base which is sited, designed and constructed and maintained to be as compact as possible and to share facilities to the maximum extent possible? NSBMC§19.70.050 (R)(3).

CPAI Response: Yes. The WOC will serve as a designated service base and has been designed to minimize the overall footprint of the WOC pad while maximizing facilities sharing to the extent possible. See also response to 7D.

NSB Response: We concur with CPAI's statement.

Will transportation facilities and utilities be consolidated to the maximum extent possible to avoid duplication? NSBMC §19.70.050 (K)(6).

CPAI Response: Yes. Transportation facilities and utilities are consolidated to the maximum extent possible. See also response to 7D.

NSB Response: While we concur with CPAI's statement, the NSB is working on seasonal snow trials and encourage CPAI cooperation to minimize duplication of trials in the best interests of all residents.

Will development be located, designed and maintained in a manner that does not interfere with the use of a site that is important for significant cultural uses or essential for transportation to a subsistence use area? NSBMC §19.70.050 (K)(8).

CPAI Response: Yes. CPAI does not limit the use or crossing of CPAI roads for subsistence use by local residents. Additionally, CPAI has added vehicle pullout pad locations that provide safe locations for subsistence hunters to park their vehicles and trailers while they hunt, while still allowing for safe industrial use of the road. These pullouts include ramps to facilitate access to essential subsistence use areas. See also response to 3.A.

NSB Response: We received concerns from stakeholders that:

- Industry employees are not adhering to the 15 mile per hour speed limit required when wildlife is in the vicinity.
- Industry employees are honking at caribou when near them.

Will siting, design, construction and maintenance of transportation and utility facilities (including ice roads) minimize alteration of shorelines, water courses, wetlands and tidal marshes? NSBMC§19.70.050 (L)(2).

CPAI Response: Yes. CPAI has designed the proposed project components to have as little gravel fill as is reasonably possible to have minimal impacts to wetlands. CPAI walks the entire route of each development to determine the locations of culverts to sustain sheet flow within the area. Where possible, CPAI's infrastructure is placed a minimum of 500 feet away from the shoreline

of a waterbody. Existing gravel facilities will be utilized to the extent possible to minimize the additional gravel footprint and associated support infrastructure.

NSB Response: We concur with CPAI's statement.

Will siting, design, construction and maintenance of transportation and utility facilities (including ice roads) minimize significant disturbance to important habitats and avoid critical fish migration periods? NSBMC §19.70.050 (L)(2).

CPAI Response: *Yes. Siting, design, construction and maintenance of transportation and utility facilities (including ice infrastructure) will minimize significant disturbance to important habitats and avoid critical fish migration periods. Bridges are specified for river crossings other than the Colville River, and the single-season ice-bridge across the Colville River will not occur during a critical fish migration period.*

NSB Response: We concur with CPAI's statement.

Will the project maintain the natural permafrost insulation quality of soils and vegetation? NSBMC §19.70.050 (L)(3).

CPAI Response: *Yes. CPAI designed its infrastructure to maintain the thermal regime of the permafrost soils by ensuring that all roads and pads are designed with a minimum five-foot thickness gravel fill.*

NSB Response: CPAI's plans shows that they will construct this development with an appropriate amount of gravel to protect the permafrost.

Will airports and helicopter pads be sited, designed, constructed and operating in a manner that minimizes impact on wildlife? NSBMC §19.70.050 (L)(4).

CPAI Response: *Yes ConocoPhillips will comply with BMPs that are crafted to minimize the effects of air traffic on wildlife.*

NSB Response: We concur.

Will pipelines be situated and sufficiently high (7 feet preferred, 5 feet required) to avoid interference with wildlife movement? NSBMC §19.70.050(L)(5).

CPAI Response: *Yes. Pipelines will be designed with sufficient height to avoid interference with wildlife movement. New pipelines will be supported on common VSMs placed approximately 55 feet apart and would be a minimum of 7 feet above ground surface. Where possible, pipelines would be constructed at least 500 feet away from the road to minimize caribou disturbance and prevent excessive snow accumulation. Pipelines are typically constructed within 1,000 feet of roads to allow for visual inspection from the road.*

NSB Response: We concur with CPAI's statement.

Is the project sited, designed and constructed to minimize loss of life or property due to riverine flooding, icings, stream bank erosion, oceanic storms, sea waves, ice gouging and override and shore erosion? NSBMC §19.70.050 (L)(6).

CPAI Response: *Yes. CPAI designs all projects to withstand a 50-year flood. CPAI will continue to follow the Alpine Facilities Erosion Control Plan and the Willow Development Erosion Plan, which is currently approval.*

NSB Response: We concur with CPAI's statement.

STAFF RECOMMENDATION:

Staff's recommendations are intended for the Planning Commission's review for the proposal and to help inform prior to the Public Hearing.

Staff believes CPAI's proposed development has met the approval criteria for this development and recommends that the Planning Commission recommend approval of this rezoning to the Assembly, subject to the Stipulations and Mitigation Measures listed below. Additional stipulations maybe added by the Planning Commission, if not already addressed in this memorandum.

STIPULATIONS AND MITIGATION MEASURES

Willow Final Staff Recommendation Stipulations and Mitigation Measures

1. Overall Impact Minimization

- A. **Duck Ponds:** CPAI and its contractors shall place or affix permanent ownership identification and unique numbering on every duck pond owned and used.
- B. **Mitigation Fund:** CPAI shall mitigate the impacts on local residents related to the additional infrastructure in the area and the potential for reduction of subsistence resource availability, including the impacts related to displacing resources from high priority subsistence use areas. Commencing with the start of construction and continuing for the life the project, in addition to any other agreements CPAI shall make annual payments in the amount of \$50,000 per year to a mitigation fund directed and administered by the North Slope Borough.

2. Subsistence Use Protection

- A. **Access:** CPAI shall consult with the NSB, the Native Village of Nuiqsut, Kuukpik Corporation, and the Kuukpik Subsistence Oversight Panel (KSOP) at least annually. Examples of uses and developments requiring consultation include but are not limited to the following: (1) construction of facilities and roads; (2) aircraft movement; (3) drilling; and (4) the selection of water sources. Through this consultation, CPAI shall make reasonable efforts to assure that planned activities are compatible with subsistence activities and will not result in unreasonable interference with subsistence harvests or subsistence resources. CPAI shall submit a report of this consultation, including areas of agreement and identification of any unresolved conflicts, to the Administrator prior to the commencement of the uses/developments at issue. The Administrator may take measures consistent with NSBMC Title 19 to address any unresolved conflicts relating to said uses/developments.
- B. **Due Diligence:** CPAI shall exercise due diligence to mitigate all adverse impacts on subsistence use activities caused by CPAI's activities.
- C. **Timing:** To the maximum extent practical, initial project construction activities, such as construction of gravel roads, pad, pipeline and bridges, will be done during the winter season.

3. Wildlife and Habitat Protection

- A. **General Provisions** for studies on caribou, waterbirds, fish and subsistence:

The following provisions apply to the caribou, waterbird, subsistence, and fish stipulations.

- a. Study designs will be discussed and coordinated with the NSB Department of Wildlife Management (DWM) for submittal to the NSB by 1 March 2021 and each year thereafter as necessary. The DWM and Planning will review, seek revisions as appropriate, and approve the study designs by 1 April 2021 and each year thereafter as necessary.
- b. An annual report will be prepared and distributed to NSB DWM and Planning departments by 15 February and a meeting scheduled with NSB DWM and Planning, to occur by 1 April. This meeting will discuss the results and the potential need for adjustments to scope to assess possible impacts to caribou, waterbirds, fish, and subsistence users. The Land Management Administrator and Director of the DWM will make the final decision of whether study designs need to be altered and/or additional data collection or analyses are required.

- c. CPAI will consult with KSOP on study design prior to submittal to the NSB and provide KSOP with annual reports.
- d. CPAI will make data available from their studies annually to the NSB DWM and within a year of completion of the study to the general public through a data archive (e.g., UAF's Geographical Information Network of Alaska [GINA], Alaska Ocean Observing System [AOOS], etc.).
- e. CPAI will provide the DWM with reports from studies (wildlife, habitat, erosion etc.) required by other agencies involved in permitting lands associated with the Willow Project, and to the maximum extent practical where multiple study requirements can be aligned, avoid duplication of study efforts among the NSB and such other agencies.
- f. To the extent practicable, CPAI and its contractors will minimize flights by hiring local boat drivers, snow machine drivers, and allowing their contractors to camp at a study site.
- g. To the extent practicable, CPAI will involve students from Nuiqsut (or other North Slope communities if no students are available from Nuiqsut) in their studies.

B. Caribou

CPAI will fund a caribou study to analyze the distribution and movements of caribou around the Willow Project area and adjacent areas to assess habitat relationships and possible impacts from development.

- a. CPAI will fund a third party contractor to :
 - i. Characterize pre-construction caribou movements utilizing historic telemetry data
 - ii. Assist ADF&G or the NSB DWM in the collection of GPS telemetry data (e.g. potential purchase of additional caribou collars or database management etc.)
 - iii. Determine caribou pre- and post-construction movement rates in relation to roads pipelines and pads associated with their project.
 - iv. Characterize habitat conditions (e.g. snow melt, vegetation habitat, plant biomass, infrastructure etc.) within the study area using best available technology.
 - v. Evaluate these indices of habitat conditions, with particular attention to possible impacts from development, on the distribution of caribou utilizing the study area.

C. Birds

Because the Willow project is farther west than previous development projects, there is concern about possible impacts to molting geese and other waterfowl. CPAI will conduct a study of molting waterfowl in the vicinity of the Willow Project and farther to the west. The final study

area will be determined in consultation with the DWM and after consulting with the US Fish and Wildlife Service to determine the area that is currently being monitored for molting geese. The study will be conducted for at least three years. After that time, the results will be reviewed and a determination will be made about whether the surveys need to continue and if so, for how long. The final determination will be made by the Land Management Administrator and Director of the DWM.

CPAI will fund a third party contractor to conduct a breeding shorebird study in and adjacent to the Willow project area. As this is known to be important shorebird breeding habitat, baseline studies will be conducted annually pre-development, and at least once every three years after development has been initiated. This study will document shorebird abundance, density, and nesting success.

CPAI will fund a third party contractor to conduct a Yellow-billed Loon study in and adjacent to the Willow project area. To minimize impacts to breeding Yellow-billed Loons, the study will document presence and habitat use (breeding/non-breeding) through techniques such as aerial or ground surveys, but will avoid nest examination until termination of nesting.

D. Fish

Fish studies required by these stipulations will be conducted by a third party. These studies will provide baseline data in order to help detect possible impacts, mitigate impacts, or conduct a damage assessment in the event of oil spills and/or release of oil-related products. Potential impacts are not restricted to population level effects.

- a. CPAI will repeat required predevelopment studies outlined by BLM and FWS (herein called baseline) every four years. Should differences be detected from baseline, then CPAI will consult with NSB-DWM on whether additional studies are required to explain differences and/or to monitor change. If CPAI divests, sells, or significantly alters management responsibility for Willow, then CPAI is required to provide funding for another year of those studies to incoming management to be conducted during the subsequent summer season.
- b. CPAI will experimentally determine the effect of sublethal hydrocarbon exposure and persistence of detection of exposure on two species of fish (fourhorn sculpin and Arctic Cisco) and two prey items of fish, at four temperatures that reflect local seasonal changes (summer, autumn, and spring and winter) using , Alaska North Slope Crude oil and, when available, hydrocarbon from Willow (i.e., not mixed to produce ANS Crude). This experimental method must be developed so that it can used to determine whether fish and their prey items have been exposed during accidental releases of hydrocarbons from CPAI operations. If no accidental releases occur in 10 years, then repeat experiment using more updated tools, methodologies, analyses, making sure that previous experimental results can be compared. If data are not sufficient to fulfill this stipulation, additional studies may be required.

- c. Fish detected with water mold (or other newly emerging infections) in both the Nuiqsut Fall Fishery and in areas associated with ConocoPhillips influence will be recorded, collected, and reported to the DWM.

E. Water Quality

- a. CPAI will collect data on water quality and hydrology to help detect potential project related impacts on fish and the subsistence fishery:
 - i. CPAI will be required to repeat required predevelopment studies outlined by BLM and FWS (herein called baseline) every four years. Should differences be detected from baseline, then CPAI will consult with NSB-DWM on whether additional studies are required to explain differences and/or to monitor change. If CPAI divests, sells, or significantly alters management responsibility for Willow, then CPAI is required to provide funding for another year of those studies to incoming management to be conducted during the subsequent summer season.

F. Subsistence

- a. CPAI will fund a contractor to design and conduct a subsistence study that investigates the effects of the company's Willow development activities and associated infrastructure, as well as future exploration and development activities and associated infrastructure, to subsistence hunters from Nuiqsut. The study should focus on all ConocoPhillips facilities and activities within the area that is subject to this re-zone, as well as facilities and activities outside of this area that have the potential to impact subsistence resources and activities within the area, as determined by discussions with DWM and Planning staff. The project should at a minimum:
 - i. Examine possible effects from CPAI developments and activities to subsistence activities, especially on caribou and migratory bird hunting.
 - ii. Document hunter concerns and opinions about impacts from the ConocoPhillips facilities and activities associated with this rezone.

4. Minimizing Traffic Impacts

CPAI shall coordinate with KSOP, Kuukpik, and the NSB Planning and Wildlife Departments to establish standard air traffic routes that will minimize interference with animal concentrations. (Concentrations of caribou herds are of particular concern.) CPAI shall follow these routes unless there is a threat to human safety or an animal concentration or subsistence user is positioned along the routes

5. Onshore Oil and Gas Pipelines and Roads

- A. General: Siting, design, construction and maintenance of pipelines must minimize alteration of shorelines, water courses, wetlands, tidal marshes and avoid significant disturbance to important habitats and critical migration periods.
 - B. Consolidation: Permanent oil and gas facilities, including gravel pads, roads, airstrips, and pipelines, must be consolidated to the maximum extent possible.
 - C. Wildlife Crossing: Pipeline design and construction shall be based on the best available information and include adequate pipeline elevation, ramping, or burial to provide for unimpeded wildlife crossing. Aboveground pipelines and all associated infrastructure (including fiber optic and other cables) must be elevated at or above the 7-foot minimum height except at those points where the pipeline intersects a road, pad, or caribou ramp, or is constructed within 100 feet of an existing pipeline that is elevated less than 7 feet.
 - D. Placement: CPAI must adhere to the following requirements to the maximum extent practicable.
 - 1. Pipelines must be separated from roads by a minimum distance of 500 feet (except at those points where the pipeline intersects a road, pad or caribou ramp).
 - 2. Pipelines shall not be constructed at a distance greater than 1,000 feet from any access road.
 - 3. Permanent oil and gas facilities, including gravel pads, roads, airstrips, and pipelines, are prohibited on the lake or lakebed and within 1500 feet of the ordinary high water mark of any fish-bearing deep lake (i.e., depth > 4m). If the fish-bearing status of a lake is unknown, the burden is on CPAI to demonstrate whether fish are present.
 - E. Drainage: Appropriate facilities shall be installed to ensure adequate drainage patterns.
 - F. Sedimentation: CPAI will monitor for sedimentation build-up or scouring resulting from all bridges, and provide the Administrator with results of such monitoring on a regular basis. The Administrator may require measures to mitigate sedimentation and scouring, including dredging, to ensure that the subsistence use area is maintained.
6. Economic Opportunity
- A. Job Fairs: CPAI will host a job fair annually in Nuiqsut beginning after the Assembly's approval of CPAI's Application.
 - B. Employment Reports: CPAI shall submit annual reports to the Administrator by December 1st of each year showing the number of NSB residents employed by CPAI by job type. Overall employment statistics will be part of this reporting, showing the percentage of NSB resident employment, separate for Alaska resident employment. The

overall employment report will also reflect the total workforce, by resident location of CPAI's workforce in Alaska.

- C. Bids: When CPAI solicits bids, it shall invite North Slope suppliers, subcontractors a regional and village corporations to bid on Willow projects for which they are qualified.
- D. Subsistence Policy: NSB strongly urges CPAI to adopt a formal policy in order to avoid scheduling disruptions and misunderstandings when subsistence leave is needed while employed by CPAI. The use of seasonal employment options as a method of addressing subsistence leave flexibility is not a meaningful method of employment that allows NSB residents to gain CPAI experience workplace experience. This requirement should be passed onto all CPAI contractors to the maximum extent allowable.
- E. Land Management Orientation: NSB shall provide land management orientation for CPAI for its Willow projects on an annual basis.
- F. Subsistence Representative: CPAI shall fund a year round subsistence representative.

7. Cultural and Historical Site Protection

- A. Data Points for Critical Sites: CPAI must contact the NSB Iñupiat History, Language and Culture (IHLC) Division at (907) 852-0422 and the State Historic Preservation Office (SHPO) to obtain a set of data points for sites of possible historic, prehistoric, cultural, traditional, archeological, and paleontological significance (Critical Sites). CPAI will maintain the data provided by IHLC in a secure place for internal use only and shall not disclose that data to any other person or entity except SHPO and those entities with a need to know for the purposes of the planned Willow and associated developments and associated facilities including roads, bridges, gravel pads, airstrips, and pipelines. CPAI will retain and update this data throughout the life of the development project. Prior to the completion of the development project, CPAI will come to an agreement with IHLC as to the disposition of IHLC data once the project is completed. Data points provided by IHLC in the form of geographic coordinates may be imprecise. CPAI is nevertheless responsible for ensuring that its operations do not cause any adverse impacts to Critical Sites and for reporting to IHLC the proper coordinates of any such site discovered. CPAI will release NSB from any liability associated with CPAI's use of these data points.
- B. Buffer Zones: CPAI must maintain an effective buffer zone around all Critical Sites. An effective buffer zone will be at least 500 feet unless a smaller zone is necessary and can be mutually agreed upon by CPAI and the NSB Planning Department. CPAI must train its staff and contractors to observe this buffer and ensure that Critical Sites are not disturbed.
- C. Discovery of Remains or Materials: Should any human remains or Critical Site materials (including, but not limited to artifacts, house mounds, grave sites, ice cellars, and fossilized animal remains) be discovered in the course of this field survey that were not

already identified by IHLC or SHPO, CPAI must stop all work in the vicinity of the discovery until CPAI has made contact with IHLC at (907) 852-0422, SHPO and, in the case of human remains, the Alaska State Troopers (AST), and has obtained these agencies' approvals to continue work. CPAI must submit any information discovered that may be of historic, prehistoric, cultural, traditional, archeological, and paleontological significance to IHLC (including, but not limited to artifacts, house mounds, grave sites, ice cellars, and fossilized animal remains). CPAI must not disclose that data to any other person or entity except SHPO and those entities with a need to know for the purposes of working on the planned Willow and associated developments and associated facilities (including roads, bridges, gravel pads, airstrips, and pipelines). CPAI must not remove or disturb any items that may be of historic, prehistoric, cultural, traditional archeological, and paleontological significance except to the extent needed to document their existence and to comply with state and federal law and this ordinance.

- D. Allotments: CPAI must not trespass on Native Allotments or private property. Owner permission must be obtained in advance to enter onto the surface of these lands. CPAI must work with the Inupiat Community of the Arctic Slope (ICAS) and Native Allotment owners in and around the area in a beneficial manner.
- E. Site Visits: Upon IHLC's request, CPAI must allow an IHLC representative to accompany CPAI during field work. The IHLC representative shall comply with all CPAI safety and operational rules and requirements when accompanying CPAI during field work.

8. Reclamation Plan

An abandonment/reclamation plan must be submitted to the Administrator within three (3) years of cessation of permitted activities. At a minimum, the plan must contain:

- A. A grading and site plan drawn and certified by an Alaska licensed professional engineer or land surveyor, indicating the areas excavated or filled, the proposed finished grades and contours, drainage directions and any control structures to be installed;
- B. The methods and plans to be employed for reclamation of the site during and after the activity shall be stated along with a time table for completions;
- C. A description of all roads and structures and a site map showing the locations of all roads and development which will be built indicating which ones will remain after cessation of activities;
- D. A description of any known reclamation requirements of any other governmental entity, and a copy of any reclamation plan under development or in existence for the activity; and

- E. All maps shall be submitted at a scale of one inch equals 200 feet extending 200 feet beyond the site area with a maximum contour interval of five feet. The scale requirements may be adjusted by the Administrator to fit unusual circumstances.

9. State, Local and Federal Compliance

- A. Other Permits: This approval shall not become effective until all other local, state and federal permits, approvals and authorizations have been issued. CPAI shall comply with all local, state and federal laws and regulations for all projects within the Unit area.

10. Tundra Protection

- A. Vehicles must be operated in a manner such that the vegetative mat of the tundra is not disturbed and blading or removal of tundra or vegetative cover is prohibited unless specifically approved by the NSB Land Management Administrator or his designee.
- B. Development is required to maintain the natural permafrost insulation quality of existing soils and vegetation.
- C. Trails, campsites and worksite must be kept clean. No littering is allowed. All solid waste including incinerator residue must be backhauled to an authorized solid waste disposal facility.
- D. Winter on-tundra travel may begin when six inches (6") of snow cover and twelve inches (12") of frost depth conditions exist, consistent with State regulations, for the activities intended as determined by an authorized field representative of the Administrator. Certain on-tundra activities may begin sooner than others depending on the impact or magnitude of the operations.
- E. After April 15 of each year, on-tundra travel must be subject to termination within 72 hours of notification by the NSB Administrator or his/her designee for protection of surface vegetation.

cc: NSB Planning Commission
Harry Brower, Jr., Mayor, NSB
Brian Person, NSB Wildlife (caribou/fox/geese/vegetation)
Selene Tirre, Assessing Division, NSB
Jeanne.proulx@alaska.gov
Donna Wixon, USDI/BLM
Jeanne Frazier, Adele Lee, AkDNR/DO&G, Anchorage
Lee McKinley, ADF&G JPO Liaison, Anchorage
Audra Brase, ADF&G Regional Supervisor/Division of Habitat, Fairbanks
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Realty Director, Inupiat Community of the Arctic Slope
Rex Rock Sr., President, Arctic Slope Regional Corporation
Olivia Cabrinboy, NSB Village Deputy Assistant
Mamie Pardue, City of Nuiqsut Mayor
Joseph Nukapigak, Kuukpik Corp. President
Raymond Ipalook, Native Village of Nuiqsut President

Mark Major, Permitting Agent, Kuukpik Village Corporation, majorinor@live.com
Willow Hetrick, Kuukpik Corporation
Tommy Nageak, Cultural Resource Specialist, NSB
Herbert Ipalook Jr., Field Inspector, Nuiqsut
Allyson Atos, Leroy Oenga Jr., Field Inspectors, Barrow
Wayne Cary, Assistant Attorney, NSB
LMR Staff
Files

STAFF RECOMMENDATION / NSB/RZ 21-001/GRB/mk/pl LMR Manager/lk

Exhibit 4

Proposed Conditions of Approval In Response to Kuukpik Comments

North Slope Borough Ordinance Serial No. 75-06-75

1. Kuukpik proposed addition: "Use of insulation in roads, pads and airstrip to reduce the height (and visual barrier) of these features to minimize impacts on caribou movement."

Proposed Condition of Approval: ConocoPhillips will use insulation in the Willow gravel infrastructure to reduce the height (and visual barrier) of these features to minimize impacts on caribou movement, subject to obtaining necessary permits and agency authorizations. ConocoPhillips will submit a detailed implementation plan, including explanation of where insulation is and is not practicable, to the North Slope Borough by September 30, 2021, pursuant to NSBMC Chapter 19.50.

2. Kuukpik proposed addition: "Reduction of the size of the airstrip to only what is needed for all aircraft that CPAI proposes to use at Willow."

Proposed Condition of Approval: ConocoPhillips will reduce the length of the Willow airstrip to a maximum 5,700 feet long. Final approval of the airstrip dimensions will be determined in accordance with NSBMC Chapter 19.50. ConocoPhillips has no plans to use the Willow airstrip for Boeing 737s or similar passenger aircraft, and therefore will leave the surface of the runway as gravel. Any modification of this condition, including the use of Boeing 737s or similar passenger aircraft, will require approval of the North Slope Borough Assembly. The airstrip permit application will include an analysis of required runway dimensions based on aircraft manufacturer guidance, FAA requirements and recommendations, safety considerations, and engineering best practices.

3. Kuukpik proposed addition: "Restrictions on vehicle & aircraft use during sensitive periods (e.g. caribou calving & bird nesting)."

Proposed Condition of Approval:

Vehicle Plan. ConocoPhillips will provide to the North Slope Borough a vehicle plan that includes restrictions on and minimization of vehicle use during sensitive periods (caribou calving, bird nesting, and peak caribou subsistence activity). The objective of the vehicle plan is to mitigate potential impact of Willow project vehicle traffic on caribou calving, bird nesting, and peak subsistence activity. A vehicle plan for 2021 is attached. A vehicle plan for construction activities beginning in 2022 will be developed in consultation with the North Slope Borough Wildlife Department, and submitted for review and approval, in accordance with NSBMC Chapter 19.50, no later than September 1, 2021 and updated as needed when drilling and operations commence.

Aircraft Plan. ConocoPhillips will provide to the North Slope Borough an aircraft plan that minimizes aircraft use during sensitive periods (caribou calving, bird nesting, and peak caribou subsistence activity) and will include a communication protocol with the local community. The objective of the aircraft plan is to mitigate potential impact of Willow project air traffic on caribou calving, bird nesting, and peak subsistence activity. An aircraft plan will be developed in

**Proposed Conditions of Approval
In Response to Kuukpik Comments
North Slope Borough Ordinance Serial No. 75-06-75**

consultation with the North Slope Borough Wildlife Department and submitted for review and approval, in accordance with NSBMC Chapter 19.50, at least six months prior to the Willow airstrip commissioning.

4. Kuukpik proposed addition: "Require provision of aircraft plans and vehicle plans for NSB approval."

Proposed Condition of Approval: See above.

5. Kuukpik proposed addition: "Require the planned diesel pipeline to be extended from its current end point at Alpine to the Willow project area."

Proposed Condition of Approval: ConocoPhillips will submit a diesel use plan for review and approval, in accordance with NSBMC Chapter 19.50, by October 31, 2021. The plan will include an analysis of diesel transportation, including the conversion of existing pipelines or the utilization of Willow pipelines authorized in the Willow EIS Record of Decision for diesel transportation. The objective of this plan is to minimize traffic impacts & spill impacts due to human error on roads in high-use subsistence areas.

6. Kuukpik proposed addition: "Inclusion of a "good neighbor" agreement on caribou."

Proposed Condition of Approval:

During the construction period of the Willow Project (prior to start-up of the central processing facility), if requested by the North Slope Borough Subsistence Mitigation Committee, in addition to the existing contributions, ConocoPhillips will provide an annual air charter for a group of Nuiqsut hunters and their gear to support caribou subsistence activities. This will be requested and administered by the North Slope Borough Subsistence Mitigation Committee.

ConocoPhillips will develop a Good Neighbor Policy on caribou in consultation with the community of Nuiqsut and the North Slope Borough Wildlife and Planning Departments ("North Slope Borough"). ConocoPhillips will host at least one community workshop in the Village of Nuiqsut to obtain input from hunters and residents prior to October 31, 2021. The Good Neighbor Policy will include support to transport Nuiqsut caribou subsistence hunters and their gear to and from areas where caribou are available if it is determined that the Willow Project has significantly impacted the ability of the hunters to harvest caribou based on criteria in the Good Neighbor Policy. The determination will be made by the Director of the North Slope Borough Planning Department, in consultation with the North Slope Borough Wildlife Department. ConocoPhillips will submit a Good Neighbor Policy to the North Slope Borough on or before June 30, 2022 for review and approval, in accordance with NSBMC Chapter 19.50.

**Proposed Conditions of Approval
In Response to Kuukpik Comments**

North Slope Borough Ordinance Serial No. 75-06-75

7. **Proposed Condition of Approval:** ConocoPhillips will amend Section 1(b) of the Oil Spill Mitigation Fund Agreement for the Alpine Development District (executed August 2019) (Agreement), to incorporate the Willow Development District into the Agreement, with an effective date prior to Willow first oil. The Agreement will also be amended to include spills to land. To accomplish that, Section 2(a)(i) of the Agreement will be deleted in its entirety and replaced with the following: "CPAI's oil and gas activities in the Alpine or Willow Development Districts cause oil to be present on land or in the water, or on the ice over water." ConocoPhillips will submit this amendment for North Slope Borough review and approval, in accordance with NSBMC Chapter 19.50, six months prior to anticipated Willow first oil.

	CONOCOPHILLIPS ALASKA Health Safety and Environmental 2021 Vehicle Management Plan		Field: Willow
			Last Reviewed: 1/8/2021
Retention Code ADM220	Owner/Author: Willow Operations Lead	WIL-01-HS- PLN-0002	Review Frequency: N/A

2021 Willow Vehicle Management Plan

Scope

This Vehicle Management Plan applies to ConocoPhillips Alaska, Inc. (CPAI) and contract personnel working in support of the Willow Project. This plan shall cover field construction activities in 2021. A separate plan will be submitted for activities occurring in 2022 and beyond no later than September 1, 2021.

2021 field activities include the following:

Winter:

- Mobilization, setup, & operation of temporary accommodation facilities
- Construction and maintenance of seasonal ice roads
- Preparation and opening of the new Willow Mine Site near the Tinmiaqsiugvik River
- Gravel excavation
- Construction of up to 2.8 miles of road from GMT-2 west toward the Willow project area

Summer:

- Operation of temporary accommodation facilities
- Gravel conditioning activities
- Potential insulation installation in sections of new road west of GMT2
- Maintenance and upkeep of stranded equipment

No summer tundra travel is planned for 2021.

Regulatory Requirement

The objective of this vehicle management plan is to mitigate potential effects on caribou and birds due to Willow Project vehicle traffic. This requirement is derived from Measure 18 as stipulated in the Willow MDP EIS Record of Decision, as well as the Willow MDP NSB Rezone Stipulations and Mitigation Measures (NSB Ordinance Serial No. 75-06-75).

Purpose

The purpose of this Standard Operating Procedure is to ensure compliance with Willow MDP EIS ROD Measure 18 as well as the Willow MDP NSB Rezone Stipulations and Mitigation Measures (NSB Ordinance Serial No. 75-06-75).

	CONOCOPHILLIPS ALASKA Health Safety and Environmental 2021 Vehicle Management Plan		Field: Willow
			Last Reviewed: 1/8/2021
Retention Code ADM220	Owner/Author: Willow Operations Lead	WIL-01-HS- PLN-0002	Review Frequency: N/A

Vehicle Traffic Reduction

Traffic reduction results from use of the new Willow Mine Site rather than the ASRC mine site, which reduces haul distance and traffic near Nuiqsut. In order to further reduce vehicle traffic, the following shall be implemented and adhered to as is feasible while maintaining safe vehicle movement practices for personnel and equipment.

- Locate temporary camps in the vicinity of the Willow Mine Site to minimize travel distances
- Minimize light duty vehicle traffic through use of bus transportation of crews to and from man camps to the work location and to the CD1 Airstrip during mobilization and demobilization
- Mid-shift meals (i.e. lunch) will be taken at the work site rather than returning to camp
- Other reasonable options to reduce traffic during construction shall be evaluated and implemented as identified

ConocoPhillips will work with the gravel execution contractor to implement these practices and identify other potential traffic reduction mitigations during contract readiness planning, prior to contractor mobilization to the Willow Project Area

Caribou and Birds Protective Measures

The following protective measures (consistent with safe movement of equipment and personnel) will be implemented to mitigate potential effects to caribou and nesting birds in the Willow Project Area:

- All workers will be provided caribou-specific training on this vehicle use plan, including the mitigations described below, and the importance of minimizing disturbance to the species.
- Speed limits of 35 mph on gravel roads
- Vehicle traffic shall stop when 25 or more caribou appear to be approaching the road.
- Implement periodic traffic closures (two 1-hour periods per day or as determined by BLM) when groups of caribou are near the road for greater than 12 hours and traffic exceeds 15 vehicle trips per hour.
- All wildlife have the right-of-way, and traffic will be slowed or stopped to allow animals to cross roads. Drivers and passengers will continually watch for caribou while traveling on roadways. Personnel will not attempt to move groups of caribou off roads or pads. Honking horns, revving engines, yelling, and excessive speed are not allowed.
- CPAI policy does not allow any workers to approach, harass or bait caribou or other wildlife they may encounter in the field.

	CONOCOPHILLIPS ALASKA Health Safety and Environmental 2021 Vehicle Management Plan		Field: Willow
			Last Reviewed: 1/8/2021
Retention Code ADM220	Owner/Author: Willow Operations Lead	WIL-01-HS- PLN-0002	Review Frequency: N/A

Seasonal Protective Measures

In addition to the measures described above, the following shall be implemented during the caribou calving season (25 May to 30 June) and fall migration season (15 Aug to 15 September) within the Willow Project Area (west of GMT2):

- Vehicle speed shall be reduced to 25 mph
- Vehicles shall stop and turn off their engine when caribou are crossing the road within 25 feet of the vehicle
- Vehicle drivers and passengers are not to leave the gravel footprint and walk on the tundra without clearance from a Field Environmental Coordinator

Vehicle Idling

Willow personnel and equipment shall adhere to the Vehicle Idling Policy as described in the North Slope Field Environmental Handbook (Section 3, page 17, Dec 2015 edition) as well as the general policies outlined below:

- **Summer Operation - May 1st through September 30th**
 - Vehicles will be shut off when not occupied.
- **Winter Operation - October 1st through April 30th**
 - At temperatures warmer than 0 degrees Fahrenheit vehicles will be turned off when not in use. Efforts should be made to plug vehicles in. If plug-ins are not available, vehicles must still be turned off. This includes short periods of time such as lunch breaks or delivery stops.
 - At temperatures between 0 and minus 30 degrees Fahrenheit vehicles must be parked on bull rails and plugged in, if available.
 - At temperatures colder than minus 30 degrees Fahrenheit, vehicles that see everyday use should be left running.

PRE-SHIFT WARMUP

Vehicles shall not be started sooner than 15 minutes before beginning of shift. Ensure vehicle contains a spill kit.

	CONOCOPHILLIPS ALASKA Health Safety and Environmental 2021 Vehicle Management Plan		Field: Willow
			Last Reviewed: 1/8/2021
Retention Code ADM220	Owner/Author: Willow Operations Lead	WIL-01-HS- PLN-0002	Review Frequency: N/A

Conduct 360 around vehicle prior to start to ensure no leaks, duck pounds or containment devices are attached and no observed mechanical issues. Conduct an additional 360 after vehicle warms up and prior to moving vehicle.

EXEMPTIONS

Should there be a need to maintain the heat inside a vehicle due to special gear, electronic testing equipment that cannot be relocated, etc.,

An exemption must be applied for and approved by the Willow Construction Supervisor.

The vehicle must be away from camp, offices, living quarters, occupied structures and not near any air vents or intake on any facility. It must NOT occupy a bull rail space or parking area where plug-in's are located.

Dust Control

Willow personnel and equipment shall adhere to the Willow Dust Control Plan (WIL-01-RG-PLN-0003), as published by BLM in the Willow MDP Final EIS.

Inspection and Compliance

Adherence to this plan shall be a condition of contractor mobilization. All contract personnel shall be trained on this policy prior to arrival on site at Willow.

Additionally, once field activities are underway, CPAI security or designated contractor shall perform periodic and random surveillance of the project area to ensure that personnel abide by restrictions outlined in this management plan.

CPAI shall employ subsistence representatives throughout the gravel haul period to monitor project activities and adherence to this plan.

CPAI shall supply a report to the BLM Administrative Office following completion of 2021 activities, reporting of any roadkill of birds or mammals.

