CITY OF NORTH POLE
Regular Meeting
February 20, 2024
City Hall Chambers
125 Snowman Lane, North Pole, Alaska
www.northpolealaska.com

Tuesday, February 20, 2024
Committee of the Whole: 6:30 PM
Regular City Council Meeting: 7:00 PM

MAYOR
Michael Welch
907-488-8584

CITY CLERK
Emily Braniff, CMC
907-488-8583

COUNCIL MEMBERS

Chandra Clack – Mayor Pro Tem	907-460-3767
Anton Keller – Deputy Mayor Pro Tem	907-987-2548
Larry Terch – Alt. Deputy Mayor Pro Tem	907-378-9233
Jeffrey Jacobson	907-460-7733
Benny Williams	907-388-5911
David Skipps	907-750-5106

1. Call to Order/Roll Call
2. Pledge of Allegiance
3. Invocation
4. Approval of Agenda
5. Approval of the Minutes from February 5th, 2024
6. Communications from the Mayor
    a. Proclamation – Student of the Month Keira O'Connor
    b. Proclamation – Black History Month
7. Council Members Questions of the Mayor
8. Citizens Comments (Limited to five (5) minutes per Citizen)
9. Communications from Department Heads and Borough Representative
10. Ongoing Projects Report
11. Unfinished Business
12. New Business
    a. Ordinance 2024-02 an Ordinance Amending NPMC Title 2, Chapter 36, Section 050 Categories of Employees, Apprentice
    b. Resolution 2024-03 Resolution Establishing the Transfer of Funds from Mt. McKinley Bank to the City of North Pole AML Investment Pool Account

c. Resolution 2024-04 a Resolution to Approve the Disbursal of Attorney Fees to CSG, Inc. RE: City V. Williams $2,102,000
d. Request to Council – Streetlight Survey and Analysis, Respec, LLC $25,360.00
e. Recommendation to Council – City Water Main Design Award – Respec, LLC

13. Council Comments
14. Adjournment

Committee of the Whole – 6:30 P.M.
Regular City Council Meeting – 7:00 P.M.

A regular meeting of the North Pole City Council was held on Monday, February 5, 2024, in the North Pole City Hall Council Chambers.

CALL TO ORDER/ROLL CALL

Mayor Pro Tem Clack called the regular City Council meeting of Monday, February 5, 2024, to order at 7:00 p.m.

Present:

Chandra Clack – Mayor Pro Tem
Larry Terch – Alt. Deputy Mayor Pro Tem
Jeffrey Jacobson
Benny Williams
David Skipps

Absent:

Mayor Welch
Anton Keller – Deputy Mayor Pro Tem

PLEDGE OF ALLEGIANCE TO THE U.S. FLAG

Led by Mayor Pro Tem Clack

INVOCATION

Given by Mr. Williams

APPROVAL OF AGENDA

Mr. Jacobson *moved* to approve the agenda of February 5th, 2024

Seconded by Mr. Terch

Mr. Jacobson *moved to amend* the agenda to allow citizen comments on Ordinance 2023-17 under Citizens Comments

Seconded by Mr. Williams

UNFINISHED BUSINESS

a. Ordinance 2023-17, An Ordinance of the City of North Pole, to Amend Title 10, Unsafe and Hazardous Vehicles and Title 1, Minor Offense Fee Schedule (Ordinance 2023-17 was postponed from the Regular City Council meeting of November 20, 2023)

b. Ordinance 2024-01, an Ordinance to Accept Board of Adjustment Duties from the Fairbanks North Star Borough to Hear and Decide Appeals of Certain Land use Decisions for Land Located Within the City of North Pole

NEW BUSINESS

a. Memo – Appointment to FNSB Planning Commission, Greg Corbett
b. Request to Council – Purchase Two (2) 2024 Dodge Durango Police Vehicles $94,142.50
c. Request to Council – Water Meter Purchase $242,598.31 American Rescue Plan Act (ARPA) Funds
d. Request to Council – Lead Line Survey - Respec $48,000
e. Request to Council – Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Application -Two Bears Environmental Consulting $6,300

On the Agenda

DISCUSSION

None

PASSED

Yes: Clack, Terch, Jacobson, Skipps, Williams
No: 0
Absent: Welch, Keller

On the Agenda, as Amended

DISCUSSION

None

PASSED

Yes: Williams, Terch, Clack, Jacobson, Skipps
No: 0
Absent: Welch, Keller

APPROVAL OF MINUTES

Mayor Pro Tem Clack *moved to approve* the minutes from the January 16th, 2024, meeting.

Seconded *by* Mr. Skipps

On the Minutes

DISCUSSION

None

PASSED

Yes: Skipps, Terch, Jacobson, Clack, Williams
No: 0
Absent: Welch, Keller

COMMUNICATIONS FROM THE MAYOR

a. Employee Recognition – 25 Years of Service Paul Trissel

Mayor Pro Tem Clack asked Danny Wallace City Services Director to come forward to award Paul Trissel, Utilities Supervisor, a 25-year plaque. Mr. Wallace spoke about Mr. Trissel's 25-year history working with the City of North Pole. The Council and the chambers recognized Mr. Trissel's accomplishments with a standing ovation.

COUNCIL MEMBER QUESTIONS OF THE MAYOR

CITIZENS COMMENTS – (Limited to Five (5) minutes per Citizen)

Rita Trometer spoke against the traffic hazard ordinance.

Barbara Haney spoke against Ordinance 2023-17 and wished Mayor Welch well. Ms. Haney thanked the Council for including a prayer at the Council meeting.

Tammy Wilson shared her disappointment that there was no work session to discuss the ordinance and asked if there is another ordinance of its kind if they could hold a town hall to include community input.

Chief Dutra reported he has asked the Council to fail the ordinance and spoke to some of the statistics that back up his recommendation. Chief Dutra thanked everyone for coming out to share their thoughts about the ordinance.

Rich Ide shared that he has lived in North Pole since 1983 and that the traffic hazard ordinance seems unnecessary, and it gives him a dark cloud feeling.

COMMUNICATIONS FROM DEPARTMENT HEADS, BOROUGH REPRESENTATIVE

Finance, Tricia Fogarty

Ms. Fogarty shared all the January sales tax payments have come in and they are working to close out the month. Ms. Fogarty reported they have met with the auditor, Elgee Rehfeld for their first meeting and it seems to be going very well.

Fire Department, Assistant Chief Tod Chambers

AC Chambers reported Chief Heineken is in Juneau at the Fire Chief's Leadership Association. He shared the trainings the department has been involved in. AC Chambers stated the apprenticeship program at the Fire Department is getting a wonderful number of inquiries and one actual application already.

Public Works/City Utility, Danny Wallace

Mr. Wallace reported Moose Creek water expansion will officially end on March 31, 2024. Mr. Wallace stated the system still has a year's warranty and that there are a few minor items that need to be taken care of, but he will stay on top of it.

Mr. Wallace shared that there is a fire alarm system issue in City Hall, he shared the system is over 30 years old and may need to be revamped. Mr. Wallace stated he is working on camera access in City Hall for some of the employees in the fishbowl.

Mr. Wallace reported there is a request for bid being advertised for a skid steer with a deadline of February 14th and he would have a recommendation for Council at the next regular meeting.

Mr. Wallace shared he is working with Human Resources Administrator/Deputy Clerk Maggie Kimmel to start

advertising for a position opening in Public Works.
Mr. Wallace reported the Building Department continues to see applications for permits and that he expects that they will increase as the summer months approach.
Mr. Wallace stated there are no serious issues to report for Utilities, but they are continuing work on the Water Main Design package and that he should have a recommendation at the next Council meeting.
Mr. Wallace reported the vehicle that was sold at auction brought in $9,200.
Mr. Jacobson shared that the fire alarm had an old phone system at the City of Fairbanks had an issue, it was running on a seven-digit phone number, and it was fixed when they updated it to a 10-digit number. Mr. Wallace said he would investigate it.

Police Department, Chief Dutra

Chief Dutra shared he has two supervisors at training in Soldotna and that his department is working on the 2024 Grant Cycle. Chief Dutra shared he is close to hiring the last open position in his department and that he was thankful to the Council for valuing the employees of his department. He shared departments across the country are suffering and he is at full staff in part to how much the Council helped with pay the prior year.

City Clerk, Emily Braniff

Ms. Braniff thanked everyone for coming to the Council meeting and referred to the video monitor to show the chambers more about the city's website. Ms. Braniff shared that agendas are required by Code to be posted on the website Thursday before the Monday Regular Council meeting. Ms. Braniff reported Council meetings are always the first and third Monday of the month and navigated on the video monitor for the guests in Chambers as to where they can find agenda packets and other city business on the website. Ms. Braniff shared the required code training for staff and Council is at 73% compliance and that there are three job openings available on the website.

Borough Representative

Mayor Pro Tem Clack asked Ms. Haney to give a Borough report, Ms. Haney updated the Council of the items on the Fairbanks North Star Borough School Districts agenda. Ms. Haney shared information about the Fairbanks North Star Borough's special election because of the School District's deficit.

ON GOING PROJECTS

UNFINISHED BUSINESS

- Ordinance 2023-17, An Ordinance of the City of North Pole, to Amend Title 10, Unsafe and Hazardous Vehicles and Title 1, Minor Offense Fee Schedule (Ordinance 2023-17 was postponed from the Regular City Council meeting of November 20, 2023)

Mr. Jacobson *moved to Adopt* Ordinance 2023-17

Seconded by Mr. Williams

On the Ordinance

DISCUSSION
None
PASSED
Yes: 0
No: Clack, Terch, Skipps, Jacobson, Williams
Absent: Welch, Keller

- Ordinance 2024-01, an Ordinance to Accept Board of Adjustment Duties from the Fairbanks North Star Borough to Hear and Decide Appeals of Certain Land use Decisions for Land Located Within the City of North Pole

Mr. Jacobson *moved to Adopt* Ordinance 2024-01

Seconded by Mr. Williams

On the Ordinance
DISCUSSION
None
PASSED
Yes: Jacobson, Skipps, Williams, Terch, Clack
No: 0
Absent: Welch, Keller

NEW BUSINESS
- Memo – Appointment to FNSB Planning Commission, Greg Corbett

Mr. Terch *moved to Approve* the Memo - Appointment to the FNSB Planning Commission, Greg Corbett

On the Memo
DISCUSSION
None
PASSED
Yes: Clack, Terch, Skipps, Jacobson, Williams
No: 0
Absent: Welch, Keller

- Request to Council – Purchase Two (2) 2024 Dodge Durango Police Vehicles $94,142.50

Mr. Jacobson *moved to Approve* the Request to Council – Purchase Two (2) 2024 Dodge Durango Police Vehicles $94,142.50

- Request to Council – Water Meter Purchase $242,598.31 American Rescue Plan Act (ARPA) Funds

On the Memo
DISCUSSION

None
PASSED
Yes: Clack, Terch, Skipps, Williams, Jacobson
No: 0
Absent: Welch, Keller

Mr. Skipps *moved to Approve* the Request to Council – Water Meter Purchase $242,598.31 American Rescue Plan Act (ARPA) Funds

Seconded by Mr. Jacobson

On the Memo
DISCUSSION
None
PASSED
Yes: Skipps, Clack, Terch, Williams, Jacobson
No: 0
Absent: Welch, Keller

- Request to Council – Lead Line Survey - Respec $48,000

Mr. Jacobson *moved to Approve* the Request to Council – Lead Line Survey

Seconded by Mr. Williams

On the Memo
DISCUSSION
None
PASSED
Yes: Williams, Terch, Skipps, Clack, Jacobson
No: 0
Absent: Welch, Keller

- Request to Council – Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Application -Two Bears Environmental Consulting $6,300

Mr. Williams *moved to Approve* the Request to Council – Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Application -Two Bears Environmental Consulting $6,300

Seconded by Mr. Skipps

On the Memo
DISCUSSION
None
PASSED

Yes: Skipps, Clack, Williams, Jacobson
No: Terch
Absent: Welch, Keller

COUNCIL COMMENTS

Mr. Skipps thanked God for the nicer weather because it is easing up on his pocketbook, he asked everyone to drive safe.

Mr. Jacobson asked Ms. Braniff to forward to Council and Staff the email link to the Legislative Sessions that will be held during the week in Juneau. Mr. Jacobson reported the Grange Gallery is having a showing and a wine tasting and encouraged everyone to check it out if they have not already. Mr. Jacobson shared that he, Mr. Wallace, and Mayor Pro Tem Clack had met with the 2016 strategic planning committee, and they would be speaking with Council and community members going forward. Mr. Jacobson shared a handout with the Council and Clerk the 2010 North Pole Land Use Plan. Mr. Jacobson reminded everyone that it is Black History Month and asked for a Proclamation to be made at the second February meeting honoring it.

Mr. Williams shared he had some car problems and asked everyone to do research when a dealer tries to tell them how much it will cost, it saved him some money. Mr. Williams shared he will be attending the Fairbanks North Star Borough Assembly meeting, Mayor Pro Tem Clack asked that he let the Borough know that North Pole had approved the land use ordinance and that they approved the FNSB Planning Commission appointee, which has been vacant for six years.

Mr. Terch thanked Mr. Trissel for his service to the City of North Pole and shared that he does so much more in his job than anyone really realizes. Mr. Terch thanked everyone for coming out to testify and to share their opinions he stated that collaborating with the citizens is his favorite part of his job.

Mayor Pro Tem Clack thanked the Lord for everyone showing up for testimony and asked that the Lord touches Mayor Welch for healing. Mayor Pro Tem Clack asked everyone to drive safely and thanked staff of the city for the work they do and the Council for their service.

ADJOURNMENT

Mr. Skipps *moved* to adjourn.

Seconded *by* Mr. Jacobson

The regular meeting of Monday, February 5, 2024, adjourned at 8:15 p.m.
These minutes passed and approved by a duly constituted quorum of the North Pole City Council on Tuesday, February 20, 2024.

_____
Mayor Pro Tem Clack

ATTEST:

_____
Emily Braniff, CMC
City Clerk

Office of the Mayor
City of North Pole

Proclamation

WHEREAS, *Keira O'Connor is a senior at North Pole High School and the daughter of Ronnetta and Shane O'Connor; and*

WHEREAS, *Kiera has been active in Student Government, National Honors Society, and softball; and*

WHEREAS, *Kiera volunteers at the North Star Ballet Company, for the Senior Volunteer Project, and the local Food Drive; and*

WHEREAS, Kiera is a distinguished Kids Voting Writing Contest Winner and an Alaska Softball Activities Association Award Recipient; and

WHEREAS, *the City of North Pole desires to recognize the outstanding students in the community.*

NOW, THEREFORE, I, *Chandra Clack, Mayor Pro Tem of the City of North Pole, do hereby proclaim Kiera O'Connor the:*

North Pole City Council
High School Student of the Month
For February 2024

Chandra Clack, Mayor Pro Tem

ATTEST:

Emily Braniff, CMC
City Clerk

CITY OF NORTH POLE
INCORPORATED
SEAL
JANUARY 16, 1953
ALASKA

Office of the Mayor
City of North Pole

Proclamation

WHEREAS, the soul of America is what makes us unique among all state. We are the only country in the world founded on an idea. It is the idea that we are all created equal and deserve to be treated with equal dignity throughout our lives. While we still grapple today with the moral stain and vestiges of slavery — our country's original sin — we have never walked away from the fight to fully realize the promise of America for all Americans.

WHEREAS, throughout our history, Black Americans have never given up on the promise of America. Unbowed by the forces of hate and undaunted as they fought for centuries against slavery, segregation, and injustice, Black Americans have held a mirror up to our Nation, allowing our country to confront hard truths about who we are and pushing us to live up to our founding ideals.

WHEREAS, in 1976, as Americans celebrated the national bicentennial, President Gerald Ford urged the Nation to "seize the opportunity to honor the too-often neglected accomplishments of Black Americans in every area of endeavor throughout our history" and, for the first time, Black History Month was celebrated nationwide; and

WHEREAS, President Ford's words rang true to the Nation, and in that spirit we recognize and celebrate the incredible roles African Americans have played in Alaska's history and their many contributions to the wellbeing of our State; and

WHEREAS, the strong and positive influence that African Americans have had on our State started long before statehood as African American men migrated to Alaska to work as whalers, fur traders, and eventually gold miners; and

WHEREAS, we have long benefitted from the contributions of outstanding African American men and women, including Willard Bowman, who moved to Alaska after serving in the U.S. Navy, was appointed the first Director of the Alaska Human Rights Commission in 1963, and later served three terms in the Alaska House of Representatives; and

WHEREAS, this month we honor our African American neighbors, their accomplishments and contributions, and celebrate the distinct influence they have on the cultural fabric of our Great State. in Alaska and encourage all Alaskans to recognize the continuing impact African Americans have on our State and the lasting contributions they bring to the success of our communities.

NOW, THEREFORE, I, Chandra Clack, Mayor Pro Tem of the City of North Pole, do hereby proclaim this February 2024 Black History Month.

Chandra Clack, Mayor Pro Tem

ATTEST:

Emily Braniff, CMC
City Clerk

THE CITY OF NORTH POLE
INCORPORATED ON
JANUARY 16, 1953
SEAL
ALASKA

Sponsored by: Mayor Pro Tem Chandra Clack
Introduced: February 20, 2024

ORDINANCE NO. 2024-02

AN ORDINANCE OF THE CITY OF NORTH POLE AMENDING MUNICIPAL CODE TITLE 2 CHAPTER 36 SECTION 050 CATEGORIES OF EMPLOYEES

WHEREAS, changes to the North Pole Municipal Code are a continually changing requirement; and

WHEREAS, the City of North Pole wishes to remain up to date with its protections for its employees and Council; and

NOW, THEREFORE, BE IT ORDAINED by the Council of the City of North Pole:

Section 1. This ordinance is of a general and permanent nature and shall be codified.

Section 2. Title 2: Administration and Personnel, Division 1: Administration, Chapter 2: City Council, Section 36.050 Categories of employees are hereby amended in the North Pole Code of Ordinances as follows: [new text in red, deleted text in ~~strikethrough~~] see attached.

2.36.050 Categories of employees.

A. The following categories are utilized in the context of City employment:

1. Full-Time. This position is included as a part of the annual operating budget and is to be considered part of the regular staffing of the City.

a. Exempt. Those employees who meet the Fair Labor Standards Act (FLSA) requirements for exemption from the Act, who work the hours necessary to accomplish the job and are considered salaried employees.

b. Nonexempt. Those employees who are subject to the recordkeeping requirements of the FLSA and are considered hourly employees.

2. Term – Full-Time. Position funded for more than six months, but less than two years, with a projected termination date which may be adjusted according to funding limitations or completion of the work. Employees hired to fill such vacancies shall enjoy all benefits of the full-time category, with the exception of employment protection beyond the life of the designated project(s).

3. Temporary. Positions deemed to be temporary will not exceed one thousand forty hours in one calendar year period.

4. Casual/Part-Time. These are positions with a workweek of less than forty hours.

5. Volunteer Fire Department Personnel. Employees in this class receive no monetary compensation for duties performed. These personnel are subject to the City drug policy and disciplinary procedures, must follow the grievance procedures, and are eligible for training and tuition reimbursements. They are not eligible for leave with pay, retirement, or medical, hospitalization, life and accident insurance benefits extended to full-time employees. Should a volunteer be hired as a full-time employee, the date of hire will be the date that employee begins full-time employment.

6. Apprentice. Employees in this category are performing on the job training to gain experience, education and certifications necessary to qualify for career positions within a specific career field. Position may be full-time or part-time for a term no longer than 24 months. Apprentice employees are not eligible for leave with pay, retirement or medical, hospitalization, life and accident insurance benefits extended to permanent full-time employees.

Section 3. Effective Date. This ordinance shall become effective upon signing.

ADOPTED THE ___ DAY OF .

_____
Mayor Pro Tem Chandra Clack

ATTEST:

_____
Emily Braniff, CMC
City Clerk

PASSED/FAILED
Yes:
No:
Absent:

Sponsored by: Mayor Pro Tem Clack
Introduced and Adopted: February 20, 2024

CITY OF NORTH POLE

RESOLUTION 2024-03

A RESOLUTION ESTABLISHING A TRANSFER OF FUNDS FROM MT. MCKINLEY BANK TO THE CITY OF NORTH POLE AML INVESTMENT POOL FIRE DEPARTMENT FLEET ACCOUNT

WHEREAS, The purpose of the transfer is to earn an competitive rate of return on our account balances. and

WHEREAS, the City Council had introduced and approved Ordinance 08-10 An Ordinance of The City of North Pole Authorizing Participation In The Alaska Municipal League Investment Pool, Inc. For Use by Cities and Boroughs; and

WHEREAS, authorizing the City of North Pole to set up subaccounts to invest general funds, fleet funds, Misc. Funds; and

WHEREAS, the interest earned will be returned to investment earned accounts of the fund the investment originated from; and

WHEREAS, the interest rate earned at AML Investment pool on our general account for the month of February 12, 2024 was 5.36 percent; and

WHEREAS, the rate of returned earned at Mt. McKinley Bank in January 2024 is 1.51 percent; and

WHEREAS, the following amounts are to be transferred to the City of North Pole's AML Investment Pool accounts.

Fire Department Fleet Fund **$500,000.00**

NOW THEREFORE BE IT RESOLVED, by the Council of the City of North Pole that it approves the funds to be transferred to The Alaska Municipal League Investment Pool, Inc.

PASSED AND APPROVED by a duly constituted quorum of the North Pole City Council this 20th February 2024.

_____

Mayor Pro Tem Chandra Clack

ATTEST:

_____

Emily Braniff, CMC
City Clerk

PASSED/FAILED
Yes:
No:
Absent:

Sponsored by: Mayor Pro Tem Chandra Clack
Introduced: February 20, 2024

CITY OF NORTH POLE

RESOLUTION 2024-04

A RESOLUTION TO APPROVE THE DISBURSEAL OF ATTORNEY FEES TO CSG, INC. RE: CITY OF NORTH POLE V. WILLIAMS

WHEREAS, the City of North Pole retained the law firm of CSG, Inc. (formerly known as Cook Schuhmann and Groseclose, Inc.), on a contingent fee, as its counsel for sulfolane related litigation against The Williams Companies, Inc., Williams Alaska Petroleum, Inc., and other parties (the Litigation).

WHEREAS, CSG, Inc. has satisfactorily concluded the Litigation and has fully earned its contingent fee (as reduced from the original contingent fee contract) in the amount of $2,600,000 based on the funds distributed to the City of North Pole to date.

NOW THEREFORE BE IT RESOLVED that the City of North Pole shall promptly pay CSG, Inc. the balance of the contingent fee earned by CSG, Inc. in the amount of $2,102,000.00 and held by the City of North Pole pending the conclusion of the Litigation and the fee being fully earned.

PASSED AND APPROVED by a duly constituted quorum of the North Pole City Council this 20th day of February 2024.

_____

Mayor Pro Tem Clack

ATTEST:

_____

Emily Braniff, CMC

City Clerk

PASSED
Yes:
No:
Absent:

Cook Schuhmann & Groseclose, Inc.

Barbara L. Schuhmann
Robert B. Groseclose
Jo A. Kuchle
Zane D. Wilson
Craig B. Partyka
Danielle M. Gardner
Mary S. Spiers

Attorneys at Law

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CONTINGENT FEE CONTRACT

1. The City of North Pole, of 125 Snowman Lane, North Pole, AK 99705, (hereafter referred to as "client") employs and retains the law firm of COOK SCHUHMANN & GROSECLOSE, INC. (hereafter referred to as "CS&G", "the attorney", or "the law firm"), of 714 Fourth Avenue, Suite 200, P.O. Box 70810, Fairbanks, Alaska 99707, as her attorney to negotiate, settle, compromise, prosecute to judgment, or to otherwise recover or collect on the negligence claim against Williams Alaska Petroleum, Inc., The Williams Companies, Inc., Flint Hills Resources Alaska, LLC, an Alaska limited liability corporation and Flint Hills Resources, LLC, a Delaware limited liability corporation. CSG is authorized to commence any action on client's claims and to prosecute or settle client's claims. Client hereby agrees not to make any settlement or compromise of any claim without consent of CS&G.

2. In consideration of the service rendered and to be rendered to the client by CS&G, the client hereby agrees and promises to pay to COOK SCHUHMANN & GROSECLOSE, INC., as its compensation for such services, a sum equal to:

a. If the claims are resolved by a money settlement or judgment:
   i. 25% if resolved no later than 9 months prior to trial;
   ii. 33 1/3% if not resolved 9 months prior to trial;
   iii. 40% if an appeal is filed by either party;

of the total amount recovered, including all sums awarded as costs and attorney's fees upon trial and interest on any judgment, and excluding sums spent by client for costs. It is understood and agreed that this amount and any provisions herein for compensation paid or to be paid for legal services shall not apply to retrial, and said attorneys shall not be required to prosecute any retrial of any claim under the provisions of this agreement.

b. If the claims are not resolved by a money judgment but by a settlement with the defendants, which provides assets, benefits or services to the city that, upon application of the formula set forth in 2(a) of this agreement to the defendants' cost to provide the assets, benefits or services to the City, results in a fee that is less than the actual fees that were incurred by CS&G at their regular hourly rates, then CS&G shall be paid their regular hourly rate for their actual time devoted to this matter, without any enhancement.

c. If the claims are not resolved by a money judgment but by a settlement with the defendants, which provides assets, benefits or services to the city that, upon application of the formula set forth in 2(a) of this agreement to the defendants' cost to provide the assets, benefits or services to the City, results in a fee that is greater than the actual fees that were incurred by CS&G at their regular hourly rates, then CS&G shall be paid an enhanced fee taking into account the total fees for CS&G's actual time devoted to this matter, the total cost of the assets, benefits or services received by the City from the defendants, the capacity of these assets, benefits or services to generate income, the capability of the City to pay the fee over time without undue disruption to City finances, and those factors identified in ARPC 1.5 (attached hereto).

d. Under both (b) and (c) above, if any settlement includes a payment of money, whether for damages, costs, attorney's fees, or other categories, the formula set forth in paragraph 2(a) shall apply to the cash portion of the resolution.

3. Costs, necessary disbursements, and reasonable personal and travel expenses incurred by the attorney in advancing the client's cause are to be borne by the client but may be advanced by the attorney. Client shall reimburse the attorney for such expenses upon receipt of billing invoices for these expenses. If any expenses have not been reimbursed when the matter is concluded, reimbursement is to be made from the client's share of the recovery after deducting the agreed attorney's fees from the total recovery.

4. Under the law, if you become involved in litigation, you may have to pay some or all of the costs, fees and expenses of your opponents if you don't win your lawsuit or if you reject an offer that turns out to be better than your results at trial.

5. This contract applies to, inures to the benefit of, and binds all parties hereto, their heirs, legatees, devisees, administrators, executors, and assigns.

6. Any disputes arising between the client and the law firm, including all claims of the client in regard to errors and omissions on the part of the attorneys, shall be adjudicated by arbitration under the rules of the American Arbitration Association, except that all disputes regarding legal fees shall be resolved by binding arbitration under the rules of the Alaska Bar Association. The attorney is given a lien on the above stated claims on any sum recovered by way of settlement and on any judgment that may be recovered.

7. CS&G makes no warranties as to the outcome of this matter. All statements of CS&G are statements of opinion only.

I HAVE READ AND FULLY UNDERSTAND THE ABOVE CONTRACT. THIS CONTRACT IS NOT BINDING UNTIL AND UNLESS SIGNED BY ALL PARTIES NAMED BELOW.

CITY OF NORTH POLE

10/28/14
DATE

By: _____
Bryce Ward, Mayor

COOK SCHOHMANN & GROSECLOSE, INC.

10/29/14
DATE

By: _____
Zane D. Wilson

CSG, Inc.

Attorneys at Law

Telephone 907.452.1855 • Facsimile 907.452.8154 • Toll Free 800.550.1855
714 Fourth Avenue, Suite 200 • Fairbanks, Alaska 99701-4470
www.alaskalaw.com • csg@alaskalaw.com

Barbara L. Schuhmann - of Counsel
Robert B. Groseclose
Jo A. Kuchle
Zane D. Wilson
Craig B. Partyka
Danielle M. Gardner
Kristina M. Miller
Steven S. Hansen

November 3, 2020

sender's email address:
zane@alaskalaw.com

Mayor Welch
City of North Pole
125 Snowman Lane
North Pole, AK 99705

Re: North Pole v. Williams
Our File No. 514.50

Dear Mayor Welch:

This letter will confirm that the City of North Pole has in its possession approximately $2,102,000.00 in funds that are payable, in full, to the law firm of CS&G Inc. as attorney fees for the City of North Pole v WAPI litigation. The timing of the disbursement of these funds will be as agreed by the City and CS&G that the fees have been earned by CSG, Inc. with any remaining balance payable to CS&G Inc. no later than the conclusion of the North Pole v. WAPI litigation. The City is entitled to retain all interest earned on these funds but will not otherwise spend or place the funds at risk. The parties agree the funds may be deposited in the Key Bank Alaska Municipal League Investment Pool.

Sincerely,

CSG, Inc.

By:_____
Zane D. Wilson

City of North Pole

By:_____
Mayor Welch

SETTLEMENT AGREEMENT

This Settlement Agreement ("Agreement"), entered into by and between The City of North Pole (“CNP”), The State of Alaska (“SOA”) and Flint Hills Resources Alaska, LLC (“FHRA”) (CNP, SOA and FHRA are herein collectively referred to as the “Parties”) memorializes certain understandings reached among the Parties with respect to their obligations to each other in connection with matters related to the Environmental Matters (as defined herein) including the groundwater contaminated with sulfolane at, around and migrating from the North Pole Refinery (“NPR”), the City of North Pole and the Fairbanks North Star Borough resulting primarily from spills and releases by the prior owner of the NPR, Williams Alaska Petroleum, Inc. (“WAPI”) (the sulfolane groundwater contamination shall be referred to as the “Sulfolane Plume”) and certain short- and long-term remedial measures designed to address the Sulfolane Plume.

WHEREAS, FHRA is the current owner of the NPR located in the City of North Pole, Alaska (the “North Pole Refinery”); and

WHEREAS, SOA, through the Alaska Department of Natural Resources (“SOA/DNR”), is a former owner and lessor of the real property underlying the NPR and SOA, and through the Alaska Department of Environmental Conservation (“SOA/DEC”), has, and continues to have, regulatory and enforcement jurisdiction over the NPR with respect to Environmental Matters including but not limited to the Sulfolane Plume; and

WHEREAS, CNP has been impacted by the Sulfolane Plume in that sulfolane is in the groundwater underlying the City; and

WHEREAS, WAPI owned and operated the NPR from its initial construction in the 1970’s until its sale to FHRA on April 1, 2004. WAPI commenced the use of sulfolane in the refining process in approximately 1985. During WAPI’s ownership and operation of the NPR WAPI spilled and otherwise released sulfolane to the soil and to the groundwater underlying the NPR; and

WHEREAS, on April 1, 2004, FHRA purchased the NPR from WAPI and The Williams Companies, Inc. (“TWC”) pursuant to the terms and conditions of an “Asset Purchase and Sale Agreement” (“ASPA”), dated November 17, 2003, and related agreements. TWC was and is a parent corporation of WAPI and executed a Parental Guaranty to, among other things, guaranty WAPI’s performance under the ASPA (WAPI and TWC shall be referred to throughout as “Williams”). Pursuant to the ASPA, FHRA agreed to assume responsibility for known, disclosed groundwater contamination on the NPR premises. Williams retained liability for any unknown or undisclosed

groundwater contamination as well as any groundwater contamination that had migrated off the NPR premises; and

WHEREAS, in 2009, FHRA became aware that sulfolane from the NPR was detected in private drinking water wells off of the NPR premises; and

WHEREAS, from 2009 to present, FHRA has been cooperating with the SOA/DEC and CNP to investigate and respond to the onsite contaminants of concern and the Sulfolane Plume. This includes, but is not limited to, monitoring and characterizing the Sulfolane Plume, preparing site characterization studies, communicating directly with impacted landowners, and providing alternative drinking water to impacted landowners; and

WHEREAS, FHRA submitted and SOA/DEC approved an Onsite Cleanup Plan to address and conduct short- and long-term remedial activities on the refinery premises, including, the monitoring, groundwater treatment and recovery and disposal of sulfolane contaminated media; and

WHEREAS, pursuant to Alaska law, Williams, FHRA and SOA/DNR are potentially responsible parties and, potentially liable for some allocable share of costs and damages incurred as a result of the Sulfolane Plume. The SOA/DEC has directed Williams, as a potentially responsible party, to undertake response actions to address the Sulfolane Plume, but to date Williams has refused to materially participate or comply with the SOA/DEC requests and directives; and

WHEREAS, lawsuits are currently pending involving claims by and between FHRA, Williams, SOA and CNP to determine responsibility, damages and the allocation of future costs relating to Environmental Matters including the Sulfolane Plume. Those cases are all pending in the Superior Court for the State of Alaska, Fourth Judicial District at Fairbanks and are styled: *Flint Hills Resources Alaska, LLC Williams Alaska Petroleum, Inc. and The Williams Companies, Inc., Case No. 4FA-10-1123 CI* and *State of Alaska, Attorney General's Office v Williams Alaska Petroleum, Inc., et al and City of North Pole v Williams Alaska Petroleum, Inc., et al, Case No. 4FA-14-01544 CI Consolidated (the "Lawsuits")*; and

WHEREAS, FHRA, SOA and CNP have each evaluated and analyzed the Sulfolane Plume and independently conclude that Williams is the responsible party that is primarily responsible for the release of sulfolane into the groundwater based upon, among other things, historic spill records, historic contemporaneous records of Williams' on-site activities, evaluation and comparison of refinery environmental and operational processes and procedures, extensive sampling and analysis for sulfolane in

on-and off-site groundwater, and extensive modeling of the fate-and-transport of sulfolane in groundwater; and

WHEREAS, based upon the extensive studies undertaken by FHRA and SOA/DEC of sulfolane in the groundwater at the NPR and offsite, SOA and CNP have determined, as set forth in the attached Offsite Potable Water Plan, that the most appropriate measure to address the impact of the Sulfolane Plume on drinking water is a piped public water system; and

WHEREAS, FHRA, SOA and CNP have engaged in settlement discussions with Williams in an attempt to resolve the lawsuits, but Williams has refused to accept an allocable percentage of a planned piped water system; accordingly, those discussions have failed; and

WHEREAS, FHRA, SOA and CNP mutually wish to resolve the issues between them and proceed with ultimate implementation of the Offsite Potable Water Plan while recognizing the need to secure an equitable share of the past and future costs of both on- and off-site response activities by proceeding to pursue and enforce all claims against Williams; and

WHEREAS, SOA and FHRA have agreed to fund, on an interim basis, costs associated with the Offsite Potable Water Plan with the shared understanding that the Parties to this settlement will seek any and all relief to ensure Williams is held liable for the construction of the planned piped water system, either in whole or an allocable share, and that Williams will be held to pay its fair share of those costs to vendors responsible for the work activity; and

NOW, THEREFORE, in consideration of the foregoing, and with intent to be legally bound hereby, the Parties mutually agree as follows:

1. Definitions.

"Environmental Matters" as used in this Settlement Agreement shall mean Contaminants of Concern (as set out in the 2017 Revised Onsite Cleanup Plan) that are located onsite at the NPR and on and off site in the Sulfolane Plume.

"Operations Fund" as used in this Settlement Agreement shall be as defined in paragraph 4 of this Settlement Agreement.

"Project" as used in this Settlement Agreement is the work to design and construct the piped water distribution system as set out in the Offsite Potable Water Plan. The Parties shall use their best efforts to commence construction at the beginning of the 2018 construction season.

"Project Area" as used in this Settlement Agreement shall mean areas impacted by the Sulfolane Plume, which are in part within the CNP city limits and part outside the CNP city limits as well as to the following additional subdivisions, as those subdivisions are currently configured and populated: Garden, Riddle Estates, Poodle, Pine Stream, Steelhead and Sorores (such area, subject to changes as detailed below, is referred to herein as the "Project Area"). Attached as Exhibit A are preliminary maps of the proposed Project and Project Area, subject to change as detailed herein.

"Project Costs" as used in this Settlement Agreement shall mean costs associated with the Project, in particular:

- The design and construction of a piped water distribution system that extends the existing CNP public drinking water utility system to 656 discrete parcels, as defined by the Stantec Report (as defined herein), and includes CNP public drinking water utility system improvements necessary to support the additional water system and connections;

- The provision of service lines necessary to connect the 656 individual residences or businesses on discrete parcels to the expanded distribution system to fully place them in service. The service line cost is presented in the Stantec Report as the average cost to connect the 656 homes to the newly constructed piped water distribution system;

- The transitioning of homes on alternative water systems (AWS), currently provided by FHRA, to the planned public water system contemplated under this Settlement Agreement. The Parties agree that FHRA shall take the lead in negotiating the transition with the impacted homeowners.

- Internal Costs as defined in paragraph 4 of this Settlement Agreement.

- A One Million ($1,000,000) Dollar operations fund for the CNP to fund initial operations and maintenance of the planned piped water system.

"Stantec Report" as used in this Settlement Agreement shall mean the report prepared by Stantec Consulting Services, Inc., dated December 8, 2016, entitled "North Pole Water Distribution System Preliminary Design."

2. Effective Date and Approvals.

This Agreement shall become effective on the date last signed by all the Parties. The Parties shall seek Judicial Approval (as defined in subparagraph 10 (f) below); DEC shall hold a public meeting to explain and discuss the Offsite Potable Water Plan and the Final Revised Onsite Cleanup Plan ("ROCP") and address any

concerns of the public; and the CNP shall seek the required certificate of public necessity for the CNP to construct, own and operate the planned piped water system referenced in this Settlement Agreement from the Regulatory Authority of Alaska.

3. Payment to the City of North Pole.

Within 20 days of the date of execution of this Agreement, FHRA shall pay to CNP Two Million Seven Hundred Thousand ($2,700,000.00) Dollars as partial consideration for the settlement herein and shall deposit this payment into the trust account of C S & G, Inc. ("CSG"). CSG shall retain, and not disburse, those settlement funds until the conditions relating to public notice and certificate of public necessity, set forth in paragraph 2, have occurred. These funds may be used by the CNP to pay past and future litigation expenses incurred in this litigation, to include attorney's fees.

4. Piped Water Distribution System.

CNP shall undertake to contract, in coordination with SOA and FHRA, with qualified third parties for the engineering, procurement and construction of a piped water system consistent with the Stantec Report, subject to change as contemplated by the parties under this Settlement Agreement and the Stantec Report. Both FHRA and SOA shall have consultation and approval rights with respect to selection of the contractor(s) and the execution of the engineering, procurement and construction of the Project. As used herein, the term "Internal Costs" means all reasonable and necessary internal and external costs (including, but not limited to, agreed-upon hourly charges for time worked by employees, but not including payments to the engineering/procurement/construction contractor[s] for the Project) incurred by CNP, SOA and/or FHRA at the joint request of the Parties (and as evidenced by reasonable documentation) in the execution of the Project. Internal Costs shall be reimbursable as Project Costs in the same manner as other Project Costs as detailed herein. To the extent the Parties agree that FHRA will directly contract with Stantec for certain initial engineering work for the Project, the costs for such work shall be reimbursable as Project Costs in the same manner as other Project Costs as detailed herein.

The Parties agree that the Project Costs, in total, shall not exceed One Hundred Million ($100,000,000) Dollars. In the event that at any time prior to completion of the Project, the reasonably-estimated and actual Project Costs, in total, exceed this amount, then the Parties agree to reevaluate the Project Costs, including plans and specifications, and modify the Project in such a manner so as

to reduce the Project Costs to an amount equal to or below One Hundred Million ($100,000,000) Dollars. Such modifications may include, but are not limited to, a reconfiguration of the Project Area. In the event the modifications include a reconfiguration of the Project Area, in no event shall the reconfiguration change or modify the geographic coverage of the area within the CNP city limits. Included in the Project Costs is an Operations Fund of One Million ($1,000,000) Dollars designated for the CNP to fund the initial operation and maintenance of the finished pipeline system ("Operations Fund"). CNP agrees that once the Operations Fund is depleted the CNP shall, at its own cost, operate and maintain the pipeline system. Also included in the Project and Project Costs shall be costs associated with transitioning landowners currently on alternative water systems to the piped water system.

The CNP shall use best efforts to apply for and obtain any and all available State or Federal funding (including but not limited to grants or loans which may be forgiven under the applicable program, but excluding grants or loans that would have to be repaid by the CNP) for the Project.

In the event that the Sulfolane Plume migrates beyond the Project Area (as finally determined as detailed herein), and if the sulfolane level in a private drinking water well outside the Project Area exceeds EPA's sulfolane tap water Regional Screening Level ("RSL") (currently 20 ppb), the Parties agree that impacted landowners shall be provided an alternative water solution of, either bottled water, a treatment system or bulk tank water, the determination of which alternative shall be at the sole option and decision of FHRA. The RSL shall be the relevant standard until such time as DEC establishes a groundwater level for sulfolane under its regulations. The costs associated with any alternative water solution shall be funded according to the Interim Funding discussed below.

5. Interim Funding

a. Interim Allocation

(i) The Parties' have independently determined that the primary responsibility for the Sulfolane Plume lies with Williams. However, notwithstanding Williams' lack of cooperation and its refusal to fund or assist in efforts to address the impact of the Sulfolane Plume, the Parties hereto plan to move forward with the Project.

(ii) FHRA and SOA shall provide interim funding for the Project based upon an interim allocation of FHRA – 80%; SOA – 20% ("Interim Allocation"). Both FHRA and SOA expressly deny this Interim Allocation is an appropriate apportionment of responsibility or an equitable allocation of past and future costs and damages, but in the interest of settlement only, have agreed to this Interim Allocation pending a later judicial determination which may apportion and/or allocate past and future responsibility and damages. The aforementioned judicial determination shall replace the interim funding allocation when the judgment, if any, is collected from, or enforced against, Williams, whichever occurs first. In the event that the aforementioned judicial determination results in an ultimate allocation of more than the Interim Allocation of 80% to FHRA or 20% responsibility to SOA, or 0% to CNP, the Parties agree that the funding for the Project shall be capped at the Interim Allocation amount of 80% for FHRA, 20% for SOA and 0% for CNP, with the effect of any excess allocation being apportioned to the other party (FHRA or SOA as the case may be, but not including CNP).

b. Interim Allocation and Funding.

(i) The design and construction of the Project shall be under contract with a qualified contractor(s). Such contract or contracts shall provide for monthly progress payments during the course of the Project.

(ii) The Parties agree as follows regarding interim funding as needed for the design and construction of the Project. The Parties will enter into an escrow account agreement with a mutually agreed-upon Alaska bank into which FHRA and SOA shall deposit interim funding based upon the Interim Allocation to coincide with the monthly progress payments to the Project contractor(s) and the applicable Internal Costs incurred by the Parties ("Interim Funding"). Funds in escrow will in turn be used to pay the reasonable and approved engineering, procurement and construction costs as periodically invoiced by the contractor(s), and the Internal Costs as periodically invoiced by the Parties.

(iii) The initial funding of the escrow account shall be via the SOA depositing Six Hundred and Seventy Five Thousand ($675,000) Dollars to the escrow account, eighty (80%) percent of which ($540,000), represents an amount equal to twenty (20%) percent of the settlement payment to the CNP as contemplated under paragraph 3 of this Settlement Agreement. Thereafter, the Interim Funding deposits to the escrow account (over and above such initial $675,000 deposit by the SOA) shall be based upon the Interim Allocation percentages stated above.

(iv) Subject to Section 5 (a) (ii), upon a judicial determination of liability against Williams, allocating responsibility for all or part of the Sulfolane Plume the judicially determined apportionment or allocation percentages shall replace the Interim Allocation as a percentage of responsibility for the funding of the Project. Both the CNP and SOA shall take all steps necessary to fully enforce any judicial determination against Williams. Williams' responsibility will then be primary to any funding obligations for the Project if any, applicable to FHRA, the SOA and/or CNP (CNP's funding obligations being with respect to any State or Federal grant or loan funding). The purpose and intent amongst the Parties is to hold Williams liable for its fair share of the costs and expenses of the Project and to require Williams to directly fund its proportionate share of the Project while also ensuring that the Project continues uninterrupted without regard to the uncertainties of litigation. Notwithstanding any other provision in this Settlement Agreement, in the event that a judicial determination is made that there is joint and several liability amongst the potential responsible parties, the SOA and CNP expressly agree to only enforce and seek recovery of 100% of any such determination including, but not limited to, any and all costs and expenses, from Williams.

(v) The SOA portion of the Interim Funding shall be subject to legislative appropriation. To the extent FHRA advances any funds towards the Project to cover any portion of SOA's obligations under this Settlement Agreement, the SOA shall reimburse all such amounts which will bear interest at the applicable State of Alaska statutory rate. In the event the SOA is unable to obtain

legislative appropriation sufficient to satisfy all or part of the SOA's obligations herein, FHRA shall have the right, but not the obligation, to terminate this Agreement.

6. Claims Against Williams and Allocation of Proceeds, Release and Contribution Protection

The Parties have claims against Williams currently pending in the Superior Court for the State of Alaska Fourth Judicial District at Fairbanks (presently claims by CNP and SOA are limited to WAPI). CNP and SOA also have certain regulatory powers to order and to obligate potential responsible parties to take action to implement interim and final remedial actions with respect to environmental contamination, with the potential responsible party having certain rights to seek contribution for those costs later from other potentially responsible parties. As part of this Settlement, the Parties shall dismiss any claims they have currently pending against other Parties to this Settlement Agreement and release each other. In addition, with regard to claims for contribution against the SOA, CNP, and/or FHRA, the Parties agree that the SOA, the CNP and FHRA are entitled to protection from contribution actions or claims to the fullest extent provided by or allowable under CERCLA Section 113(f)(2), 42 U.S.C. § 9613(f)(2), by Alaska law, or by other applicable law, for matters addressed in this Agreement, including but not limited to the Sulfolane Plume.

The Parties shall, however, continue to maintain and prosecute all claims against Williams. SOA, CNP and FHRA agree to continue to commit and devote best efforts to pursue their cases against Williams. FHRA shall assist and consult in this effort as needed to ensure that all parties are satisfied with the prosecution of the case against Williams as it proceeds. FHRA understands and agrees that neither the SOA nor the CNP can guarantee litigation results and all parties accept the uncertainties of litigation, including an adverse decision in favor of Williams. Regardless of any other provision of this agreement no attorney-client relationship is created between the parties by reason of this agreement and no party may assert a claim against the other in any way related to how they prosecute their case against WAPI/Williams. Further, SOA and CNP agree to evaluate and issue, as appropriate, and in their complete discretion, any regulatory orders to further the efforts to secure Williams' responsibility, including financial responsibility for costs, associated with the Sulfolane Plume, including but not limited to, the Project Costs.

Whether by judicial determination or regulatory order, the Parties contemplate Williams taking primary responsibility for the payment of all costs associated with the Project, subject to rights of contribution, if any. In addition, to the extent Williams is ordered to pay damages to SOA (whether in the form of natural resource damages, civil assessments, or any other form of monetary damages), such proceeds shall first be used to defray any and all costs of the Project and second, reimburse FHRA and SOA for past costs relating to sulfolane and the Interim Funding addressed above. Past costs are those types and categories of costs that have been, and continue to be, incurred by FHRA and SOA as have been described by each in the Lawsuits. The first recovery from Williams of a sum equal to 40% of the then estimated total cost of the Project shall be remitted to FHRA. Any recovery in excess of that amount shall be distributed FHRA – 50% and SOA – 50% (subject to any adjustment after discussion with CNP). After FHRA is reimbursed for its costs of the Project and its past costs related to sulfolane, any recovery in excess of those amounts shall be distributed 100% to SOA.

To the extent Williams is ordered to pay damages to CNP (whether in the form of natural resource damages, penalties and fines, punitive damages or any other form of monetary damages), such proceeds shall first be used to defray any and all Project Costs. Thereafter, once all Project Costs have been defrayed or reimbursed, the next Fifteen Million ($15,000,000) shall be divided equally between the Parties to this Settlement Agreement. Thereafter, if the verdict in favor of CNP and against Williams is in excess of the amounts referenced above in this paragraph, then any remainder shall be split 55% to FHRA and 45% to the CNP, after the CNP has been reimbursed for its out of pocket litigation expenses incurred after August 18, 2016.

FHRA shall assume full and exclusive liability for any award of attorney's fees and costs that may be entered against CNP should it fail to prevail in its claims against WAPI.

Prior to verdict in *State of Alaska, Attorney General's Office v Williams Alaska Petroleum, Inc., et al and City of North Pole v Williams Alaska Petroleum, Inc., et al, Case No. 4FA-14-01544 CI Consolidated*, FHRA shall have the sole right, but not the obligation, to instruct CNP and/or SOA to dismiss all claims against WAPI and to exchange mutual releases with WAPI which shall be limited to sulfolane related liabilities, in a form agreeable to FHRA. In the event this happens; then either the Interim Allocation shall become a final allocation for the Project or a different allocation shall be implemented which shall be no higher than the

Interim Allocation percentages provided in paragraph 5 a (ii) of this Settlement Agreement for either FHRA or SOA; the referenced new allocation could include an allocation percentage ascribed to Williams. Any new allocation, as referenced in the prior sentence, shall be at the sole discretion of FHRA, but this discretion may not be exercised in any way that would result in insufficient funds being available to pay the Project Costs, up to the $100,000,000 cap.

Post verdict in *State of Alaska, Attorney General's Office v Williams Alaska Petroleum, Inc., et al and City of North Pole v Williams Alaska Petroleum, Inc., et al, Case No. 4FA-14-01544 CI Consolidated*, FHRA shall have the sole right, but not the obligation, in exchange for the payment of One Million ($1,000,000) Dollars to instruct CNP to dismiss all claims against WAPI and exchange mutual releases with WAPI which shall be limited to sulfolane related liabilities, in a form agreeable to FHRA. In the event this happens; then either the Interim Allocation shall become a final allocation for the Project or a different allocation shall be implemented which shall be no higher than the Interim Allocation percentages provided in paragraph 5 a (ii) of this Settlement Agreement for either FHRA or SOA; the referenced new allocation could include an allocation percentage ascribed to Williams, but not the CNP. Any new allocation, as referenced in the prior sentence, shall be at the sole discretion of FHRA but this discretion may not be exercised in any way that would result in insufficient funds being available to pay the Project Costs, up to the 100,000,000 cap.

The Parties have a common interest with respect to the defense and prosecution of claims by and against Williams and for this purpose and have agreed to a Joint Interest/Joint Prosecution Agreement.

The Parties hereby mutually release, cancel, forgive, covenant not to sue and forever discharge each other from all actions, claims, demands, damages, obligations, liabilities, controversies and executions, of any kind or nature whatsoever, whether known or unknown, whether suspected or not, which have arisen, or may have arisen, or shall arise by reason of the issues and claims that have been raised, or which could have been raised in the Lawsuits and do specifically waive any claim or right to assert any cause of action or alleged cause of action or claim or demand which has, through oversight or error intentionally or unintentionally or through a mutual mistake, been omitted from this release. This mutual release shall be effective on the date of execution of this Settlement Agreement. Nothing in this Settlement Agreement is intended to limit: 1) the Parties ability to enforce the terms and conditions of this Settlement Agreement pursuant to paragraph 10 a below; 2) the SOA and FHRA from enforcing the

terms and conditions of the ROCP or 3) pursue and prosecute any rights, claims and defenses in the Lawsuits, and/or regulatory actions against Williams.

7. Revision of On-Site Cleanup Plan.

On October 16, 2014 FHRA entered into an On-Site Clean Up Plan for the North Pole Refinery which was approved by DEC (the "OCP"). The Project will provide clean, sulfolane-free, water to properties currently impacted by the Sulfolane Plume and properties that are expected to be impacted by the future movement of the plume. The OCP described remediation requirements for the NPR that did not account for the installation of a piped water system.

Included as Exhibit B to this Settlement Agreement is a Revised Onsite Cleanup Plan (the ROCP) which includes (among other things) a discontinuation of the groundwater pump and treat system, a point of compliance for COCs at the refinery property boundary, and a revised on-site sulfolane performance standard (400 ppb).

Included as Exhibit C to this Settlement Agreement is the Offsite Potable Water Plan which includes the piped water system and groundwater monitoring.

The Potable Water Plan and the ROCP are incorporated into the Settlement Agreement and shall be binding upon the Parties as of the Effective Date.

CNP has no objection to the Potable Water Plan or the ROCP.

8. SOA/DEC Oversight Costs.

FHRA will pay DEC's future onsite related oversight costs to the extent Williams does not reimburse DEC for such costs. SOA expressly waives any claim against FHRA for past unpaid oversight costs invoiced prior to April 15, 2016. In the event Williams does not pay DEC's unpaid past oversight costs invoiced after April 15, 2016, after the conclusion of, or settlement of, the Lawsuits, FHRA will reimburse DEC for oversight costs invoiced between April 15, 2016, and the date this settlement agreement is fully executed. SOA/DEC shall not claim or seek from FHRA any future offsite sulfolane related oversight costs.

9. Project Assistance.

The Parties shall cooperate to make the Project as efficient and cost effective as possible. Both SOA and CNP will take any and all reasonable steps to provide effective and appropriate assistance to complete the Project, including but not limited to ensuring proper permitting is obtained and rights of way are secured,

but this assistance clause shall not be utilized to shift legitimate Projects Costs to the SOA or CNP without appropriate reimbursement. To the extent any procurement requirements are triggered, the Parties shall coordinate to ensure proper compliance.

10. General Provisions.

a. Dispute Resolution. All disputes between the Parties regarding this Settlement Agreement shall be resolved by a single arbitrator pursuant to the Expedited Procedures under the Commercial Arbitration Rules of the American Arbitration Association; provided that the Parties agree that a "reasoned award" shall not be required. Arbitration to take place in Alaska and the laws of Alaska shall apply.

b. Confidentiality. All communication leading up to this Agreement are confidential and arise in the context of confidential settlement discussions.

c. Cooperation. The Parties shall cooperate with each other in the implementation of this Settlement Agreement and shall execute any other documents necessary to give full affect to this Settlement Agreement.

d. Notifications. Unless otherwise specified, all notices or other submissions relating to this Settlement Agreement shall be in writing and sent by overnight courier service to the following representatives of the Parties:

FHRA: President
Flint Hills Resources, LLC
4111 East 37th St. North
Wichita, KS 67220
With copy to:
General Counsel
Flint Hills Resources, LLC
4111 East 37th St. North
Wichita, KS 67220

SOA: Commissioner
Alaska Department of Environmental Conservation
410 Willoughby Ave. Ste. 303

Juneau, AK 99811-1800
With copy to:
Attorney General of the State of Alaska
Alaska Department of Law – Civil Division
1031 W. 4th Ave. Suite 200
Anchorage, AK 99501-1994

CNP: Mayor, City of North Pole Alaska
City Hall
125 Snowman Lane
North Pole, AK 99705
With copy to:
Zane Wilson
Cook Schuhmann & Groseclose
714 4th Ave #200
Fairbanks, AK 99701

e. No Admissions. The Parties make no admissions of fact, law, fault, liability or allocation amongst each other.

f. Judicial Review and Approval. The Parties shall jointly and cooperatively seek judicial review and approval of this Settlement Agreement, as written ("Judicial Approval").

g. Mergers/Integration. This Agreement is the entire Agreement of the Parties regarding the subject matter hereof. All prior understandings, representations and agreements are merged in this Agreement.

h. Amendment. This Agreement may be amended only by written instrument executed by all the Parties.

i. Construction. As used herein, words in the singular include the plural, and words in the plural include the singular. Descriptive headings are employed for ease of reference only and are not substantive provisions of this Agreement.

j. Execution. This Agreement is binding and enforceable between the Parties upon the execution of any copy by each Party. The Parties need not execute the same documents prior to any specific dates. All copies of the Agreement shall constitute an original document. Execution of the Agreement by facsimile shall be acceptable.

k. Successors. This Agreement shall bind and inure to the benefit of the Parties' successors.

l. Governing Law. This Agreement shall be governed by the laws of the State of Alaska, provided that no conflicts of law principle shall be invoked so as to apply the substantive law of another jurisdiction.

IN WITNESS WHEREOF, the Parties hereto enter into this Agreement. The individuals signing this Agreement represent and warrant that they have been duly authorized to enter into this Agreement by the Party on whose behalf he or she is signing. Furthermore, FHRA, SOA and CNP, and the individuals signing on behalf of each, represent and warrant that the individual signatory has authority to sign this Agreement on their behalf and the individual signatory has authority to bind each to the obligations.

STATE OF ALASKA

JAHNA LINDEMUTH
ATTORNEY GENERAL
STATE OF ALASKA

Steven E. Mulder

By: Steven E. Mulder
Senior Assistant Attorney General

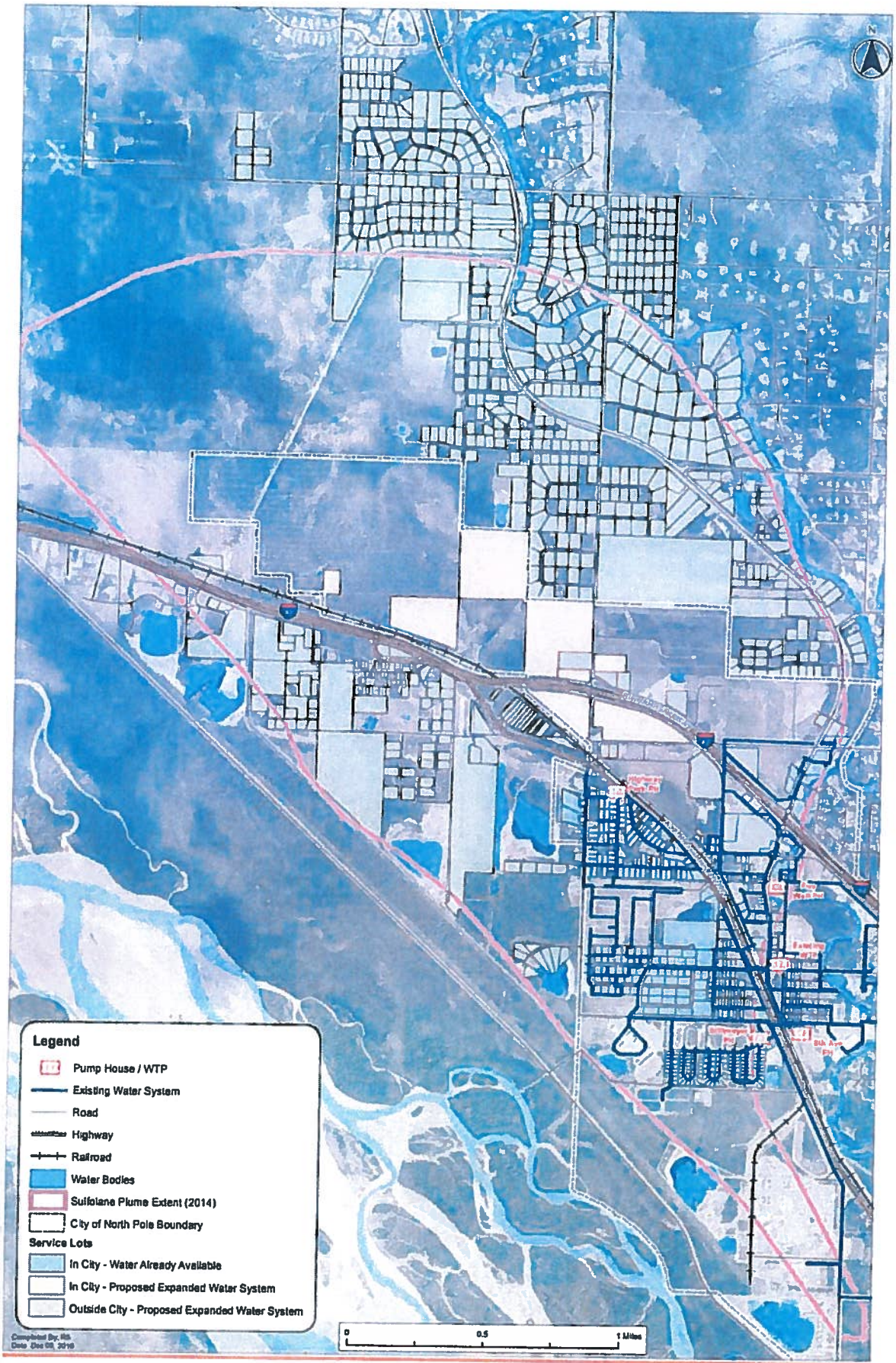
CITY OF NORTH POLE

By: Bryce Ward
Mayor, City of North Pole

FLINT HILLS RESOURCES ALASKA, LLC

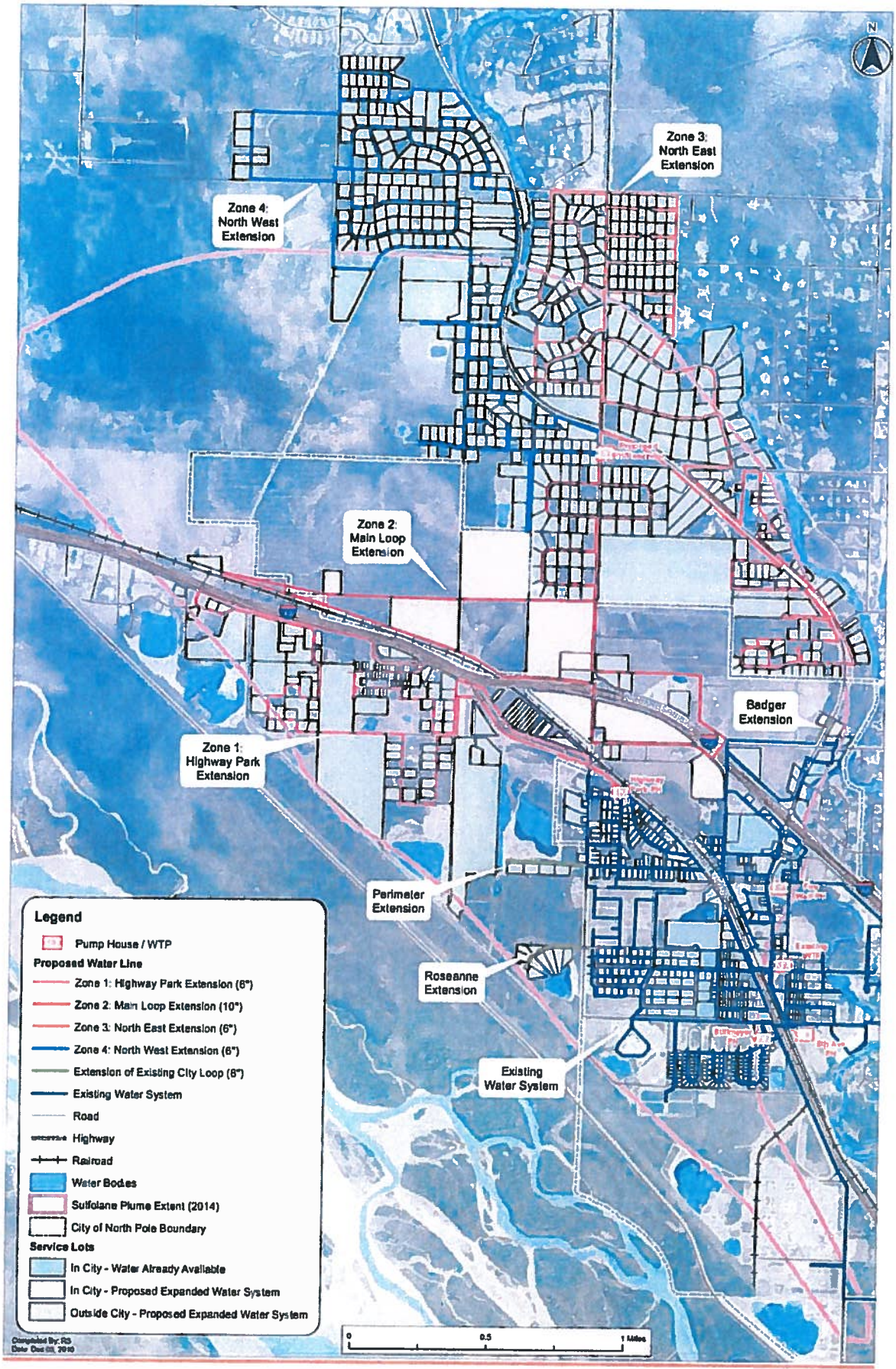
By: Bradley J. Razook
President & CEO

2/6/17



Stantec

North Pole Water Distribution System
Preliminary Design & Cost Estimate Report
Figure 1: Study Area
Exhibit A FHRA
1 of 2



Stantec

North Pole Water Distribution System
Preliminary Design & Cost Estimate Report
Figure 2: Proposed Water System Expansion

ARCADIS Design & Consultancy for natural and built assets

Flint Hills Resources Alaska, LLC

REVISED ONSITE CLEANUP PLAN

North Pole Terminal
North Pole, Alaska
ADEC File Number: 100.38.090

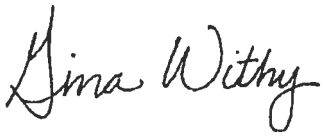
Feburary 2, 2017

REVISED ONSITE CLEANUP PLAN

North Pole Terminal
North Pole, Alaska
ADEC File Number: 100.38.090

Prepared for

Flint Hills Resources Alaska, LLC



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Our Ref

B0081981 0072

Date:

January 30, 2017

CONTENTS

TABLE (IN TEXT)

FIGURES

APPENDIX

ACRONYMS AND ABBREVIATIONS

2014 OCP	Final Onsite Cleanup Plan (Arcadis, 2014)
AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
Arcadis	Arcadis U.S., Inc.
Barr	Barr Engineering Company
bgs	below ground surface
cfm	cubic feet per minute
city	North Pole, Alaska
COC	constituent of concern
CSM	Conceptual Site Model
CU #1 Wash Area	Crude Unit #1 Wash Area
CU #2 EU	Crude Unit #2 Extraction Unit
Revised OCP	Revised Onsite Cleanup Plan
Earth Resources	Earth Resources Corporation of Alaska
EC	engineering control
ECA	Energy Corporation of Alaska
FHRA	Flint Hills Resources Alaska, LLC
GAC East	Granular Activated Carbon East
GAC West	Granular Activated Carbon West
GVEA	Golden Valley Electric Association
HVAC	heating, ventilation, and air conditioning
IC	institutional control
LNAPL	light nonaqueous phase liquid
LTM Plan	Long-Term Monitoring Plan – 2017 Update
NSZD	natural source zone depletion
offsite	area located outside the property boundary, primarily in the downgradient north-northwest direction
onsite	area that is located within the property boundary of the FHRA North Pole Terminal
Onsite SCR	Onsite Site Characterization Report – 2013 Addendum

Onsite SMP	Onsite Soil Management Plan
POC	point of compliance
power plant	electrical generating facility
site	Flint Hills Resources Alaska, LLC North Pole Terminal, located on H and H Lane in North Pole, Alaska
SWA	Southwest Former Wash Area
VI	vapor intrusion
VOC	volatile organic compound
VPT	vertical profile transect
Williams	Williams Alaska Petroleum, Inc.
WWTP	wastewater treatment plant
µg/L	micrograms per liter

1 INTRODUCTION

On behalf of Flint Hills Resources Alaska, LLC (FHRA), Arcadis U.S., Inc. (Arcadis) prepared this Revised Onsite Cleanup Plan (Revised OCP) for the FHRA North Pole Terminal, located on H and H Lane in North Pole, Alaska (site). This Revised OCP is part of a negotiated settlement to Case #4-FA-14-01544 CI Consolidated and presents the final permanent remedial solution for onsite.

1.1 Background

A refinery was built onsite in 1976 and 1977 by Energy Corporation of Alaska (ECA) and refinery operations began in August 1977. ECA changed its name to Earth Resources Company of Alaska (Earth Resources) in 1977. Earth Resources leased the refinery property from the State of Alaska, which owned the refinery land. Since 1980, the name of the refinery operator has changed from time to time, including MAPCO Alaska, Inc. (1981-1983), MAPCO Petroleum, Inc. (1983-1987), MAPCO Alaska Petroleum, Inc. (1987-1998), and Williams Alaska Petroleum, Inc. (Williams; 1998-2004). Under these various names, Williams operated the refinery on state-owned land for more than 25 years, until 2004. FHRA purchased the refinery assets from Williams effective April 1, 2004, along with the refinery land, which Williams acquired from the State of Alaska shortly before the transaction with FHRA. FHRA has owned the site property since April 1, 2004 and operated the refinery onsite from April 1, 2004 until May 2014 when the refinery was idled and operated only as a petroleum product terminal. In July 2016, a determination was made to demolish the refinery process equipment located above grade while the terminal continues to operate.

Because the onsite contamination is located in an industrial facility, the previously selected corrective actions outlined in the 2014 Final Onsite Cleanup Plan (Arcadis 2014) focused on targeted soil removal, containment and treatment of groundwater affected by historical releases to prevent off-site migration of groundwater above approved cleanup levels and a selected performance standard for sulfolane, and institutional controls (ICs) to limit future use to industrial operations and prevent use of groundwater for human consumption. Groundwater in the area located outside the property boundary, primarily in the downgradient north-northwest direction (offsite) was impacted due to the migration of sulfolane from historical releases onsite; hydrocarbons have not migrated offsite. Offsite receptors are currently protected by an interim water supply. A permanent offsite remedial solution is expected in the near future.

The entire site has undergone significant characterization and monitoring activities, as reflected in a series of site characterization reports and subsequent monitoring reports. Collectively, these reports present information that was gathered to ascertain the physical characteristics of the site, define the sources of contamination, determine the nature and extent of contamination present at the site, and confirm the investigatory conclusions and conceptual site model. Some of the relevant site characterization reports include:

- Site Characterization and Corrective Action Plan, Williams Alaska Petroleum, Inc., North Pole Refinery (Shannon and Wilson), submitted in June 2002
- Report on Well Installation, Maintenance Activities and Data Review, Flint Hills Resources Alaska, Inc., North Pole Refinery (Shannon and Wilson), submitted in December 2005

- Site Characterization Report – Through 2011 (Barr Engineering Company [Barr] 2012a), submitted in December 2012
- Site Characterization Report – 2012 Addendum (Arcadis 2013b), submitted in January 2013
- Onsite Site Characterization Report – 2013 Addendum (Onsite SCR; Arcadis 2013b)
- Onsite quarterly and/or semiannual groundwater monitoring reports (2013 to present).

Constituents of concern (COCs) for the site were identified in the 2014 Final Onsite Cleanup Plan (2014 OCP, Arcadis 2014) by comparing detected concentrations with ADEC cleanup levels presented in 18 Alaska Administrative Code (AAC) 75.345 Table C (groundwater). COCs were updated as part of this Revised OCP as discussed in Section 2.3. Sulfolane is not listed in Table C.

1.2 Community Role in the Remedy Selection Process

The community will have the opportunity to review and comment on this Revised OCP.

1.3 Purpose and Scope

The final remedies set out in this Revised OCP are intended to be protective of human health and the environment in an industrial setting. The remedies are based on investigations, sampling and analysis during the site characterizations listed above, and routine site sampling.

2 SITE SETTING AND BACKGROUND

2.1 Property Description

The 240-acre site is located inside the city limits of North Pole, Alaska (city). The city is located approximately 13 miles southeast of Fairbanks, Alaska, within the Fairbanks North Star Borough (Figure 2-1).

The history and operational layout of the former refinery operations are documented in the various site characterization reports. Contamination at the site due to numerous leaks and spills reflects the historical refinery practices primarily during the refinery's first 25 years of operation. As currently configured as a refined products terminal, tank farms are located in the central portion of the site. Truck-loading racks are located immediately north of the tank farms and a railcar-loading rack is located west of the tank farms. Rail lines and access roads are located in the northernmost portion of the site.

Along the southern site boundary, partially surrounded by the North Pole Terminal, is an electrical generating facility (power plant) operated by Golden Valley Electric Association (GVEA). The property south of the site and the GVEA power plant is occupied by the Petro Star, Inc. Refinery. Site features are presented on Figure 2-2.

North of the site are residential properties and the city's wastewater treatment plant (WWTP). The North Pole High School is located immediately north and west of the WWTP and residential properties. An undeveloped parcel, owned by the Alaska Department of Natural Resources, lies between the site and the WWTP. The Tanana River is located to the south and west, flowing in a northwesterly direction toward Fairbanks. Surrounding the site is property that is residential or undeveloped. East of the site and crossing the offsite area running southeast to northwest are the Old Richardson Highway and the Alaska Railroad right-of-way. An onsite site plan is presented on Figure 2-3.

The City of North Pole operates a public water supply system that serves the community immediately north of the North Pole Terminal. Currently some residence and businesses in the City and in the area outside the City (in the sulfolane plume area) receive their water from wells. As an interim remedy, where well water is used for potable water, FHRA has installed point of entry carbon filtration systems or supplied bulk water or bottled water. See Alternative Water Solutions Management Plan, October 2014, Barr Engineering located on the ADEC web page at dec.alaska.gov/spar/csp/sites/north-pole-refinery/documents.htm.

2.2 Physical Setting

The site and the surrounding North Pole area are located on a relatively flat-lying alluvial plain that is situated between the Tanana River and the Chena River. The site is located on the Tanana River floodplain. Up to 2 feet of organic soil are typically found in the undeveloped portions of the site. Silt and silty sand layers varying in thickness from 0 to 10 feet typically occur beneath the organic soil. Alluvial sand and gravel associated with the Tanana River are present below the organic soil and silty layers. Depth to bedrock is estimated to be 400 to 600 feet below ground surface (bgs).

The city is located within an area of Alaska characterized by discontinuous permafrost (Ferrians 1965). Permafrost tends to act as a confining unit, impeding and redirecting the flow direction of groundwater

(Glass et al. 1996). Based on regional information (Williams 1970, Miller et al. 1999), permafrost is assumed to be absent beneath the Tanana River.

The aquifer beneath the alluvial plain between the Tanana River and the Chena River generally consists of highly transmissive sand and gravel under water table conditions (Cederstrom 1963, Glass et al. 1996). The Tanana River has a drainage area of approximately 20,000 square miles upstream of Fairbanks (Glass et al. 1996). Near the site, this aquifer is reportedly greater than 600 feet thick (at least 616 feet thick near Moose Creek Dam) (Glass et al. 1996). Beyond the zones of influence of the site's historical groundwater remediation system, groundwater flow directions are controlled by discharge from the Tanana River to the aquifer and from the aquifer to the Chena River (Glass et al. 1996). Variations in river stage through time are believed to be the primary cause of variations in groundwater flow direction in the aquifer between the rivers (Lilly et al. 1996, Nakanishi and Lilly 1998). Based on data from U.S. Geological Survey water table wells, the groundwater flow direction generally varies from a north-northwesterly direction to a few degrees east of north. The groundwater flow direction trends to the north-northwest in spring and more northerly in the summer and fall (Glass et al. 1996).

2.3 Constituents of Concern

Extensive sampling of groundwater and soil was completed for numerous constituents of potential concern to develop a list of COCs for the site. Soil COCs were addressed in the Final Onsite Cleanup Plan (Arcadis 2014) by implementing soil removal and ICs. Residual hydrocarbons in soil will continue to be addressed with ICs. As part of this revision, the 2014 COCs were updated based on a comparison of site maximum concentrations to Method 2 cleanup levels for soil (Table B1 of 18 AAC 75.341 (c)) and maximum concentrations over the last two years of monitoring for groundwater (Table C of 18AAC 75.341 (b)(1)) for those constituents listed in Table 2-1.

FHRA studies of onsite groundwater characteristics and modeling of the groundwater all indicate that sulfolane in groundwater will not migrate offsite above 400 micrograms per liter (µg/L). Currently offsite receptors are protected from sulfolane in the groundwater by the interim groundwater remedy (the Alternative Water Supply). Onsite receptors are protected from exposure to sulfolane by the Equitable Servitude. Because potentially exposed receptors are protected both onsite and offsite, and because groundwater modeling indicates that offsite migration will be limited and decreasing in the future, the threshold action level for offsite migration is 400 µg/L. ADEC's acceptance of this level is predicated on the protection of onsite and offsite receptors through the provision of an alternative water supply to the affected community and enforcing the Equitable Servitude on the Site.

Table 2-1. Constituents of Concern in Soil and Groundwater

Soil COC	Maximum Concentration (mg/kg)	Soil Cleanup Level[1] (mg/kg)
1,2,4-TMB	205	0.16
1,3,5-TMB	81.1	1.3
1,2,3Trichloropropane	0.374	0.000031
Benzene	438	0.022
Cumene	41.6	5.6

Soil COC	Maximum Concentration (mg/kg)	Soil Cleanup Level[1] (mg/kg)
Ethylbenzene	392	0.13
n-Butylbenzene	107	20
n-Propylbenzene	72.7	9.1
Toluene	1,330	6.7
Xylenes	2,510	1.5
1-Methylnaphthalene	88.5	0.41
2-Methylnaphthalene	240	1.3
Naphthalene	125	0.038
Sulfolane	1,620	TBD
PFOS	3	0.003
PFOA	0.048	0.0017
GRO	7,730	300
DRO	32,000	250

Groundwater COC	Maximum Concentration* (µg/L)	Groundwater Cleanup Level[2] (µg/L)
Benzene	16,900	4.6
Ethylbenzene	1,960	15
Toluene	10,600	1,100
Xylenes	15,100	190
1,2,4-TMB	614	15
1,3,5-TMB	510	120
1-Methylnaphthalene	90	11
Sulfolane	22,500	TBD
Perfluorooctane sulfonate (PFOS)**	1.3	0.4
Perfluorooctanoic acid (PFOA)**	7.65	0.4
GRO	115,000	2,200
DRO	16,000	1,500

Notes:
1,3,5-TMB = 1,3,5-trimethylbenzene
1,2,4-TMB = 1,2,4-trimethylbenzene
GRO = gasoline range organics
DRO = diesel range organics
RRO = residual range organics
* Maximum concentration detected within the last two years of monitoring for each COC
**Most recent PFOS/PFOA results from MW-321-15 (2013)

[1] Soil cleanup level set at the minimum value of the direct contact, outdoor inhalation and migration to groundwater value in 18 AAC 75 Table B1 and B2 for the under 40-inch zone.
[2] Groundwater cleanup level set at 18 AAC 75 Table C value.

2.4 Conceptual Site Model – Distribution of Constituents of Concern

The Conceptual Site Model (CSM) was presented as Appendix A to the Onsite SCR (Arcadis 2013c). The CSM (Arcadis 2013c) summarizes COCs and sources, release mechanisms, impacted media, transport mechanisms, geology, permafrost, hydrogeology, exposure routes, and potential receptors.

At ADEC's direction, environmental impacts onsite and in areas downgradient from the site were extensively characterized and the nature and extent of impacts were previously submitted to ADEC (Arcadis 2013c). In addition to traditional soil and groundwater sampling, site characterization efforts have included investigations to assess light nonaqueous phase liquid (LNAPL), soil gas, surface water, soil and aquifer characteristics, permafrost, and geophysical subsurface data. Other focused studies have included tracer tests, pumping tests, isotope studies, and biostudies. Many of the past, relevant studies can be found at the ADEC web page: (http://dec.alaska.gov/spar/csp/sites/north-pole-refinery/documents.htm).

2.4.1 Soil

The nature and extent of soil impacts onsite were characterized through the collection of more than 1,000 soil samples during site characterization activities conducted in 2011 (Barr 2012a), 2012 (Arcadis 2013b), and 2013 (Arcadis 2013c). In 2015, soil was excavated from Lagoon B, the Fire Training Area and the Southwest Former Wash Area (SWA) and removed from the site for disposal in accordance with the 2014 OCP (Arcadis 2014).

2.4.2 Groundwater

The nature and extent of groundwater impacts have been characterized via numerous sampling events and numerous onsite groundwater studies. The lateral and vertical extents of petroleum hydrocarbons and sulfolane impacts continue to be documented in groundwater reports provided to ADEC (Arcadis 2016b).

Petroleum hydrocarbon COC concentrations in groundwater are generally co-located with LNAPL impacts. Sulfolane concentrations in groundwater are consistent with identified sulfolane source areas including Lagoon B, Sump 908, Crude Unit #2 Extraction Unit (CU #2 EU), Crude Unit #1 Wash Area (CU #1 Wash Area), and SWA. Generally, onsite sulfolane concentrations in groundwater upgradient and downgradient of the extraction wells are stable or decreasing, indicating that source mass is decreasing through time and has been effectively captured by the historical groundwater remediation system.

2.4.2.1 Petroleum Hydrocarbons

The benzene plume is largely confined to the developed portion of the site and does not extend to the northern property boundary. Benzene is an indicator of petroleum impacts; benzene concentrations greater than 4.6 µg/L were most often detected in areas where LNAPL is present in soil. Wells with other petroleum COC detections are generally located within the footprint of the benzene plume. The benzene plume is delineated laterally and vertically to the water table and has been captured by the historical groundwater remediation system that began operating in 1987.

As documented in previous site characterization and groundwater monitoring reports (Arcadis 2013c and Arcadis 2016b, respectively), LNAPL and dissolved hydrocarbons in groundwater continue to naturally attenuate across the site, to the point that passive and natural processes result in significantly more residual hydrocarbon removal than active recovery processes. The site monitoring results and groundwater modeling support the conclusion that hydrocarbon migration beyond the site boundary is not expected to occur regardless of whether the remediation system is operating.

2.4.2.2 Sulfolane

The most significant sulfolane source areas at the site are CU #2 EU, CU #1 Wash Area, SWA, Sump 908, and Lagoon B. In first quarter 2014, detectable sulfolane concentrations in groundwater extended from the source areas to the northern site boundary at a depth of up to 90 feet bgs (at well MW-364-90).

The majority of the sulfolane plume at the water table results from three of the identified source areas (CU #2 EU, CU #1 Wash Area, and Lagoon B [well MW-110-20]) and extends north to include the Sump 908 area (MW-176A-15). Optimization of the original groundwater remediation system (Granular Activated Carbon East [GAC East]) has been ongoing since 2009, improving the overall performance of the system. However, groundwater modeling indicated that the western portion of the sulfolane plume was not being captured by GAC East (Barr 2012b, included as Appendix C of Arcadis 2013a). In June 2014, FHRA installed two additional recovery wells and an additional groundwater remediation system west of the current line of recovery wells to provide capture across the entire width of the plume in accordance with the 2014 OCP (Arcadis 2014). After additional sampling and review of the modeling of the plume, ADEC agreed that the Granular Activated Carbon West (GAC West) system could be shut down (ADEC, 2016). By August 31, 2016, the GAC West system was shut down.

2.4.3 Light Nonaqueous Phase Liquid

The nature and extent of LNAPL onsite was thoroughly characterized through 26 years of LNAPL recovery and data collection, along with intense efforts to assess LNAPL composition, mobility, and recoverability during the past 5 years. Key studies that have analyzed the data include the Site Characterization Report – 2012 Addendum (Arcadis 2013b) and the Onsite SCR (Arcadis 2013c). The First Semiannual 2016 Onsite Groundwater Monitoring Report (Arcadis 2016b) includes an evaluation of current extent of LNAPL and Natural Source Zone Depletion (NSZD) assessment results.

The LNAPL present onsite was characterized by forensic analysis as diesel #2, naphtha, Jet A, mixtures of these fuels, and mixtures with gasoline in some locations. Additional information regarding LNAPL impacts at the site is summarized below (and found in detail in the above referenced studies):

- The extent of the LNAPL impact is known.
- LNAPL is not a significant source of sulfolane to groundwater (Arcadis 2013c).
- The LNAPL and dissolved-phase benzene, toluene, ethylbenzene, and xylenes plumes are stable with the groundwater remediation system operating, and modeling indicates they will continue to be stable onsite after groundwater recovery ceases.
- Natural processes are depleting the LNAPL at a significant rate.

2.4.4 Vapor Intrusion

As natural processes continue to degrade hydrocarbons in the subsurface, the potential exists for compounds to volatilize from source areas and move throughout the surrounding soil pore spaces as soil gas. Soil gas source areas may include shallow dissolved-phase volatile organic compounds (VOCs) in groundwater, impacted soil in the vadose zone, or LNAPL above or near the water table.

Indoor vapor intrusion (VI) may be a potentially complete exposure pathway (see Section 3.5).

3 CLEANUP OBJECTIVES

This section discusses cleanup objectives with the primary goal of protection of human health and the environment at an industrial facility.

3.1 Institutional Controls

ICs are an essential part of this Revised OCP to protect human health and environment. The ICs in place at the site are identified in the Equitable Servitude (FHRA, 2015)).

3.2 Soil

The soil cleanup objective is to protect onsite workers from unacceptable exposure to COCs in impacted soil.

3.3 Groundwater

Cleanup objectives for groundwater are summarized below:

- Protect onsite workers and future receptors from unacceptable exposure to COCs in impacted groundwater.
- Groundwater shall not exceed 400 µg/L sulfolane at the property line (point of compliance or "POC") and shall meet 18 AAC 75.345 Table C cleanup for other COCs.

3.4 Light Nonaqueous Phase Liquid

The LNAPL cleanup objective is:

- LNAPL is not present at or beyond the POC monitoring locations.

3.5 Vapor Intrusion

The VI cleanup objective is to protect onsite workers from unacceptable exposure to COCs resulting from indoor VI into occupied buildings.

4 REVISED CLEANUP ACTIONS

Various cleanup actions have been executed at the site since the discovery of COCs in the subsurface, including soil excavation, groundwater recovery and treatment, manual and automated LNAPL recovery, air sparging, and emplacement of ICs. See generally http://dec.alaska.gov/spar/csp/sites/north-pole-refinery/documents.htm.

This section discusses the final cleanup actions that will be implemented onsite. The final cleanup remedies established in this Revised OCP are consistent with the previous remedial alternatives evaluated for the site (Arcadis 2012b), and consider potential exposure, practicability, implementability, and cost. This section discusses the following proposed cleanup actions for the onsite area:

4.1 Institutional Controls

An Equitable Servitude (FHRA 2015) is in place for the property which:

- Limits the property use to industrial.
- Prohibits use of groundwater for drinking water purposes.
- Requires the maintenance of fencing, which restricts the general public's access and potential exposure to any residual COCs onsite.
- Requires protective measures for excavation of soil in the defined contamination area.
- Requires protective measures to limit groundwater vapor exposures in buildings currently used onsite and requirements applicable to construction of new buildings onsite to protect building occupants.

Sections 4.2 through 4.5 discuss how these ICs support the final cleanup actions.

4.2 Soil

Current and future onsite workers will continue to be protected from unacceptable exposure to residual COCs in soil by sustained implementation of ICs, engineering controls (ECs), and best work practices, as required by the Equitable Servitude (FHRA 2015). In addition, as required in the Equitable Servitude, the property is currently fenced and access is restricted.

An Onsite Soil Management Plan (Onsite SMP), provided as Attachment A to the Long-Term Monitoring Plan (LTM Plan – 2017 Update), is included in Appendix A. The Onsite SMP serves as a guidance document to protect onsite workers from exposure to impacted soil encountered during any future ground-disturbing activities. The Onsite SMP will be used by the property owner or any other party performing work onsite to manage earth-moving activities.

To supplement the Onsite SMP, project-specific soil plans may be developed to describe roles, responsibilities, and procedures based on the scope and extent of a specific project. The Onsite SMP provides general guidance on roles and responsibilities for emergency or routine maintenance, or short lead-time projects that may arise.

4.3 Groundwater

The final remedy for onsite groundwater includes establishment of a POC at the site boundary, implementation of ICs, and monitoring of the plume behavior through time with a commitment to develop contingency actions if monitoring indicates COC concentrations will likely exceed cleanup levels at the POC. Prior to revising any action set out in this Revised OCP or proposing any revision to cleanup level, FHRA will submit a written proposal to ADEC. ADEC will respond to any proposal within 30 days. Note that the groundwater remediation system (including GAC East and GAC West), will be kept in place in a mothball condition reasonably suitable for resuming operation if necessary through the first periodic remedy review, which will occur five years after shutdown of the GRTS, after which time FHRA may determine to demolish the system without notice to ADEC. The ICs will be an effective remedy to prevent current and future onsite workers from unacceptable exposure to COCs in impacted groundwater.

A line of groundwater monitoring wells near the downgradient site boundary were selected for the POC monitoring network and are defined in the LTM Plan – 2017 Update (Appendix A). Groundwater monitoring will be performed for sulfolane and benzene at POC wells on a schedule that will be based on historical sample results and current trends. In addition, upgradient monitoring wells are included in the LTM Plan – 2017 Update (Appendix A) for trend analysis. Monitoring details are provided in the LTM Plan – 2017 Update (Appendix A) and include the following:

- Description of the POC and supporting monitoring well network.
- Sampling program objectives and schedule.
- Lists of all monitoring wells to be included in long-term monitoring (POC wells and selected upgradient wells for trend analysis).
- Provisions for modifying the LTM Plan – 2017 Update and monitoring network contingent on groundwater data trends.
- A sampling and analysis plan that will include sampling for selected COCs, on a frequency that is appropriate for the COC detection frequency and concentration.

ICs are in place via the Equitable Servitude (FHRA 2015) to protect onsite workers from unacceptable exposure to COCs. The Onsite SMP requires appropriate air monitoring during soil-disturbing activities. Air monitoring will protect workers from potential inhalation of volatile COCs from groundwater while working in a trench.

FHRA will conduct long-term groundwater monitoring to verify that the cleanup objectives identified in this Revised OCP have been met. The cleanup verification will include:

- Groundwater monitoring as described in the LTM Plan – 2017 Update (Appendix A) will continue for 10 years from the date of this Revised OCP. The protections provided by the Equitable Servitude (FHRA 2015) will continue beyond the 10-year monitoring period. In addition to the standard semiannual monitoring report, the following reviews will be performed:
    - FHRA will prepare a review analysis after conclusion of the one-year short-term monitoring program (Short Term Monitoring Evaluation), including a discussion of contaminant rebound, horizontal and vertical groundwater gradients, updated benzene and sulfolane trends, BTEX

assimilative capacity, mass flux, and current nature and extent of contamination. The analysis will note any unexpected conditions, such as groundwater flow patterns substantially different from current conditions (outside of the area influenced by the GRTS), different from model predictions, or unexpectedly high levels of contaminant rebound. If conditions differ significantly from pre-shutdown expectations and indicate the Cleanup Objectives will likely not be achieved, any appropriate contingencies should be proposed.

  - FHRA will prepare periodic reviews twice during the proposed 10-year monitoring time period (Five and Ten Year Evaluations), including a discussion of contaminant trends, source area depletion, BTEX assimilative capacity, and a comparison of actual results with modeling predictions. If conditions differ significantly from pre-shutdown expectations and indicate the Cleanup Objectives will likely not be achieved, any appropriate contingencies should be proposed. Conversely, the need for extended monitoring beyond the 10-year time period will be assessed based on actual data trends generated over the 10-year monitoring period and compared against predicted outcomes. If monitoring trends are consistent with expected outcomes, then onsite monitoring could be terminated with ADEC approval which approval will not be unreasonably withheld if groundwater cleanup objectives have been met.

- If it is determined that cleanup objectives are not met at the POC (or if based on the above reviews the analysis indicates that the cleanup objectives will likely not be met), then additional remedial actions will be considered and evaluated. FHRA will schedule a meeting with ADEC (within 60 days of such determination) to discuss an appropriate alternative response. In addition to the POC wells, the current monitoring plan requires monitoring of select vertical profile transect (VPT) monitoring locations that are located significantly upgradient of the POC wells. If sulfolane is detected above 400 µg/L in any of the VPT wells, ADEC will be notified and quarterly monitoring of the 15 VPT wells will be initiated until all concentrations are below 400 µg/L for one year. If three or more of the 15 VPT wells monitored during a sampling event have sulfolane concentrations at or exceeding 400 µg/L then the existing air sparge system will be turned on and FHRA will schedule a meeting with ADEC to discuss any other appropriate responses. If, in one year, a single VPT well has three detections of sulfolane concentrations at or exceeding 400 µg/L then the existing air sparge system will be turned on and FHRA will schedule a meeting with ADEC to discuss any other appropriate responses. If triggered by three or more detections, once groundwater concentrations of sulfolane no longer exceed 400 µg/L in three or more VPT wells, the existing air sparge system and any other agreed-to remedial actions will be terminated. If triggered by three detections in one VPT well, once groundwater concentrations of sulfolane no longer exceed 400 µg/L in the target well for a year, the existing air sparge system and any other agreed-to remedial actions will be terminated.

4.4 Light Nonaqueous Phase Liquid

The cleanup objective for residual LNAPL onsite will be achieved by monitoring NSZD processes that continue to remediate and reduce the presence of LNAPL at the site and by sustaining the protections afforded in the Equitable Servitude (FHRA 2015).

Based on previously submitted quantitative evaluations of the chemical composition of groundwater and soil gas, LNAPL is being depleted through ongoing natural processes including dissolution, volatilization, and biodegradation in the saturated and unsaturated zones (Arcadis 2013c and 2016a). LNAPL that is

present in areas beyond the control of the historical groundwater remediation system is not migrating. NSZD will continue to reduce the volume and mobility of LNAPL onsite. Monitoring defined in the LTM Plan – 2017 Update (Appendix A) will also be used to document that any residual LNAPL onsite does not extend beyond the POC and to qualitatively document the NSZD conditions.

Administrative controls and ICs will be implemented in accordance with the Equitable Servitude (FHRA 2015) to protect receptors from potential exposure to LNAPL as a result of soil excavation activities (Onsite SMP -Appendix A) and to soil gas associated with the presence of LNAPL (Section 4.5). The Equitable Servitude (FHRA 2015) also protects workers during potential future construction of buildings over the LNAPL plume.

FHRA will conduct long-term groundwater monitoring to verify that the cleanup objectives identified in this Revised OCP have been met for LNAPL. The cleanup verification will include:

- Groundwater monitoring for LNAPL as described in the LTM Plan – 2017 Update (Appendix A) will continue for 10 years from the date of this Revised OCP. At the end of that time period, assuming cleanup objectives are still being met, the LNAPL monitoring work under this Revised OCP and any subsequent amendments will be considered completed. The protections provided by the Equitable Servitude (FHRA 2015) will continue beyond the 10-year monitoring period. In addition to the standard semiannual monitoring reports, the following reviews will be performed:
    - FHRA will prepare a review analysis after conclusion of the one-year short-term monitoring program (Short Term Monitoring Evaluation), including a discussion of NSZD and the current extent of LNAPL. The analysis will note any unexpected conditions, such as unexpectedly high levels of LNAPL migration. If conditions differ significantly from pre-shutdown expectations and indicate the Cleanup Objectives will likely not be achieved, any appropriate contingencies should be proposed.
    - FHRA will prepare periodic reviews twice during the proposed 10-year monitoring time period (Five and Ten Year Evaluations), including a discussion of source area depletion and NSZD. If conditions differ significantly from pre-shutdown expectations and indicate the Cleanup Objectives will likely not be achieved, any appropriate contingencies should be proposed. Conversely, the need for extended monitoring beyond the 10-year time period will be assessed based on actual data trends generated over the 10-year monitoring period and compared against predicted outcomes. If monitoring trends are consistent with expected outcomes, then on-site monitoring could be terminated.
- If it is determined that cleanup objectives for LNAPL are not met at the POC (or if based on the above reviews the analysis indicates that the cleanup objectives will likely not be met), then additional remedial actions should be considered and evaluated. FHRA will schedule a meeting with ADEC (within 60 days of such determination) to discuss an appropriate alternative response.

4.5 Vapor Intrusion

The process of volatilization during NSZD creates soil gas, which could potentially represent a risk for indoor VI. By the end of 2016, only one occupied building (the terminal building) will be located near an area with LNAPL present in the subsurface. Two other buildings (the laboratory and fire house) have

been or will be vacated by the end of 2016; both buildings are scheduled to be demolished in 2017. The requirements set out in the Equitable Servitude (FHRA 2015) achieve VI cleanup objectives through implementation of ECs and administrative controls.

Currently, three buildings are located above the LNAPL plume: laboratory, fire training house, and terminal building. FHRA contracted Holaday-Parks Inc. to review ventilation of the laboratory and the terminal building in 2008 (both buildings) and 2013 (laboratory only); results are discussed in Sections 4.5.1, 4.5.2, and 4.5.3.

4.5.1 Laboratory

A review of the ventilation report for the laboratory indicates that the laboratory spaces were designed to be under negative pressure, as is standard for chemical laboratory construction. The calculated air exchange rate for the laboratory averaged 6.1 air exchanges per hour. This air exchange rate was based only on the mechanically supplied outside air and did not account for the influence of the laboratory hood system. The total building air exchange rate based on exhausting of the fume hoods is 18.3 air exchanges per hour. The fume hoods are an EC that serve as a protective measure for the daily work with petroleum samples conducted in the laboratory. While the negative pressurization could induce some VI, the majority of the makeup air for the hoods is likely delivered through the mechanically supplied air and leakage through the walls, doors, windows, and/or roof systems.

FHRA maintains a daily monitoring program of indoor air for VOCs and percent lower explosive limit in the laboratory. The high rate of air exchange provides some protection against the potential effects of VI and was in place until building occupation ended in 2016; building demolition is scheduled for 2017.

4.5.2 Terminal Building

A review of the ventilation report for the terminal building indicates that this building is positively pressurized as long as the heating, ventilation, and air conditioning (HVAC) system is operating, because the mechanical flow is 960 cubic feet per minute (cfm) of air, of which 460 cfm is outside air. The total capacity of the exhaust systems in the utility room and bathroom is 215 cfm. Therefore, the supplied air considerably exceeds the exhausted air. This air flow rate is expected to provide protection against VI, per ADEC guidance (ADEC 2012). FHRA maintains a daily monitoring program of indoor air for VOCs and percent lower explosive limit in the terminal building.

4.5.3 Fire Training House

A ventilation audit was also conducted in the fire training house in 2008. The office space was provided with 1,725 cfm of outside air with an air handler. It is reasonable to conclude that the main portion of the fire training house is under positive pressure when the HVAC system is operating. If the HVAC system is operated continuously, it will provide a protective benefit with regard to VI.

Normal occupancy or access to the fire training house ended in 2016; building demolition is scheduled for 2017.

5 WASTE MANAGEMENT PLAN

Purge water generated during groundwater monitoring will be treated via the facility process wastewater treatment system or at an offsite disposal facility.

6 IMPLEMENTATION SCHEDULE

FHRA's proposed implementation schedule for the activities described in this Revised OCP is included in the table below. Progress reports will be included in semi-annual groundwater monitoring reports, as described in the LTM Plan – 2017 Update (Appendix A).

Table 6-1. Implementation Schedule

Activity	Proposed Date
Shutdown groundwater remediation system	July 2017
Implement LTM Plan – 2017 Update	Third quarter 2017
LTM Reporting	July 2017 and January 2018 (semi-annual thereafter)
Short-Term Monitoring Program Evaluation	August 2018
Five Year Evaluation	August 2022
Ten Year Evaluation	August 2027
ICs	In place

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FIGURES

LEGEND:

FHRA PROPERTY BOUNDARY

0 0.5 Miles

GRAPHIC SCALE

Note
Image provided courtesy of Pictometry International 2012

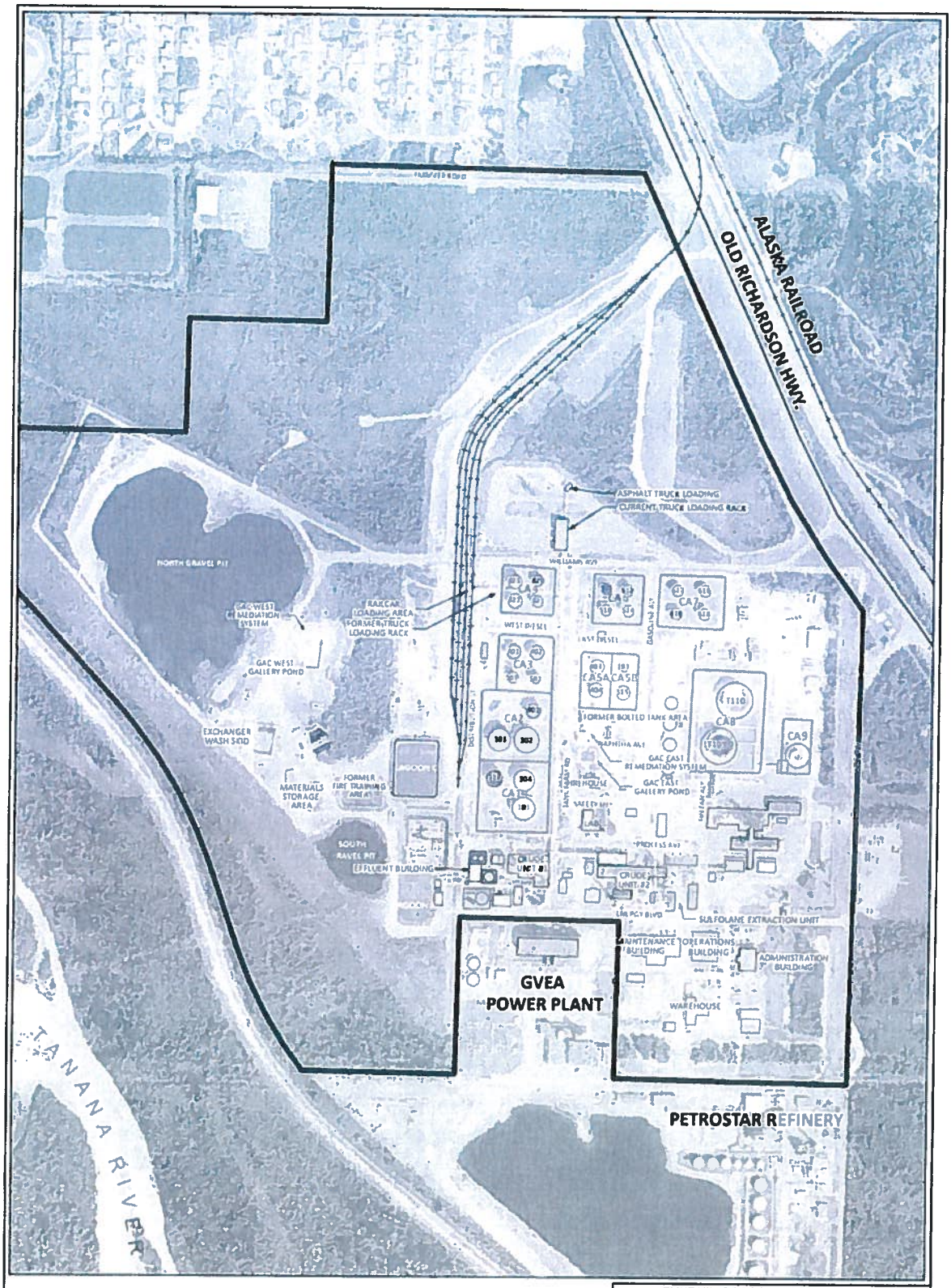
FLINT HILLS RESOURCES ALASKA, LLC
NORTH POLE TERMINAL, NORTH POLE, ALASKA

FINAL ONSITE CLEANUP PLAN

SITE LOCATION

ARCADIS

FIGURE 1-1



Legend

- Bermed Containment Areas (CA)
- Approximate Area
- FHRA Property Boundary

Notes:

GAC Granular Activated Carbon
GVEA Golden Valley Electrical Authority
Image provided courtesy of Pictometry International 2012

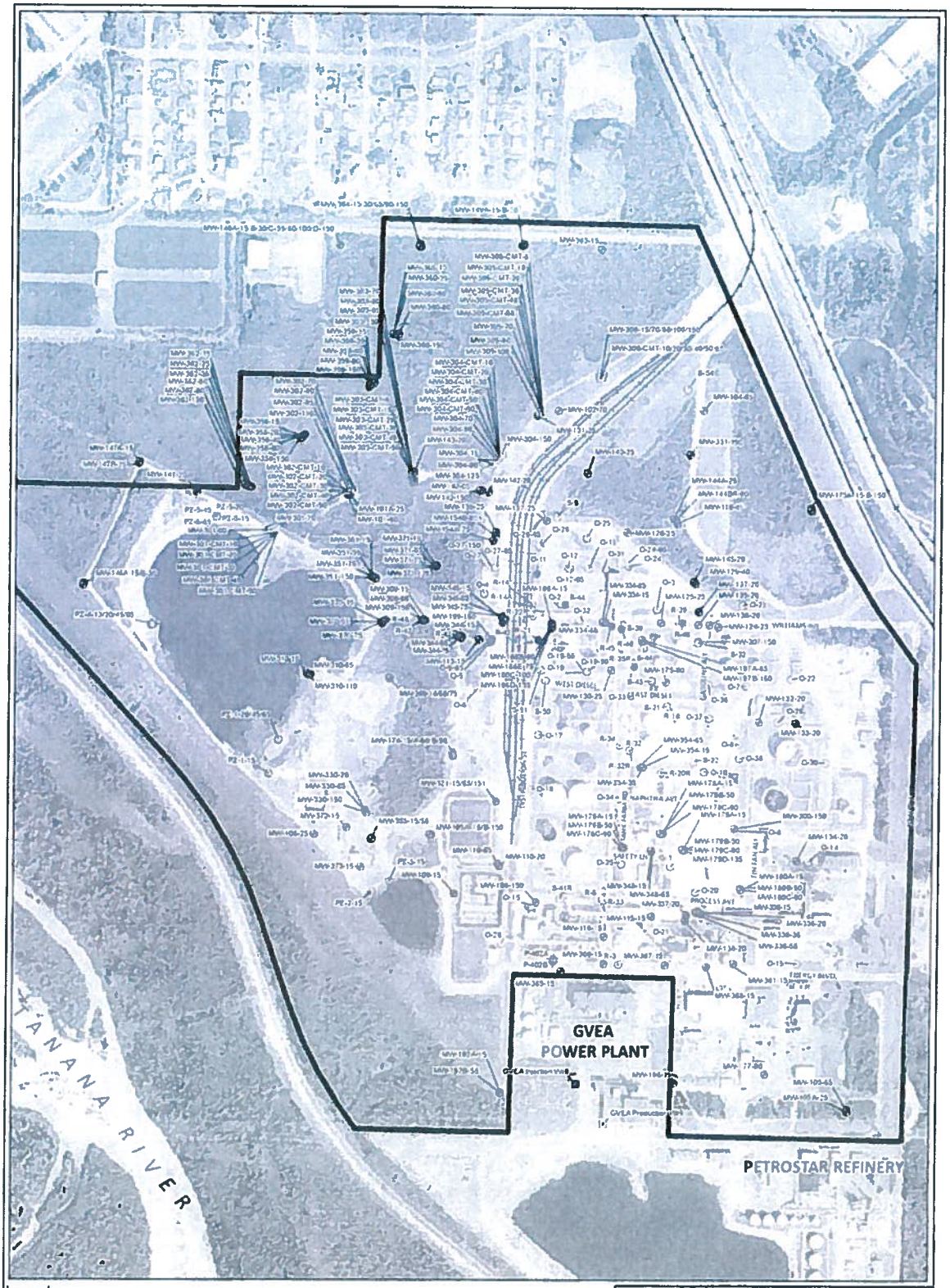
0 400 800
SCALE IN FEET

FLINT HILLS RESOURCES ALASKA LLC
NORTH POLE TERMINAL, NORTH POLE, ALASKA
FINAL ONSITE CLEANUP PLAN

SITE FEATURES

ARCADIS

FIGURE 1-2



Legend

- Monitoring Well
- Observation Well
- Vertical Profile Transect Well
- Recovery Well
- Recovery Well
- GVEA Injection Well (Approximate)
- GVEA Production Well (Approximate)
- Production Wells (Approximate)
- Piezometer
- FHRA Property Boundary
- Major Road
- Local Road
- RAIL LINE

0 400 800

SCALE IN FEET

Notes:
GVEA = Golden Valley Electrical Authority
-Image provided courtesy of Pictometry International 2012

FLINT HILLS RESOURCES ALASKA LLC
NORTH POLE TERMINAL, NORTH POLE, ALASKA

FINAL ONSITE CLEANUP PLAN

SITE PLAN - ONSITE

FIGURE 1-3

ARCADIS

Exhibit B
28 of 61

APPENDIX A

ARCADIS Design & Consultancy for natural and built assets

Flint Hills Resources Alaska, LLC

LONG-TERM MONITORING PLAN - 2017 UPDATE

North Pole Terminal

North Pole, Alaska

ADEC File Number: 100.38.090

Feburary 2, 2017

Gina Withy

Gina Withy
Project Environmental Engineer

R. Andresen

Rebecca Andresen
Vice President

LONG-TERM MONITORING PLAN - 2017 UPDATE

North Pole Terminal
North Pole, Alaska
ADEC File Number: 100.38.090

Prepared for

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B0081981.0078

Date:

February 2, 2017

CONTENTS

TABLE (IN TEXT)

TABLES (ATTACHED)

ATTACHMENT

Attachment A – Onsite Soil Management Plan

ACRONYMS AND ABBREVIATIONS

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
Arcadis	Arcadis U.S., Inc.
COC	constituent of concern
CSM	conceptual site model
Revised OCP	Revised Onsite Cleanup Plan
DRO	diesel-range organics
FHRA	Flint Hills Resources Alaska, LLC
GRO	gasoline-range organics
ITRC	Interstate Technology & Regulatory Council
LNAPL	light nonaqueous phase liquid
LTM Plan	Long-Term Monitoring Plan – 2017 Update
NSZD	natural source zone depletion
Onsite RSAP	Onsite Revised Sampling and Analysis Plan
Onsite SMP	Onsite Soil Management Plan
PFC	Perfluorinated Compound
POC	point of compliance
site	Flint Hills Resources Alaska, LLC North Pole Terminal, located on H and H Lane in North Pole, Alaska
µg/L	micrograms per liter

1 INTRODUCTION

On behalf of Flint Hills Resources Alaska, LLC (FHRA), Arcadis U.S., Inc. (Arcadis) prepared this Long-Term Monitoring Plan – 2017 Update (LTM Plan), as Appendix A to the Revised Onsite Cleanup Plan (Revised OCP), for the FHRA North Pole Terminal, located on H and H Lane in North Pole, Alaska (site). This LTM Plan includes the following items:

- Groundwater sampling program objectives and schedule.
- Groundwater sampling and analysis plan, including constituents of concern (COCs) and the appropriate sampling frequencies.
- List of monitoring wells to be included in long-term monitoring, including point of compliance wells and selected upgradient and downgradient wells for trend analysis.
- Onsite Soil Management Plan (Onsite SMP; Attachment A).

Groundwater COCs for the site are defined in the 2014 Final Onsite Cleanup Plan (2014 OCP, Arcadis 2014) and updated in the 2017 Revised OCP. This LTM Plan adopts and references information, work, and analysis that are further described in the Onsite Revised Sampling and Analysis Plan (Onsite RSAP; Arcadis 2016a).

2 GROUNDWATER SAMPLING PROGRAM OBJECTIVES

Periodic monitoring of site monitoring wells has been ongoing since 1987. The groundwater concentration data have been integral in developing the conceptual site model (CSM) and documenting current site groundwater conditions. The objectives of the scope of monitoring summarized in this LTM Plan are to:

- Monitor the nature and extent of COCs onsite.
- Evaluate the potential exposure to COCs.
- Evaluate contaminant trends and groundwater modeling predictions.

3 GROUNDWATER SAMPLING FREQUENCY AND SCHEDULE

The groundwater monitoring schedules and frequencies outlined in this LTM Plan supersede those presented in all previous work plans and sampling plans; however, procedures for conducting the activities included in this LTM Plan, such as groundwater level gauging and monitoring well purging, remain the same as outlined in the Onsite RSAP (Arcadis 2016a). The groundwater elevation monitoring network is summarized in Table 3-1. The revised sampling schedule is summarized in Tables 3-2 through 3-6. The following annual schedule is proposed for monitoring based on the monitoring frequencies identified in Table 1.

Table 1. Groundwater Monitoring Frequency and Schedule

Monitoring Frequency	Monitoring Schedule
Semiannual	First and third quarters
Annual	Third quarter

Annual monitoring for light nonaqueous phase liquid (LNAPL) will target the water table minima (typically in late October). Semiannual groundwater monitoring will be completed in the first and third quarters. Annual monitoring will be completed in the third quarter to allow the greatest chance for thawed conditions and to minimize cold weather limitations.

Due to the extreme seasonal cold occasionally preventing field work in the winter months, field staff may not be able to complete the scope of work. If the scope of work identified for the first quarter cannot be completed in the first quarter, it will continue into the second quarter.

4 POINTS OF COMPLIANCE AND MONITORING NETWORKS

The point of compliance (POC) is established as the downgradient property line in the Revised OCP. Monitoring wells at the POC will be monitored to document that applicable cleanup levels (defined in the Final OCP) are being achieved at the site boundary. The POC wells are:

- MW-149A-15
- MW-364
- MW-360
- MW-359
- MW-358
- MW-362.

Not all COCs will be monitored at all depths in the POC wells.

Monitoring wells retained for long-term monitoring and the monitoring networks are summarized in Tables 3-1 through 3-6.

5 MONITORING WELL NETWORKS AND MODIFICATIONS

The following frameworks determined the appropriate monitoring frequencies for individual wells within the monitoring networks.

5.1 Groundwater Elevation Monitoring

The groundwater elevation monitoring well network will be monitored on a semiannual monitoring frequency. Historical gauging data indicate that the overall groundwater gradient and flow direction are

generally consistent. The network for semiannual gauging was selected based on key well locations and to minimize redundancy. Monitoring will include placement of dataloggers in select monitoring wells for a 12-month period starting after shut down of the Groundwater Water Remediation Treatment System (GRTS). The datalogger network and evaluation of the data will follow the networks and procedures detailed in the Hydraulic Gradient Evaluations, included as Appendix J of the First Semiannual 2016 Onsite Groundwater Monitoring Report (Arcadis, 2016b). The monitoring well network is summarized in Table 3-1.

5.2 Light Nonaqueous Phase Liquid

Periodic LNAPL monitoring will be used in conjunction with annual natural source zone depletion (NSZD) monitoring (Section 5.5) to confirm that the LNAPL plume will not migrate to the property boundary. Annual monitoring will be conducted at select wells located at the downgradient extent of the LNAPL plume. The LNAPL monitoring program is shown on Table 3-2.

5.3 Sulfolane

In accordance with the Revised OCP the onsite cleanup objective for sulfolane in groundwater will be measured at the POC wells listed in Section 4. Monitoring well locations were selected based on the following:

- Establishing monitoring points at the POC (the site boundary) at multiple depths.
- Continuing monitoring at wells located within the core of the sulfolane plume to document plume decay.
- Establishing a monitoring well network that is spatially distributed across the site to reasonably document the vertical and horizontal distribution of sulfolane concentrations across the site upgradient of the POC monitoring wells. The locations and sampling frequencies were determined based on the extensive monitoring performed to date, understanding of the past effect of the hydraulic control systems on groundwater and COC transport, groundwater modeling and predicted COC transport patterns subsequent to shutdown of the groundwater treatment systems.

Wells selected for sulfolane monitoring and the monitoring frequency are shown in Table 3-3.

5.4 Other Constituents of Concern

Other COCs in groundwater are identified in the 2017 Revised OCP (Table 2-1). Benzene, toluene, ethylbenzene, and total xylenes (BTEX) monitoring will be conducted to monitor hydrocarbon-related impacts. Additionally, select monitoring wells will be analyzed for 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, and 1-Methylnaphthalene annually for three years. BTEX, gasoline-range organics (GRO) and diesel-range organics (DRO) monitoring will be conducted annually in conjunction with NSZD monitoring, described in Section 5.5.

A BTEX monitoring network was selected that is spatially distributed across the site to reasonably document the horizontal distribution of hydrocarbon concentrations across the site upgradient of the POC monitoring wells. The locations and sampling frequencies were determined based on the extensive

monitoring performed to date, understanding of the past effect of the hydraulic control systems on groundwater and COC transport, groundwater modeling and predicted COC transport patterns subsequent to shutdown of the groundwater treatment systems. Wells selected for BTEX monitoring and the monitoring frequency are shown in Table 3-4.

Because of the historical use of a fire training area in the southwest portion of the NPT, previous soil and groundwater investigations and monitoring events were completed for the characterization of perfluorinated compounds (PFCs) in soil and groundwater. Detections of PFCs were identified generally in the southwest part of the NPT (Arcadis 2013). Upon the implementation of the Revised OCP two annual groundwater monitoring events for PFCs will be completed by sampling a select number of monitoring wells to document groundwater conditions. This sampling approach considers the length of time since the last use of the fire training area (2009), rate of groundwater movement, limited historical detections, and subsequent excavation in the fire training area. Wells selected for PFC monitoring are shown in Table 3-5.

5.5 Natural Source Zone Depletion

Annual NSZD monitoring in the saturated zone will be conducted following protocols outlined in the Technology Overview for Evaluating Natural Source Zone Depletion at Sites with LNAPL (Interstate Technology & Regulatory Council [ITRC] 2009). This monitoring will be performed for 10 years unless cleanup objectives for LNAPL are not being met. NSZD rates will be calculated using a mass balance approach. LNAPL attenuation through dissolution and biodegradation will be quantified by assessing groundwater quality upgradient, downgradient, and within the LNAPL plume. BTEX assimilative capacity calculations will be performed. A summation of the mass flux of electron acceptors into and out of the plume combined with mass flux of dissolved-phase petroleum constituents out of the plume will be used to quantify dissolved-phase NSZD rates (ITRC 2009).

Twelve monitoring wells will be sampled annually for the NSZD parameters during the third quarter to evaluate the potential for NSZD to occur at the site. NSZD groundwater samples will be collected in accordance with the Onsite RSAP (Arcadis 2016a).

For quantifying dissolution and biodegradation in the saturated zone, the required data include:

- Hydraulic parameters such as hydraulic gradient and groundwater flow direction. These parameters will be estimated based on routine gauging data collected at the site.
- Horizontal and vertical dimensions of the LNAPL source zone. The LNAPL source zone dimensions will be determined based on GRO and DRO concentrations in groundwater within, upgradient, and downgradient of the source zone.
- Source Zone BTEX concentrations.
- Presence of dissolved electron acceptors (e.g., oxygen and sulfate) and reaction products (e.g., ferrous iron, manganese (II), and methane) in groundwater within, upgradient, and downgradient of the source zone. This can be accomplished by collecting groundwater samples and analyzing for these parameters using appropriate analytical methods. Nitrate monitoring is not included as an NSZD monitoring parameter because it has been consistently nondetect at the site.

Monitoring wells and analytical parameters for NSZD monitoring are summarized in Table 3-6.

6 MONITORING DATA ANALYSIS

The proposed groundwater monitoring network and sampling frequencies are based on the extensive investigation efforts and resulting data that characterized the nature and extent of COCs at the NPT. The monitoring network is designed to support sufficient data trend analysis to track the COC attenuation at the site relative to the Cleanup Objectives established in the Revised OCP. Sulfolane and benzene concentration trends will be prepared and evaluated in semiannual reports.

7 SOIL MANAGEMENT

Site workers, contractors, and other third parties performing ground-disturbing activities within the site boundary will properly manage soil potentially contaminated with COCs (or "impacted soil"). The Onsite SMP (Attachment A) provides guidance for potential ground-disturbing activities to protect workers from exposure to impacted soil associated with former site operations.

8 REPORTING SCHEDULE

Monitoring results will continue to be reported in semiannual groundwater monitoring reports on or before July 31 and January 31 of each year. Groundwater monitoring as described in this LTM Plan will continue for 10 years from the date of the Final OCP. At the end of that time period, assuming cleanup objectives are still being met, the groundwater monitoring work under this LTM Plan and any subsequent amendments could be considered completed.

9 MONITORING WELL DECOMMISSIONING

Monitoring wells not used for monitoring or sampling, as identified in this LTM Plan, will be decommissioned after an evaluation of at least one year of data collected from the updated sampling networks. Wells that are no longer required will be decommissioned in accordance with the ADEC Monitoring Well Guidance (ADEC 2013). Planned well decommissioning will be presented in the semiannual groundwater monitoring reports.

10 REFERENCES

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TABLES

Table 3-1

Groundwater Elevation Monitoring Well Network
Long-Term Monitoring Plan
Flint Hills Resources Alaska, LLC
North Pole Terminal, North Pole, Alaska

Well	Monitoring Frequency	Zone
MW-104-65	Semiannual	10-55
MW-142-20	Semiannual	Water Table
MW-144BR-90	Semiannual	55-90
MW-145-20	Semiannual	Water Table
MW-149A-15	Semiannual	Water Table
MW-173B-150	Semiannual	90-160
MW-174-15	Semiannual	Water Table
MW-174A-50	Semiannual	10-55
MW-174B-90	Semiannual	55-90
MW-176A-15	Semiannual	Water Table
MW-176B-50	Semiannual	10-55
MW-186A-15	Semiannual	Water Table
MW-186B-60	Semiannual	10-55
MW-192A-15	Semiannual	Water Table
MW-192B-55	Semiannual	10-55
MW-198-150	Semiannual	90-160
MW-300-150	Semiannual	90-160
MW-301-60	Semiannual	10-55
MW-302-CMT-50	Semiannual	10-55
MW-302-80	Semiannual	55-90
MW-303-80	Semiannual	55-90
MW-303-CMT-59	Semiannual	10-55
MW-306-80	Semiannual	55-90
MW-309-15	Semiannual	Water Table
MW-310-15	Semiannual	Water Table
MW-310-110	Semiannual	90-160
MW-321-15	Semiannual	Water Table
MW-334-15	Semiannual	Water Table
MW-336-20	Semiannual	Water Table
MW-358-20	Semiannual	Water Table
MW-358-40	Semiannual	10-55
MW-358-60	Semiannual	10-55
MW-359-15	Semiannual	Water Table
MW-359-60	Semiannual	10-55
MW-359-80	Semiannual	55-90
MW-360-15	Semiannual	Water Table
MW-360-50	Semiannual	10-55
MW-360-80	Semiannual	55-90
MW-360-150	Semiannual	90-160
MW-362-15	Semiannual	Water Table
MW-362-50	Semiannual	10-55
MW-362-150	Semiannual	90-160
MW-364-15	Semiannual	Water Table
MW-364-65	Semiannual	10-55
MW-364-90	Semiannual	55-90
MW-366-15	Semiannual	Water Table
North Gravel Pit	Semiannual	Gravel Pit

Table 3-1

Groundwater Elevation Monitoring Well Network
Long-Term Monitoring Plan
Flint Hills Resources Alaska, LLC
North Pole Terminal, North Pole, Alaska

Well	Monitoring Frequency	Zone
O-34	Semiannual	Water Table

General Notes:
GRTS - Groundwater Remediation Treatment System

Table 3-2

LNAPL Migration Monitoring Well Network
Long-Term Monitoring Plan
Flint Hills Resources Alaska, LLC
North Pole Terminal, North Pole, Alaska

Well	Frequency	Notes
MW-139-25	Annual	
MW-142-20	Annual	
MW-145-20	Annual	
MW-334-15*	Monthly (3 events) then Quarterly (3 events)	One Year Monitoring, to be initiated upon GRTS shutdown
MW-345-15*	Quarterly (4 events)	One Year Monitoring, to be initiated upon GRTS shutdown
O-2*	Quarterly (4 events)	One Year Monitoring, to be initiated upon GRTS shutdown
O-11	Annual	
O-12	Annual	
O-24	Annual	
O-25	Annual	
O-26	Annual	
O-27	Annual	
O-31*	Monthly (3 events), Quarterly (3 events), then Annual	
O-4	Annual	
O-5	Annual	
O-7	Annual	
R-21*	Monthly (3 events) then Quarterly (3 events)	One Year Monitoring, to be initiated upon GRTS shutdown
R-35R*	Quarterly (4 events)	One Year Monitoring, to be initiated upon GRTS shutdown
R-40*	Monthly (3 events) then Quarterly (3 events)	One Year Monitoring, to be initiated upon GRTS shutdown

Acronyms and Abbreviations:
LNAPL = light nonaqueous phase liquids
* Monitoring schedule for one year following GRTS shutdown.
GRTS - Groundwater Remediation Treatment System
Annual gauging to be conducted in late October

Table 3-3

Sulfolane Monitoring Well Network - Onsite
Long-Term Monitoring Plan
Flint Hills Resources Alaska, LLC
North Pole Terminal, North Pole, Alaska

Well	Zone	Routine Frequency	12 Month Post-GRTS Shutoff Sampling*
MW-127-25	10-55	Annual	Quarterly
MW-130-25	10-55	—	Quarterly
MW-139-25	10-55	Annual	Quarterly
MW-142-20	WT	Annual	Semiannual
MW-145-20	WT	Every 2 years	—
MW-148A-15	WT	Semiannual	
MW-148B-30	10-55	Semiannual	
MW-148C-55	10-55	Semiannual	
MW-148-80	55-90	Semiannual	
MW-149A-15	WT	Every 4 years	—
MW-154B-95	55-90	Annual	Quarterly
MW-176A-15	WT	Semiannual	—
MW-186A-15	WT	Semiannual	Quarterly
MW-186B-60	10-55	Annual	—
MW-186E-75	55-90	—	Quarterly
MW-301-CMT-20	WT	Every 4 years	Quarterly
MW-301-60	10-55	Every 4 years	Quarterly
MW-302-CMT-20	WT	Annual	Quarterly
MW-302-CMT-50	10-55	Every 2 years	Quarterly
MW-302-80	55-90	Every 2 years	Quarterly
MW-303-CMT-19	WT	Semiannual	Quarterly
MW-303-CMT-39	10-55	Annual	Quarterly
MW-303-CMT-59	10-55	Annual	Quarterly
MW-303-80	55-90	Every 2 years	Quarterly
MW-304-CMT-20	WT	Semiannual	Quarterly
MW-304-CMT-40	10-55	Annual	Quarterly
MW-304-CMT-60	10-55	Annual	Quarterly
MW-304-80	55-90	Every 2 years	Quarterly
MW-305-CMT-28	10-55	Annual	Quarterly
MW-305-CMT-48	10-55	Every 2 years	Quarterly
MW-309-15	WT	Annual	—
MW-310-15	WT	Annual	—
MW-330-20	WT	Semiannual	
MW-334-15	WT	Semiannual	Monthly (3 events) then Quarterly (3 events)
MW-334-65	10-55	—	Quarterly
MW-334-85	55-90	—	If needed based on shallow results
MW-336-20	WT	Semiannual	—
MW-344-15	WT	—	Monthly (3 events) then Quarterly (3 events)
MW-344-55	10-55	—	If needed based on shallow results
MW-344-75	55-90	—	If needed based on shallow results
MW-345-15	WT	Semiannual	Monthly (3 events) then Quarterly (3 events)
MW-345-55	10-55	Annual	Quarterly
MW-345-75	55-90	—	If needed based on shallow results
MW-354-35	10-55	Semiannual	—
MW-358-20	WT	Every 2 years	—
MW-358-40	10-55	Every 2 years	—
MW-358-60	10-55	Every 2 years	—
MW-359-15	WT	Annual	—
MW-359-35	10-55	Annual	—
MW-359-60	10-55	Annual	—
MW-359-80	55-90	Every 2 years	—

Table 3-3

Sulfolane Monitoring Well Network - Onsite
Long-Term Monitoring Plan
Flint Hills Resources Alaska, LLC
North Pole Terminal, North Pole, Alaska

Well	Zone	Routine Frequency	12 Month Post-GRTS Shutoff Sampling*
MW-360-15	WT	Annual	—
MW-360-35	10-55	Annual	—
MW-360-50	10-55	Annual	—
MW-360-80	55-90	Every 2 years	—
MW-362-15	WT	Every 4 years	—
MW-362-50	10-55	Every 4 years	—
MW-364-15	WT	Every 2 years	—
MW-364-30	10-55	Every 2 years	—
MW-364-65	10-55	Every 2 years	—
MW-364-90	55-90	Every 2 years	—
MW-371-15	WT	Annual	—
MW-372-15	WT	Semiannual	—
O-1	WT	Semiannual	—
O-2	WT	Semiannual	Monthly (3 events) then Quarterly (3 events)
O-11	WT	—	Quarterly
O-12	WT	—	Quarterly
O-13	WT	—	Quarterly
O-19	WT	—	Quarterly
O-19-90	55-90	—	Quarterly
O-24	WT	Semiannual	
O-26	WT	Semiannual	—
O-26-65	10-55	Annual	—
O-27	WT	Semiannual	Quarterly
O-27-65	10-55	Annual	—
O-31	WT	—	Quarterly
O-34	WT	Semiannual	—
R-21	WT	—	Monthly (3 events) then Quarterly (3 events)
R-35R	WT	—	Monthly (3 events) then Quarterly (3 events)
R-40	WT	—	Quarterly
S-51	WT	Annual	Quarterly

General Notes:

* One year sampling program to be initiated following GRTS shutdown. Sampling to revert to Routine Frequency at the conclusion of the one year program.
GRTS - Groundwater Remediation Treatment System
— - No monitoring planned
Semiannual wells will be sampled during the first and third quarters of the year.
Annual wells will be sampled during the third quarter of the year.

Table 3-4

BTEX Monitoring Well Network
Long-Term Monitoring Plan
Flint Hills Resources Alaska, LLC
North Pole Terminal, North Pole, Alaska

Well	Routine Frequency	12 Month Post-GRTS Shutdown Sampling
MW-101A-25	Annual	—
MW-130-25*	Annual	Quarterly
MW-131-25	Annual	—
MW-135-20*	Annual	Monthly (3 events) then Quarterly (3 events)
MW-137-20**	Annual	Additional COCs annually for three years
MW-139-25**	Semiannual	Quarterly, additional COCs annually for three years
MW-140-25	Semiannual	—
MW-142-20**	Semiannual	Semiannual, additional COCs annually for three years
MW-143-20	Annual	—
MW-144A-25	Every 2 years	—
MW-145-20**	Annual	Additional COCs annually for three years
MW-149A-15	Every 2 years	—
MW-176A-15	Annual	—
MW-303-CMT-19	—	Annual
MW-304-CMT-20	—	Annual
MW-305-CMT-28	—	Annual
MW-321-15	Every 2 years	—
MW-334-15	—	Quarterly
MW-344-15	—	Semiannual
MW-344-55	—	If needed based on shallow results
MW-344-75	—	If needed based on shallow results
MW-345-15	—	Quarterly
MW-351-15	Every 2 years	—
MW-358-15	Every 2 years	—
MW-360-15	Every 2 years	—
O-2*	Annual	Quarterly
O-3	Annual	—
O-4	Annual	—
O-24	Annual	—
R-21	—	Quarterly
R-35R	—	Quarterly
R-39	—	Monthly (3 events) then Quarterly (3 events)
R-40	—	Quarterly
S-9	Semiannual	—

Acronyms and Abbreviations:
BTEX = benzene, toluene, ethylbenzene, and total xylenes

* One year sampling program to be initiated following GRTS shutdown. Sampling to revert to Routine Frequency at the conclusion of the one year program.
**Annual analysis to include 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, and 1-Methylnaphthalene, third quarter for three years
GRTS - Groundwater Remediation Treatment System
— - No monitoring planned

Table 3-5

PFC Monitoring Well Network
Long-Term Monitoring Plan
Flint Hills Resources Alaska, LLC
North Pole Terminal, North Pole, Alaska

Well	Zone
MW-309-15	WT
MW-321-15	WT
MW-358-20	WT
MW-359-15	WT
MW-359-35	10-55
MW-362-15	WT
MW-362-25	10-55
MW-364-15	WT
MW-364-30	10-55

Acronyms and Abbreviations:
PFC = Perfluorinated Compounds
WT - Water Table

Table 3-6

Natural Source Zone Depletion Monitoring Network
Long-Term Monitoring Plan
Flint Hills Resources Alaska, LLC
North Pole Terminal, North Pole, Alaska

Location	Well ID	BTEX	TPH - GRO	TPH - DRO	E- acceptors		Biodegradation Products		
					Oxygen	Sulfate	Ferrous Iron	Manganese (II)	Methane
Upgradient	MW-192-15	X	X	X	X	X	X	X	X
Upgradient	O-15	X	X	X	X	X	X	X	X
Background	MW-369-16	X	X	X	X	X	X	X	X
Downgradient	MW-145-20	X	X	X	X	X	X	X	X
Downgradient	MW-142-20	X	X	X	X	X	X	X	X
Downgradient	MW-101A-25	X	X	X	X	X	X	X	X
Source Zone	MW-116-15	X	X	X	X	X	X	X	X
Source Zone	MW-125-25	X	X	X	X	X	X	X	X
Source Zone	MW-130-25	X	X	X	X	X	X	X	X
Source Zone	MW-135-20	X	X	X	X	X	X	X	X
Source Zone	MW-180A-15	X	X	X	X	X	X	X	X
Source Zone[1]	MW-348-15	X	X	X	X	X	X	X	X
Source Zone	MW-321-15	X	X	X	X	X	X	X	X
Source Zone	MW-336-20	X	X	X	X	X	X	X	X
Source Zone[2]	MW-138-20	X	X	X	X	X	X	X	X

General Notes:

NSZD monitoring will be conducted quarterly for one year following GRTS shutdown, and then will revert to annual in the third quarter

[1] Monitoring well MW-348-15 is a backup well in the event that monitoring well MW-180A-15 is frozen and cannot be sampled.

[2] Monitoring well MW-138-20 is a backup well in the event that monitoring well MW-336-20 is frozen and cannot be sampled.
In the event a well is frozen and cannot be sampled, an alternate well should be selected (if not already identified)
If LNAPL is present, the LNAPL will be removed and the well sampled per the Sampling and Analysis Plan.

Acronyms and Abbreviations:
TPH = total petroleum hydrocarbons
GRO = gasoline range organics
DRO = diesel range organics

ATTACHMENT A

Onsite Soil Management Plan

ARCADIS Design & Consultancy for natural and built assets

Flint Hills Resources Alaska, LLC

ONSITE SOIL MANAGEMENT PLAN

North Pole Terminal
North Pole, Alaska
DEC File Number: 100.38.090

Feburary 2017

Gina Withy

Gina Withy
Project Engineer

R Andresen

Rebecca Andresen
Vice President

ONSITE SOIL MANAGEMENT PLAN

North Pole Terminal

North Pole, Alaska

Prepared for:

Flint Hills Resources Alaska, LLC

Prepared by

Arcadis U.S. Inc.

1100 Olive Way

Suite 800

Seattle

Washington 98101

Tel 206.726 4717

Our Ref.:

B0081981.0072.0001

Date:

Feburary 2017

CONTENTS

TABLE

ATTACHMENT

1 INTRODUCTION

On behalf of Flint Hills Resources Alaska, LLC (FHRA), Arcadis U.S., Inc. (Arcadis) prepared this Onsite Soil Management Plan (Onsite SMP) for the FHRA North Pole Terminal (NPT), an idled petroleum refinery located on H and H Lane in North Pole, Alaska (site). Future land use of the property will remain consistent with an industrial manufacturing setting given its significant infrastructure and capabilities. The purpose of this Onsite SMP is to provide guidance for potential ground-disturbing activities to protect workers from exposure to impacted soil associated with former site operations. This Onsite SMP applies to ground-disturbing activities by the Property Owner and operators, on-site contractors, and future Property Owners and operators, and should be used in conjunction with existing NPT health and safety policies for excavation.

To supplement this Onsite SMP, project-specific soil plans may be developed to identify responsibilities and procedures for onsite soil management based on the scope and extent of a specific project. This Onsite SMP provides general guidance on the roles and responsibilities for emergency, routine maintenance, or short lead-time ground-disturbing activities.

2 BACKGROUND

The 240-acre site is located inside the city limits of North Pole, Alaska (the city). The city is located approximately 13 miles southeast of Fairbanks, Alaska, within the Fairbanks North Star Borough. The physical setting for the site is described in the Onsite Site Characterization Report – 2013 Addendum (Arcadis 2013b).

2.1 Site Characterization Background

A series of site characterization reports collectively present an extensive body of information that has been gathered to ascertain the physical characteristics of the site, define the sources of contamination, and determine the nature and extent of contamination present at the site. These reports are listed below:

- Site Characterization Report – Through 2011 (Barr Engineering Company 2012)
- Site Characterization Report – 2012 Addendum (Arcadis 2013a)
- Onsite Site Characterization Report – 2013 Addendum (Arcadis 2013b)

For this Onsite SMP, the term "onsite" is the area that is located within the property boundary of the FHRA NPT. This Onsite SMP only applies to excavations that occur more than 12 inches below the soil surface, although all contaminated soil must be properly managed per Alaska Department of Environmental Conservation (ADEC) regulations.

2.2 Constituents of Concern

Extensive sampling of soil was completed for numerous constituents of potential concern (COPCs) to develop a list of constituents of concern (COCs) for the site. COCs were identified based on a comparison of site maximum concentrations to Method 2 cleanup levels for soil (Table B1 and B2 of 18 AAC 75.341(c)) for those constituents listed in Table 2-1.

Table 2-1. Constituents of Concern in Soil

Soil COC	Maximum Concentration (mg/kg)	Soil Cleanup Level[1] (mg/kg)
1,2,4-Trimethylbenzene	205	0.16
1,3,5-Trimethylbenzene	81.1	1.3
1,2,3 Trichloropropane	0.374	3.1×10^{-5}
Benzene	438	0.022
Cumene	41.6	5.6
Ethylbenzene	392	0.13
n-Butylbenzene	107	20
n-Propylbenzene	72.7	9.1
Toluene	1,330	6.7
Xylenes	2,510	1.5
1-Methylnaphthalene	88.5	0.41
2-Methylnaphthalene	240	1.3
Naphthalene	125	0.038
Sulfolane	1,620	TBD
Perfluorooctane sulfonate (PFOS)	3	0.003
Perfluorooctanoic acid (PFOA)	0.048	0.0017
Gasoline range organics	7,730	300
Diesel range organics	32,000	250

Notes:

1 Soil cleanup level set at the minimum value of the direct contact, outdoor inhalation and migration to groundwater value in 18 AAC 75 Table B1 and B2 for the under 40-inch zone (November 6, 2016).

mg/kg = milligrams per kilogram

TBD = to be determined

3 COMPLIANCE WITH SOIL MANAGEMENT REQUIREMENTS

NPT workers, contractors, and other third parties performing ground-disturbing activities within the site boundary will properly manage soil potentially contaminated with COCs (or "impacted soil"). Ground-disturbing activities include any man-made cut, boring, cavity, trench or depression in an earth surface, formed by earth removal. FHRA considers any dig of 12 inches or more an Excavation.

This Onsite SMP will be used in conjunction with existing NPT policies for Excavation activities. Soil management requirements for contaminated soils are defined below. Excavated soil will be properly characterized. Soil will be properly managed, transported, and disposed of in accordance with all state, federal and international laws and regulations.

3.1 Contaminated Soils Management Requirements

The area of the facility where soil may be found that is contaminated is identified in Attachment A. Pursuant to the FHRA Excavation Procedure, any excavation for the purpose of remediation that will take place will be subject to an excavation permit and will be supervised by the qualified person assigned to the excavation project.

For excavation that involves repair and replacement of existing infrastructure, excavated contaminated soil appropriate for use as fill material will be placed back in the excavation where it originated. For new construction or demolition activities, excavated contaminated soil may be used as backfill with prior ADEC approval. Obviously contaminated soils containing saturated levels of hydrocarbons or other COC will not be replaced unless a suitable replacement is not available and an unacceptable safety condition would result.

Basic requirements for handling contaminated soils excavated from the subsurface are as follows:

- Notify FHRA personnel and obtain an Excavation Permit pursuant to FHRA's procedures prior to any excavation.
- Do not transfer, remove, or otherwise move contaminated soils from a contaminated area to a non-contaminated area, or from one contaminated area to another contaminated area without properly emplacing engineering controls to mitigate potentially spreading contamination. Directions will be provided by FHRA regarding the handling, management, and transport of any excess contaminated soils that will not be returned to the excavation for re-use.
- Avoid mixing contaminated and uncontaminated soils during excavation or repeated handling to minimize potential waste generation.
- Excavation equipment that comes in contact with contaminated soils must be properly decontaminated before transport offsite or to an uncontaminated area of the property.

If new areas of contamination are discovered while excavation is occurring in areas previously believed to be uncontaminated, it will be necessary to halt work in these areas. Under these circumstances, excavation activities will stop to ensure appropriate FHRA personnel and ADEC have been notified that actual or potential contaminated soils have been encountered. This work delay will allow FHRA to ensure that the appropriate health and safety and soil management procedures are in place before continuing.

4 HEALTH AND SAFETY PLAN

A site-specific Health and Safety Policy (HSP-06, Alaska Excavation Procedure) has been and will continue to be used to protect the health and safety of subsurface workers when subsurface work is conducted at the site. The HSP conforms to the requirements established under 29 Code of Federal Regulations (CFR) 1910.120, including the use of appropriately trained workers, monitoring and

identification of contaminated media, site health and safety officer's authorities and responsibilities, and health and safety meetings for applicable site personnel.

The Excavation Procedure requires anyone involved with subsurface work to use a minimum level of personal protective equipment (PPE) (e.g., protective clothing, work-appropriate gloves and boots, etc.) to protect against the COCs identified at the site. HSP-06 defines appropriate air monitoring protocols, PPE requirements, and worker decontamination.

Hazards associated with the site and the content of the Excavation Procedure are communicated to site workers prior to commencing Excavation work and during daily tailgate safety meetings. Site-specific hazards, changes in site conditions, safe work practices, PPE requirements, emergency procedures, and notification protocols will be discussed with the site workers as part of the Safe Work Permitting process.

The map included in Attachment A is also included in the Excavation Procedure and identifies areas containing COCs. In order to excavate in the areas identified on the map, employees, contractors and other third parties must obtain an Excavation Permit from trained FHRA employee. That employee's training will include identification of areas located within the map so that persons undertaking the excavation can undertake appropriate precautions.

The primary hazard relevant to this Onsite SMP is soil impacted by COCs identified in Table 2-1. The majority of the COCs are related to petroleum hydrocarbons. As the site operations directly involve the handling and storage of petroleum hydrocarbons, the site is very familiar and experienced with the health and safety requirements necessary to ensure workers are properly protected. The primary routes of exposure include inhalation of volatilized constituents in trench air. However, direct contact with soil impacted by other constituents associated with historical operations, including sulfolane, is also considered. Excavation work conducted at the NPT in areas of impacted soil, or areas with soil suspected to be impacted, requires the issuance of a Safe Work Permit prior to commencing work. This includes, but is not limited to, permission by operations personnel to work in an area, a discussion of potential hazards and associated risk mitigation activities, completion of an Excavation checklist, and designation of only authorized workers to be performing work within the work area.

Appropriate worker hygiene is required so that individuals will not inadvertently ingest or inhale impacted soil particles adhering to gloves or clothing, or ingest impacted groundwater. Work within the Excavation areas containing impacted soil is anticipated to require modified Level D PPE for workers who could potentially come into contact with impacted soil and/or groundwater. Modified Level D PPE includes: steel-toed boots, hard hat, and protective eyewear. Chemical-resistant gloves and/or respirators, as well as decontamination requirements, would be required if hazards are identified by the Excavation Competent Person or as part of the Safe Work Permitting Process.

5 WORKER HEALTH AND SAFETY TRAINING

The Alaska Occupational Safety and Health Program generally follows federal Occupational Safety and Health Administration (OSHA) requirements. According to OSHA 29 CFR 1910.120(e), workers and field supervisors that are engaged in hazardous substance removal as part of cleanup operations are required to have received either 24- or 40-hour Hazardous Waste Operations and Emergency Response training from a qualified vendor.

6 SOIL MANAGEMENT PLAN AMENDMENTS

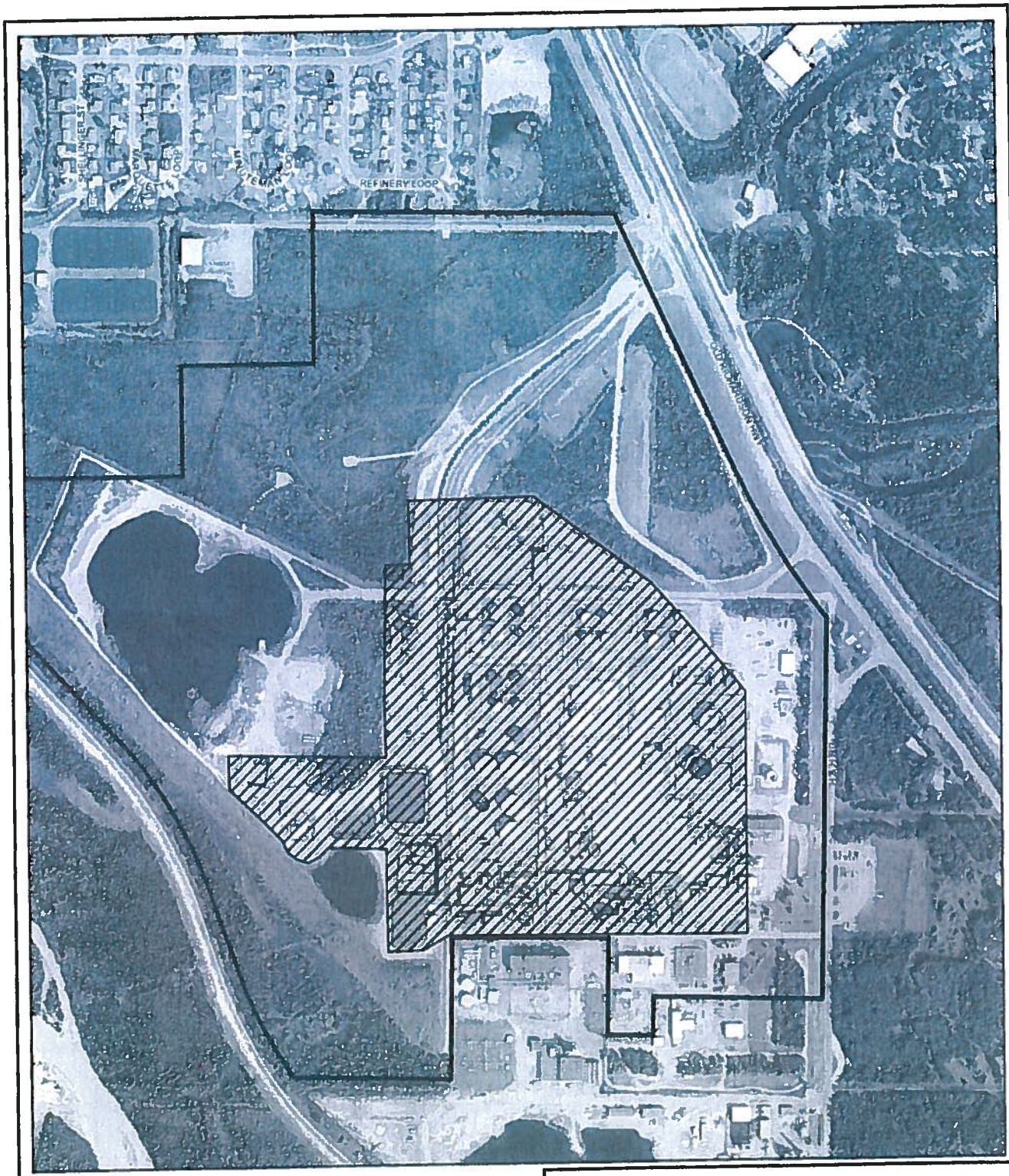
This Onsite SMP may be amended and approved by the Property Owner as necessary to address changes in ownership, NPT operations, regulatory changes, or other requirements. A project-specific soil management plan may be prepared based on the proposed scope of future work.

7 REFERENCES

Arcadis U.S., Inc. 2013a. Site Characterization Report – 2012 Addendum. January 25, 2013.

Arcadis U.S., Inc. 2013b. Onsite Site Characterization Report – 2013 Addendum. December 20, 2013.

Barr Engineering Company. 2012. Site Characterization Report – Through 2011. December 2012.



Legend

- Soil potentially contaminated with BTEX or Sulfolane
- FHRA Property Boundary

0 600 1,200

SCALE IN FEET

FLINT HILLS RESOURCES ALASKA, LLC
NORTH POLE TERMINAL, NORTH POLE, ALASKA

ONSITE SOIL MANAGEMENT PLAN

MAP OF POTENTIALLY CONTAMINATED SOIL

ARCADIS

Appendix **A**

ARCADIS Design & Consultancy for natural and built assets

Arcadis U.S. Inc

1100 Olive Way

Suite 800

Seattle, Washington 98101

Tel 206 325 5254

Fax 206 325 8218

www.arcadis.com

Offsite Sulfolane Potable Water Plan

The Alaska Department of Environmental Conservation ("DEC") agrees to the following plan for the supply of drinking water in areas associated with the offsite Sulfolane Plume in North Pole and Fairbanks Alaska. The supply of drinking water will include:

- Construction of a piped public water system that expands the current City of North Pole water system to 656 discrete parcels, as defined by the Stantec Report dated December 8, 2016, including City of North Pole supply system improvements necessary to support the additional water system and connections;
- Construction of service line connections necessary to connect the 656 individual residences or businesses to the expanded distribution system;
- Transition of homes on alternative water systems ("AWS"), currently provided by Flint Hills Resources Alaska, LLC ("FHRA"), to the planned public water system contemplated under this Settlement Agreement.
- An operations fund for the City of North Pole to fund initial operations and maintenance of the planned piped water system.
- Continued supply of water via the Alternative Water Supply Plan until the piped system is available for property owners to connect.
- Concurrent monitoring of the Sulfolane Plume until the plume meets a cleanup level to be set by the State of Alaska.

The above actions are necessary to protect public health or welfare and the environment.

Background

Williams Alaska Petroleum, Inc. ("Williams") owned and operated the North Pole Refinery ("NPR ") from its initial construction in the 1970's until its sale to FHRA on April 1, 2004. Williams commenced the use of sulfolane in the refining process in approximately 1985. During Williams's ownership and operation of the NPR, Williams spilled and released sulfolane to the soil and to the groundwater underlying the NPR. Although not detected by Williams prior to its sale of the refinery in 2004, sulfolane had migrated off site during Williams's operation of the NPR.

In 2009, FHRA became aware that sulfolane emanating from the NPR was detected in private drinking water wells off of the NPR premises ("Sulfolane Plume"). From 2009 to present, FHRA has been cooperating with the State of Alaska, DEC and the City of North Pole to investigate and respond to the onsite contaminants of concern and the Sulfolane Plume. FHRA's actions included monitoring and characterizing the Sulfolane Plume, preparing site characterization studies, communicating directly with impacted landowners, and providing alternative drinking water to impacted landowners. In 2014, FHRA submitted, and DEC approved, an Onsite Cleanup Plan to address and conduct short- and long-term remedial activities on the refinery premises which includes groundwater monitoring, groundwater treatment and recovery and

disposal of sulfolane contaminated media. As part of the approval of the Plan, an Equitable Servitude was recorded on the property which includes the following: limitation of property use to industrial, prohibition of the use of groundwater for drinking purposes, requirement to maintain fencing, requirement of protective measures for soil excavation and limitations regarding groundwater vapor exposures.

Current Site Conditions

Based on studies conducted by FHRA and the DEC, the state has determined that the Sulfolane Plume is approximately 4 miles long, affects an area of over 5 square miles, and includes sulfolane contamination both above and below permafrost at depths as much as 300 feet in some areas. For additional site information and studies relied upon in development of this plan see documents set out on the DEC web page at http://dec.alaska.gov/spar/csp/sites/north-pole-refinery/documents.htm.

DEC has determined that the most appropriate approach to address the offsite impact of the Sulfolane Plume on the drinking water of the residents is the construction of a piped public water system to the impacted areas and concurrent monitoring of the Sulfolane Plume.

Dated: February 2, 2017

125 Snowman Lane
North Pole, Alaska 99705
(907) 488-8593
(907) 488-3002 (fax)
rwallace@northpolealaska.org

City of North Pole
Director of City Services

Memo

To: City Council

From: Danny Wallace

Date: February 20, 2024

Subject: Streetlight Survey and Analysis

City Council:

I recommend Council approval to contract with Respec, LLC to conduct a streetlight survey and analysis to assess selected areas for adding or improving street lighting. Cost for this is $25,360.00 (submitted previously as part of our Public Works budget).

This effort is dedicated to improving safe travel for both pedestrians and vehicles, especially at intersections and along routes to school. This is in response to citizen testimony on concerns about children walking to school and to establish a fiscally constrained targeted plan for the City.

The new streetlights in the City core area (currently installed, but awaiting parts for final activation) cost $1.6M (million). Subsequent potential projects to put streetlights throughout the rest of the City are projected to be at least $2.3M. See https://dot.alaska.gov/nreg/northpolelights/ for additional information.

This scoping project intends to put additional streetlights at key locations along known routes to the schools and other areas in the City. The intent is to establish a plan that complements current light installations and remains affordable for the City.

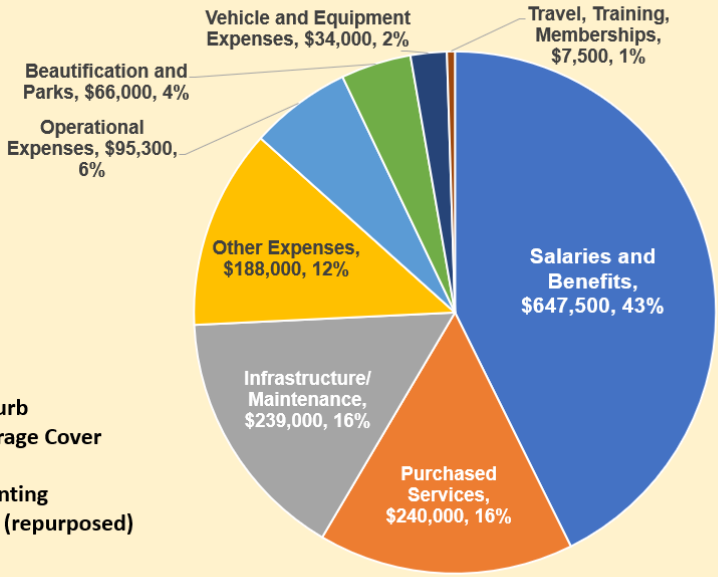
Bottom line: I recommend that the City Council approves spending $25,360.00 on this survey and analysis.

Respectfully,

Robert (Danny) Wallace
Director of City Services
North Pole, Alaska

Public Works Budget Brief Excerpt (2024)

Public Works Budget



Key Projects:

Street Light Study
Terry Miller Park Refurb
Overhead Gravel Storage Cover
Bus Shelters (2)
Candy Cane Light Painting
City Services Vehicle (repurposed)
Skid Steer

Transfers Out:
Skid Steer (carried over - Equip)

Total Budget Request:
$1,451,300

STATEMENT OF SERVICES

STREETLIGHT SURVEY FOR THE CITY OF NORTH POLE

JANUARY 2024

RESPEC

The City of North Pole (NP) has requested that RESPEC Company, LLC (ENGINEER) provide engineering services to assess selected areas for adding or improving street lighting to improve the safety of residents, especially at intersections and along routes to school.

1.0 PROJECT SCOPE SUMMARY

This Statement of Services details the scope to be provided by RESPEC Company, LLC (ENGINEER or RESPEC).

1.1 DEFINITIONS

- ENGINEER – RESPEC Company, LLC
- OWNER – City of North Pole

1.2 OVERALL SCOPE OF WORK

We propose that this work be divided into two stages. The first stage would be fieldwork and determining which areas to focus on in the second stage. The second stage would be the assessment of those areas. Having two stages will allow for adaptability and prioritizing for cost-effectiveness.

1. Identifying critical intersections/roads and assessing current lighting through these areas. Tasks would include:
    a. Interviewing City, Police, and School personnel to determine known problem areas.
    b. Desktop assessment of high-traffic areas, pedestrian school routes, and current street light infrastructure. Review AKDOT&PF plan for future lighting projects.
    c. Site visits to the area when it is dark to observe conditions at locations flagged during conversations and desktop assessment. Visiting the site during morning or evening rush hour/school pick up or drop off would be best.
    d. In coordination with the City of North Pole, identify locations for more in-depth assessment and examine types of improvements. We anticipate focusing on intersections near the schools and other areas of high vehicle and pedestrian traffic.
    e. Scope and fees for the second stage would be set after the first stage. The ones included here are for general guidelines.
2. Recommendations and cost estimates for proposed improvements:
    a. Assess technical issues for each improvement (Power, ROW, impact on neighbors, light pollution).
    b. Provide a recommendation of project order based on cost and benefit.

2.0 ENGINEERING REQUIREMENTS

Upon this Agreement becoming effective, the ENGINEER shall perform the following tasks:

2.1 DATA COLLECTION

- Meet with stakeholders to determine known problem locations.

- Conduct a desktop assessment of the road system and existing lighting infrastructure to determine locations of interest for field study.
- A progress meeting with OWNER will be held to discuss findings and plans for the field study.
- Conduct site visits during nighttime hours to observe traffic and lighting conditions.
- Coordinate with North Pole to determine areas to focus on.

2.2 RECOMMENDATIONS

- Provide an assessment of technical issues with improvements at each location.
- Provide concept-level cost estimates for streetlighting at recommended locations.
- Provide a recommendation for improvement priority based on cost, benefit, and technical limitations.

3.0 ASSUMPTIONS

1. Meetings may be in person or virtual.
2. It is assumed that eight intersections can be studied with the proposed budget.
3. Usable record information is available and includes, but is not limited to, the make and model of existing streetlights and as-builts, tech data, and design analysis for the recent Alaska DOT project that installed streetlights in a portion of North Pole ("North Pole Street Lighting Standardization and Improvements").

4.0 OWNER RESPONSIBILITIES

1. The OWNER shall arrange interviews with appropriate stakeholders (Police, Schools, Maintenance, etc.).
2. The OWNER shall provide record information if available.

5.0 SCHEDULE

The schedule for the project is to be determined, pending coordination with the OWNER:

1. The schedule of this project will be determined once NTP is provided.
2. We anticipate fieldwork will be conducted during the current "dark" season.

6.0 METHOD OF PAYMENT

The Consultant will perform the services on a lump sum and time and expenses not-to-exceed basis (lump sum for stage 1, time and expenses not-to-exceed for stage 2) for $25,360. See attachment for additional information.

END OF STATEMENT OF SERVICES

NP Streetlight Survey
01/31/24
SUMMARY

	Phase	Civil	Electrical	ODCs	Total
1	#201 - Data Collection	$4,930.00	$2,890.00	$50.00	$7,870.00
2	#400 - Concept Design (15%)	$9,520.00	$7,920.00	$50.00	$17,490.00

	Subtotal	$14,450.00	$10,810.00	$100.00	$25,360.00
	Est Tax				$0.00
	Total				$25,360.00

NP Streetlight Survey
01/31/24
Civil

Phase	1				
#201 - Data Collection	**Principal Civil Eng**	**Senior Civil Eng**	**Civil EIT**	**Hourly Subtotal**	**Cost**
Billing Rate	**$250.00**	**$210.00**	**$125.00**		
				0	$0.00
Stage 1				0	$0.00
Kickoff meeting		1	2	3	$460.00
Stakeholder Interviews		1	2	3	$460.00
Progress Meeting		1	2	3	$460.00
Existing Conditions Survey				0	$0.00
Desktop Determination of Critical Intersections for Review		1	6	7	$960.00
Site Visits			8	8	$1,000.00
Coordination Meeting to determine focus areas		2	2	4	$670.00
				0	$0.00
				0	$0.00
Draft Tech Memo		2	4	6	$920.00
				0	$0.00
Hourly Subtotal	0	8	26	34	
Cost	$0.00	$1,680.00	$3,250.00		$4,930.00

Phase	2				
#400 - Concept Design (15%)	**Principal Civil Eng**	**Senior Civil Eng**	**Civil EIT**	**Hourly Subtotal**	**Cost**
Billing Rate	**$250.00**	**$210.00**	**$125.00**		
Stage 2				0	$0.00
Assessment				0	$0.00
8 intersections		4	26	30	$4,090.00
				0	$0.00
Estimate				0	$0.00
8 intersections		4	16	20	$2,840.00
				0	$0.00
Tech Memo		3	10	13	$1,880.00
Tech Review	1	1	2	4	$710.00
				0	$0.00
Hourly Subtotal	1	12	54	67	
Cost	$250.00	$2,520.00	$6,750.00		$9,520.00

Civil Hours	1	20	80	101	
Civil Cost	$250.00	$4,200.00	$10,000.00		$14,450.00

Phase

#201 - Data Collection	Senior Elec. Eng	Lead Elec. Eng	Project Elec. Eng	Tech Editor	Hourly Subtotal	Cost
Billing Rate	$205.00	$185.00	$170.00	$135.00		
Task					0	$0.00
					0	$0.00
Stage 1					0	$0.00
Kickoff meeting			1		1	$170.00
Progress meeting			2		2	$340.00
					0	$0.00
Existing Conditions Survey					0	$0.00
Site Visits			12		12	$2,040.00
Coordination Meeting to determine focus areas			2		2	$340.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
Hourly Subtotal	0	0	17	0	17	
Cost	$0.00	$0.00	$2,890.00	$0.00		$2,890.00

Phase

#400 - Concept Design (15%)	Senior Elec. Eng	Lead Elec. Eng	Project Elec. Eng	Tech Editor	Hourly Subtotal	Cost
Billing Rate	$205.00	$185.00	$170.00	$135.00		
Task					0	$0.00
Stage 2					0	$0.00
Assessment					0	$0.00
8 intersections			26		26	$4,420.00
					0	$0.00
Estimate					0	$0.00
8 intersections			10		10	$1,700.00
					0	$0.00
Tech Memo			7	3	10	$1,595.00
Tech Review	1				1	$205.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
					0	$0.00
Hourly Subtotal	1	0	43	3	47	
Cost	$205.00	$0.00	$7,310.00	$405.00		$7,920.00

Electrical Hours	**1**	**0**	**60**	**3**	**64**	
Electrical Cost	**$205.00**	**$0.00**	**$10,200.00**	**$405.00**		**$10,810.00**

Phase	1

#201 - Data Collection

Billing Rate	Unit	Unit Cost	Civil	Electrical	Qty	Cost
Copies/Prints/Scans (Letter)	ea	$0.20			0	$0.00
Copies/Prints/Scans (Full Size	ea	$1.00			0	$0.00
Teleconference Costing	hr/line	$3.00			0	$0.00
Airfare	ea	$500.00			0	$0.00
Rentals	day	$0.00			0	$0.00
Survey GPS Rental	day	$154.50			0	$0.00
LIDAR Scanner	day	$800.00			0	$0.00
Shipping	ea	$25.00			0	$0.00
Parking	day	$16.00			0	$0.00
Hotel	day	$0.00			0	$0.00
Mileage	mile	$0.625	40	40	80	$50.00
Per Diem	man day	$0.00			0	$0.00
Cost			$25.00	$25.00		$50.00

Phase	2

#400 - Concept Design (15%)

Billing Rate	Unit	Unit Cost	Civil	Electrical	Qty	Cost
Copies/Prints/Scans (Letter)	ea	$0.20			0	$0.00
Copies/Prints/Scans (Full Size	ea	$1.00			0	$0.00
Teleconference Costing	hr/line	$3.00			0	$0.00
Airfare	ea	$500.00			0	$0.00
Rentals	day	$0.00			0	$0.00
Survey GPS Rental	day	$154.50			0	$0.00
LIDAR Scanner	day	$800.00			0	$0.00
Shipping	ea	$25.00			0	$0.00
Parking	day	$16.00			0	$0.00
Hotel	day	$0.00			0	$0.00
Mileage	mile	$0.625	40	40	80	$50.00
Per Diem	man day	$0.00			0	$0.00
Cost			$25.00	$25.00		$50.00

125 Snowman Lane
North Pole, Alaska 99705
(907) 488-8593
(907) 488-3002 (fax)
rwallace@northpolealaska.org

City of North Pole
Director of City Services

Memo

To: City Council

From: Danny Wallace

Date: February 9, 2024

Subject: City Water Main Design Award

City Council:

The City received viable proposals for the water main engineering analysis and project. The first was from Respec, LLC and the other was from Stantec. The proposal was advertised from Dec 20, 2023 - Jan 17, 2024 on our website and in the NewsMiner. The evaluation team included City Council and Staff representatives and reviewed two proposals on Jan 26, 2024. They used eight weighted evaluation criteria to include Project Services, Methods, Project Management, Project Staff, Professional Experience, Proximity/Affordability to Geographic Location, Estimated Fee Schedule, and Quality of Proposal. Both proposals were deemed suitable for this project and scores were very similar. The scoring sheet, ad, and proposal documentation are attached.

After reviews were complete, it was determined that Respec's proposal fully conformed to the stated requirements (submitted in a sealed envelope with insurance information) while Stantec's bid did not. Stantec's bid was not sealed and did not include the insurance information as required in the proposal announcement. As a result, the second bid was rejected.

We recommend awarding the planning and design contract to Respec.

Respectfully,

Robert (Danny) Wallace
Director of City Services
North Pole, Alaska

Scoring Sheet

Tabulation of Bids	**Description:** City Water Main Replacement Design and Planning				**Project:** City Water Main Replacement Design and Planning **Bid Due Date:** Jan 17, 2024 @ 2pm
Recommend: Respec Reason: Evaluation Committee	**Vendor: Respec** 1028 Aurora Drive Fairbanks, AK 99689 Karen Brady karen.brady@respec.com		**Vendor: Stantec** 475 Riverside Way Fairbanks, AK 99709 Dean Syta dean.syta@stantec.com		
Evaluation Criteria		Percentage		Percentage	
1. Project Services	298.5	99.50%	Rejected		
2. Methods	300	100%			
3. Project Management	90	90%			
4. Project Staff	270	90%			
5. Professional Experience	400	100%			
6. Proximity/Affordability to Geographic	95	95%			
7. Estimated Fee Schedule	340	85%			
8. Quality of Proposal	100	100%			
Total Score	**1893.5**	**94.68%**			

Newspaper Ad (NewsMiner)

00072314

CITY OF NORTH POLE
REQUEST FOR PROPOSAL
CITY DOWNTOWN WATER MAIN DESIGN

The City of North Pole is seeking proposals to design the replacement for the City's Downtown Water Main system. This will include schematic design, pre-final construction design, generation of construction documents, and other required items. The request for proposal and project information may be obtained by emailing wallace@northpolealaska.org or by calling 907-488-8593. Hard copy sealed bids must be received in the City Clerk's Office by 2pm, Wednesday, January 17th, 2024, at which time the bids will be opened and read aloud.

Published: 12-27-23, 12-29-23 & 1-3, 1-5, 1-9, 1-11 & 1-15-24

Request for Proposals
City of North Pole Water Main Replacement Design Project

City of North Pole
125 Snowman Lane
North Pole, AK 99705
Tel: 907-488-8593; Fax: 907-488-3002

I. Downtown Water Main Replacement Design Project

The purpose of this Request for Proposals (RFP) is to identify an engineering firm to assist the City of North Pole in the assessment and design to replace the current Downtown Water Main system.

The City of North Pole's public water system provides the community with water utilities, including sanitation and safety services. The Downtown Loop area, which was developed in the 1970s and early 1980s, consists of approximately eight miles of distribution water mains. However, most of these mains are over 50 years old and made of thin-gauge steel piping, which experience significant and constant leaks at the fittings and joints. The Downtown Loop water mains typically operate between 80 to 135 pounds per square gauge (psig), exceeding the 100-psig pressure rating of the system pipes and contributing to the leaking issue. This operating range does not include the increased range during the tourism season or the winter months when the pipes can freeze, causing further damage to the system and aging pipes. The water main lines' age and pipe makeup in the Downtown Loop raise serious concerns regarding pipe failure, which have dangerous consequences for the community. This location includes critical municipal infrastructure and lifelines, such as City Hall, the Police and Fire Departments, Public Works, three public schools, medical clinics, Senior Citizen Centers and Housing, and many residences. There is a significant community safety concern regarding the water main and fire hydrants. Currently, the fire hydrants in the Downtown Loop are installed in the main line and do not have isolation valves. If the main line were to have a failure, hydrants may be without water for use by the Fire Department. Additionally, without the means to isolate the hydrants, the equipment cannot be serviced without portions of the loop being offline, causing disruptions to customers, City Hall, and the elementary, middle, and high schools. As the population is expected to increase, the risk current system failure is an important issue for the City. Leaks and failures will result in infrastructure damage, emergency service disruptions, human health risks, safety issues, and will negatively impact economic development.

II. Project Components and Scope

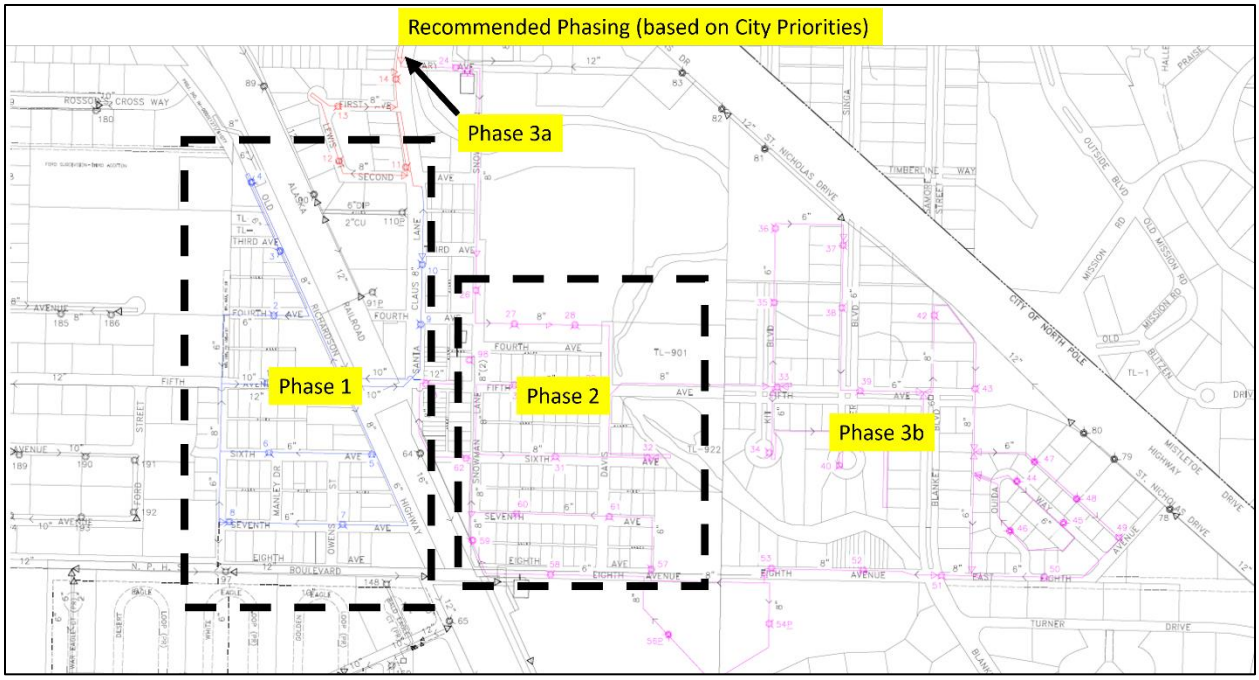
The City is requesting proposals from engineering firms to conduct an engineering analysis and design project that will both pave the way for future construction and funding acquisition efforts.

Task 1 – Schematic Design (35% Design)	**Jan 31, 2024 – Sep 30, 2024**
Task 1 is to plan and design major details of the water main replacements, including updating construction cost estimates. The contracted engineering firm will carry out this task, including coordinating weekly meetings with North Pole leaders and City staff when necessary. This task also	

includes survey work of the water mains and hydrants, which requires snowless conditions. Deliverables include the development of plan and profile (P&P) sheets, design drawings, and general notes. Coordination with ADEC for permit review will occur alongside contacting environmental technicians and geotechnical engineers on previous study information to verify impacts that may require additional permits or details. If required, public meetings will be facilitated to inform residents and businesses along the project corridor of upcoming activities. City staff will be in support roles for this task and managing grant drawdown requests.	
Task 2 – Pre-Final Construction Design (95% Design)	**Oct 1, 2024 – Jan 31, 2025**
Task 2 is to update all necessary documentation, including cover/index sheets, general notes, index, P&P sheets, and roadway sections that will be affected. Deliverables include Technical Specifications to supplement all design drawings that will be developed, division 1 specifications to describe construction management and quality control requirements. The ADEC permit and construction application will be prepared for approval to construct. City staff will be in support roles for this task and managing grant drawdown requests.	
Task 3 – Generation of Construction Documents	**Jan 1, 2025 – Feb 28, 2025**
Task 3 is to finalize all documents to move the project from planning and design to construction. Deliverables include Technical Specifications, Division 1 Specifications, and the Construction Contract being finalized. All permits will be finalized or applied for, including coordinating with ADEC for approval to construct based on comments received during their review. The construction cost estimate will be updated and finalized. City staff will be in support roles for this task and managing grant drawdown requests and providing final approval on project deliverables to close out the tasks.	

Scope

The City's Downtown Water Main lies in an area bounded by St. Nicholas Drive (north and east edge), Eighth Ave (south edge), and Holiday Rd (west edge). This project is separated into three phases as shown below (more detailed maps in Appendix 1)



Design quotes must include all three phases, listed per phase. The quote format is listed on p. 9 (Fee Schedule).

Proposal Narrative

The proposal narrative should explain the firm's qualifications to conduct the project, including key personnel who will be assigned to conduct the project; how the assessment will be conducted; and the proposed timeline to conduct the project. All components of the project shall be completed no later than February 28, 2025. The project deliverables shall be of sufficient detail to be used by the City to generate grant and loan applications for submission to state and federal funding agencies. Engineering and design plans shall be to the 100% completion level. Documents and electronic files submitted as part of the project shall become the property of the City and may be modified or amended by the City as necessary to meet the City's needs. Text documents shall be submitted in Microsoft Word format compatible with the current program used in the City; engineering design documents shall be submitted in modifiable CAD format, a PDF file and a hard copy set printed on 11x17 inch paper or larger; and any pictures shall be submitted in jpg or equivalent format.

III. Proposal Assessment Criteria

Proposals will be evaluated based upon the following criteria at the relative weights indicated.

1. **Project Services 15**
   The firm states, in a concise manner, its interpretation and understanding of the project. Proposal demonstrates the firm's comprehension of the objectives and services of the proposed project. The firm identifies what aspects of the project it believes will prove to be the most challenging and how such challenges will be overcome by the firm.

2. **Methods.....15**
   The proposal outlines the methods for accomplishing the proposed project. The proposal describes what, when, where, how and in what sequence the work will be done and identifies the amount and type of work to be performed by any Subcontractors. The proposal explains how each task will be carried out, what services will be required from the City and plans for coordinating work with the City.

3. **Project Management.....5**
   The proposal describes the administrative and operational structures that will be used to perform the proposed work; for example, who has overall responsibility for the contract? What will the lines of authority be? Inclusion of a graphic depiction is preferred in the response to this criterion. The proposal discusses how the physical location of the firm's offices with respect to the project site and the City's offices affect the firm's ability to provide services.

4. **Project Staff.....15**

The proposal names the key individuals who will perform the following functions, and other professional/technical functions deemed essential to the performance of the project.

A. Project Manager: Single point of contact directly engaged in contract performance and compliance.
B. Project Staff: The proposal describes the work to be performed by the individuals named in the proposal and details their specific qualifications and substantive experience directly related to the proposed project.

5. Professional Experience.....20

The proposal identifies the period of time the firm has been performing work similar to that requested in the RFP and the proposal needs to demonstrate that the firm has previous experience designing water main systems in regions where the climate is similar to that in the City of North Pole. The proposal must include descriptions of a minimum of three (3) prior projects that the firm conducted that were similar to the work requested in this RFP. The discussions shall include a summary of the work performed; identifies any of the Project Staff to be assigned to the North Pole project who participated in a prior project; and when and where the work was done. For each contract discussed, the proposal must provide the name of the contracting entity and a reference (contact person and a telephone number). More than three reference projects may be listed. Any project references beyond the minimum three required shall be listed in an appendix. The level of experience will be a factor in assessing a firm's professional experience.

6. Proximity/Affordability to Geographic Location 5

The proposal identifies offices and staff responsible for the project and their proximity to the project site and City offices. The proposal documents what measures will be taken to reduce the engineering firm's cost for visiting with city staff and required inspections. Proximity is a criterion related to familiarity and experience with local conditions that affect the conduct of the project.

7. Estimated Fee Schedule.....20

Proposal provides a reasonable fee estimate in relation to the proposed project activities. The fee estimate contains a breakdown of project activities that at a minimum address:

- Generation of engineering and design documents to the 100% completion level.
- Generation of detailed cost estimates for the different components of the phased design schedule.
- Other. List and describe any other services the firm proposes to provide.

8. Quality of Proposal 5

Submitters do not respond to this criterion. Review Committee members will rate this criterion based upon their evaluation of the clarity, completeness and presentation of the proposal. Note: This criterion is NOT used to evaluate color, graphics or other visual techniques except as they may detract from legibility.

IV. Bid Submission Documents

The firm shall submit four complete copies of the proposal.

Section 1: Proposal Narrative. The body of the proposal shall be labeled **Proposal Narrative.** The Proposal Narrative shall outline how the firm will address each of the project activities listed below. The proposal should address the firm's unique qualifications to conduct the project. The Proposal Narrative shall use the subheadings listed below and shall be single-spaced, printed on single-sided pages using a font size no smaller than 12 point.

- **Project Services**
- **Methods**
- **Project Management**
- **Project Staff**
- **Professional Experience**
- **Geographic Location of Firm**
- **Other** (not required)
- **Appendix.** The Appendix is for the inclusion of Other Submissions and for supplemental information not contained in the body of the proposal like additional project references and project staff resumes. (See Section 4 below.)

Section 2: Proposal Submittals. The proposal submission shall include all the **Required Submittals** that include the items listed below. **Supplemental Submittals** will be required from the winning contractor within ten (10) days of receipt of Notice-of-Intent to Award.

Required Submittals

- **Contactor Information Form (includes acknowledgment of any Addenda issued)--Required with proposal**
- **Fee Schedule--Required with proposal**
- **Alaska Business License--Required with proposal**

Supplemental Submittals

- **Certificate of Insurance—Required with proposal** (See **Insurance Requirements** below.)

Insurance requirements: Certificate of Insurance

Contractor must furnish a certificate of insurance within the (10) days of receipt of the Notice-of-Intent to Award and must provide for a thirty (30) day prior notice of cancellation, non-renewal or material change of the policies. Failure to furnish satisfactory evidence of insurance or lapse of policy shall disqualify any submittal. All policies shall be endorsed with a waiver of subrogation in favor of the Owner. All other insurance policies required of the Contractor by this

agreement shall be endorsed to provide that such insurance shall apply as primary insurance and that any insurance or self-insured carried by the Owner will be excess only and will not contribute with the insurance required by this agreement. All other insurance policies required of the Contractor and subcontractors by this Agreement shall be endorsed to name the Owner as additional insured. All insurance shall be on an occurrence from acceptable to the Owner.

1. Workers' Compensation and Employers' Liability Insurance as required by any applicable law or regulation. Employers' liability insurance shall be in the amount no less than $500,000 each accident for bodily injury, $500,000 policy limit for bodily injury by disease and $500,000 each employee for bodily injury by disease. The Contractor shall be responsible for Workers' Compensation Insurance for any subcontractor who directly or indirectly provides services under this contract. This coverage must include statutory coverage for states in which employees are engaging work. If there is an exposure of injury to Contractor's employees under the U.S. Longshoremen's Harbor Workers' Compensation Act, the Jones Act, or under laws, regulations or statutes applicable to maritime employee, coverage shall be included for such injuries or claims.

2. Commercial General Liability Insurance: The Contractor is required to provide Commercial General Liability (CGL) insurance with limits not less than $1,000,000 combined single limit per occurrence and $2,000,000 in the aggregate not excluding premises operations, independent contractors, products, and completed operations, broad form property damage, blanket contractual, explosion, collapse and underground hazards. Limits may be a combination of primary and excess (umbrella) policy forms.

3. Comprehensive Automobile Liability Insurance: Covering all owned, hired and non-owned vehicles with coverage limits not less than $1,000,000 single limit per occurrence bodily injury and property damage.

4. Property Insurance: The Contractor shall submit to the Owner evidence of All Risk Builder's Risk Insurance for all physical loss, including earthquake and flood (100% completed value basis) upon the entire work naming the Owner, the Contractor and the subcontractors as additional insured parties and as their interests may appear to the full contract sum thereof, until the project is completed by the Contractor and accepted by the Owner. The policy, by endorsement, shall specifically permit partial or beneficial occupancy at or prior to substantial completion or final acceptance of the entire work.

    A. PROOF OF INSURANCE: The Contractor shall furnish the Owner with a Certificate of Insurance or where requested by the Owner, the policy declaration page with required endorsements attached thereto showing the type, amount, effective dates and dates of expiration of all policies. All endorsements shall reference policy number and the project name and project number.

B. To the fullest extent permitted by law, the Contractor shall, upon demand, defend, indemnify and hold harmless the Owner occurs, and employees from and against any and all loss, expense, damage, claim, demand, judgment, fine, charge, lien, liability, action, cause of action, or proceedings of any kind whatsoever (whether arising on account of damage to or loss of property, or personal injury, emotional distress or death) arising directly or indirectly in connection with the performance or activities of the Contractor hereunder, whether the same arises before or after completion of the contractor's operations or expiration of this Agreement, except for damage, loss or injury resulting from the Owner's gross negligence or willful misconduct.

C. Without limiting its indemnification, the Contractor shall maintain, until acceptance of the project by the Owner, occurrence type coverage of the kinds and minimum amounts set forth herein All insurance limits are minimum. If the Contractor's policy contains higher limits, the Owner shall be entitled to coverage to the extent of such higher limits. The Owner, at its sole discretion, may rise or lower the limit.

V. Proposal Submission

Proposals are due to the City of North Pole by 2:00 PM, January 17 (Wed), 2024. It is the sole responsibility of the proposal submitter to see that his/her proposal is submitted on time. The outside of the envelope shall clearly identify the proposal as **City of North Pole Water Main Replacement Design Project.**. Any proposal received after the due date will not be considered and will be held unopened. No responsibility will be attached to any officer or City employee for the premature opening of or failure to open a proposal not properly addressed and identified. Telegraphic or electronic proposals will not be accepted. Proposals should be addressed to:

City of North Pole
City Clerk
125 Snowman Lane
North Pole, AK 99708

The City of North Pole reserves the right to reject any or all proposals, to waive any informalities in the procedures, or to cancel the solicitation if it is in the best interest of the City. The City of North Pole shall have the right to reject any proposals from a submitter determined by the City at its discretion, to not be responsible or not qualified to perform the proposal specifications. A determination that a proposal submitter is not responsible may be made solely on the basis of previous failure to perform properly or to complete contracts.

VI. Questions/Interpretations

Any questions or requests for clarification must be submitted in writing. Written requests for interpretation or correction of any ambiguity, inconsistency, discrepancy, omission, or error in the RFP shall be directed to Danny Wallace, Director of City Services at

rwallace@northpolealaska.org or 907-488-8593. The deadline for submission of questions is by January 12. 2024, Alaska Standard Time. Any interpretations or corrections will be issued in an addendum. Only written interpretations issued by the City of North Pole shall be binding. No other interpretations or corrections shall be considered valid for the preparation of a proposal.

Contractor Information Form

City of North Pole Water Main Replacement Design Project

City of North Pole
125 Snowman Lane
North Pole, AK 99705
Tel: 907-488-2281; Fax: 907-488-3002

Firm's name	Authorized signature
Address	Name/title authorized individual (print)
Address 2	Telephone
City, State, ZIP	Fax

Addenda

Submitter has received and examined the Addenda listed below, receipt of which is hereby acknowledged by listing the Addendum Number and Addendum Date.

Addendum Number	Addendum Date

Fee Schedule

City of North Pole Water Main Replacement Design Project

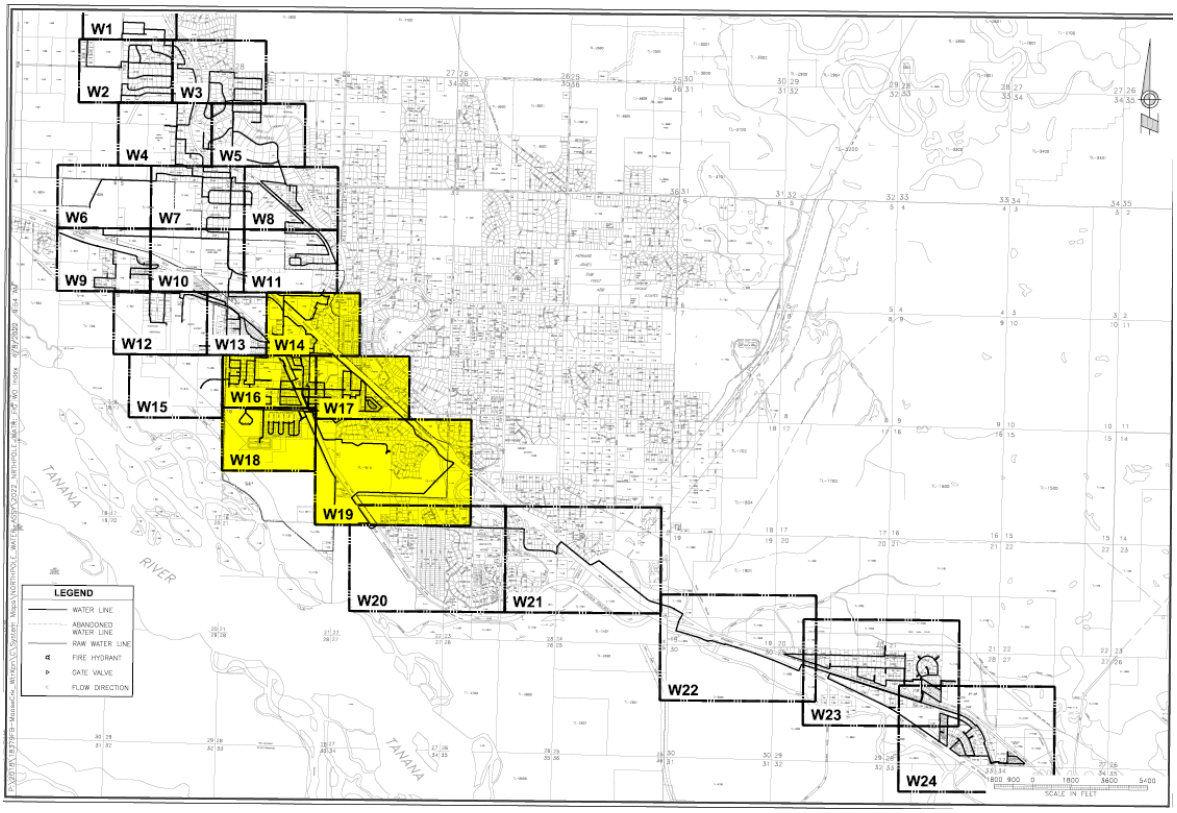
City of North Pole
125 Snowman Lane
North Pole, AK 99705
Tel: 907-488-2281; Fax: 907-488-3002

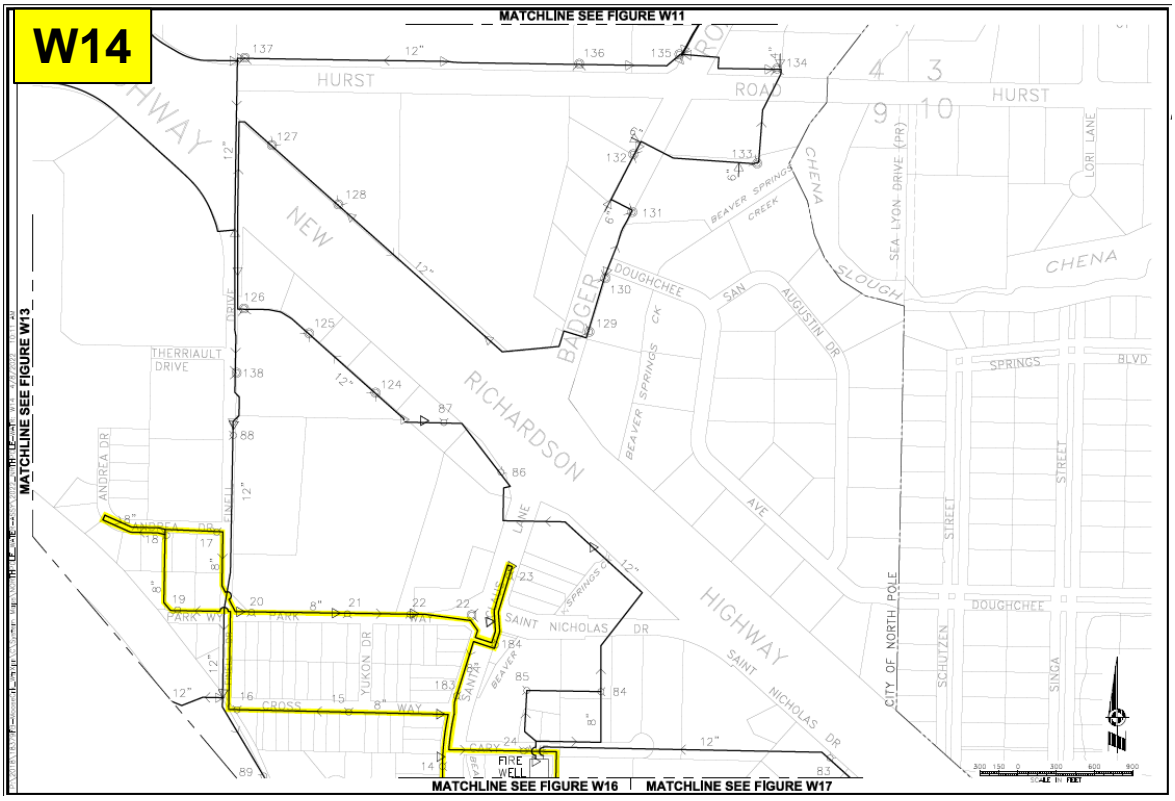
Price Proposal

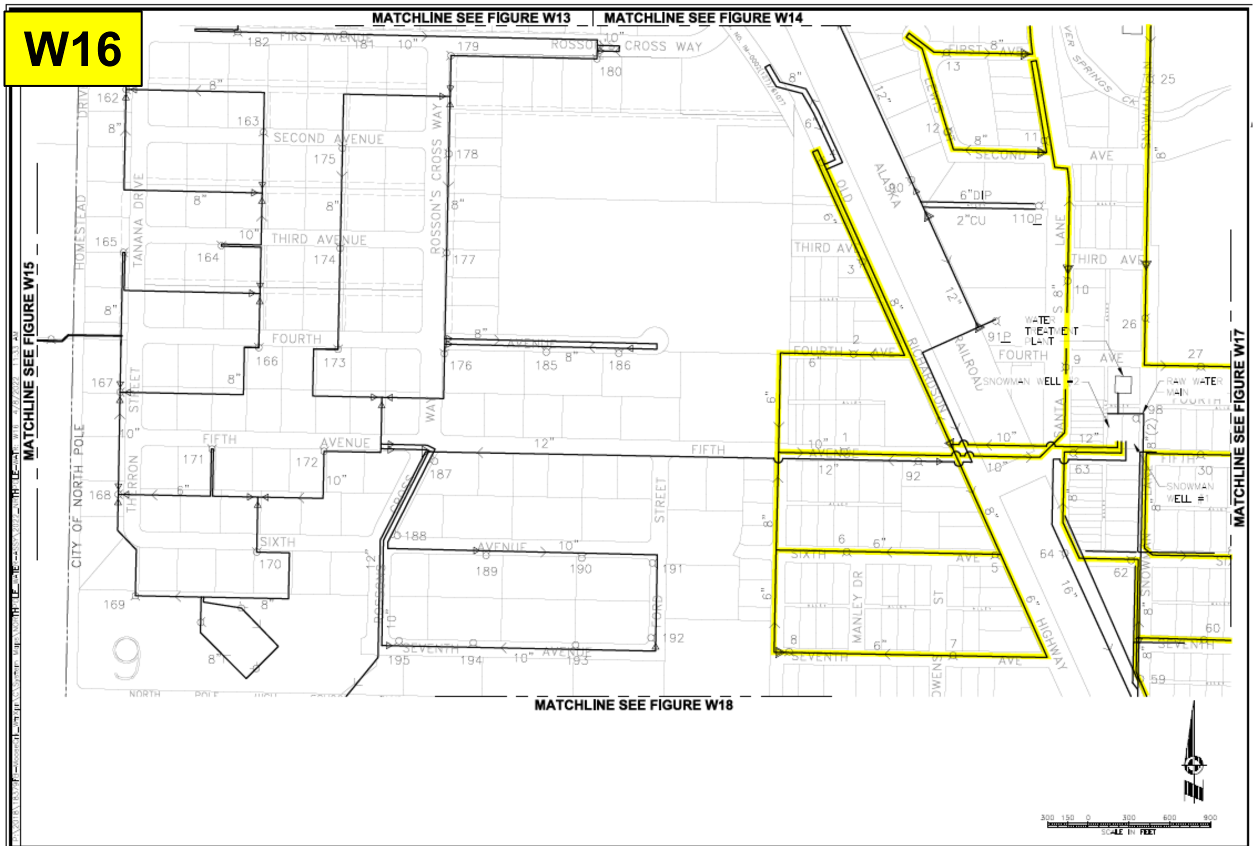
Service	Phase 1	Phase 2	Phase 3
Generation of Preliminary Environmental Report			
Generation of Engineering Report (35%)			
Generation of engineering and design documents to the 100% completion level			
Generation of a recommended phased construction schedule			
Generation of detailed cost estimates for the different components of the phased construction schedule			
Other			
Total Cost			

Note: The City, at its sole discretion, may choose to fund one or more Phases (rather than all Phases)

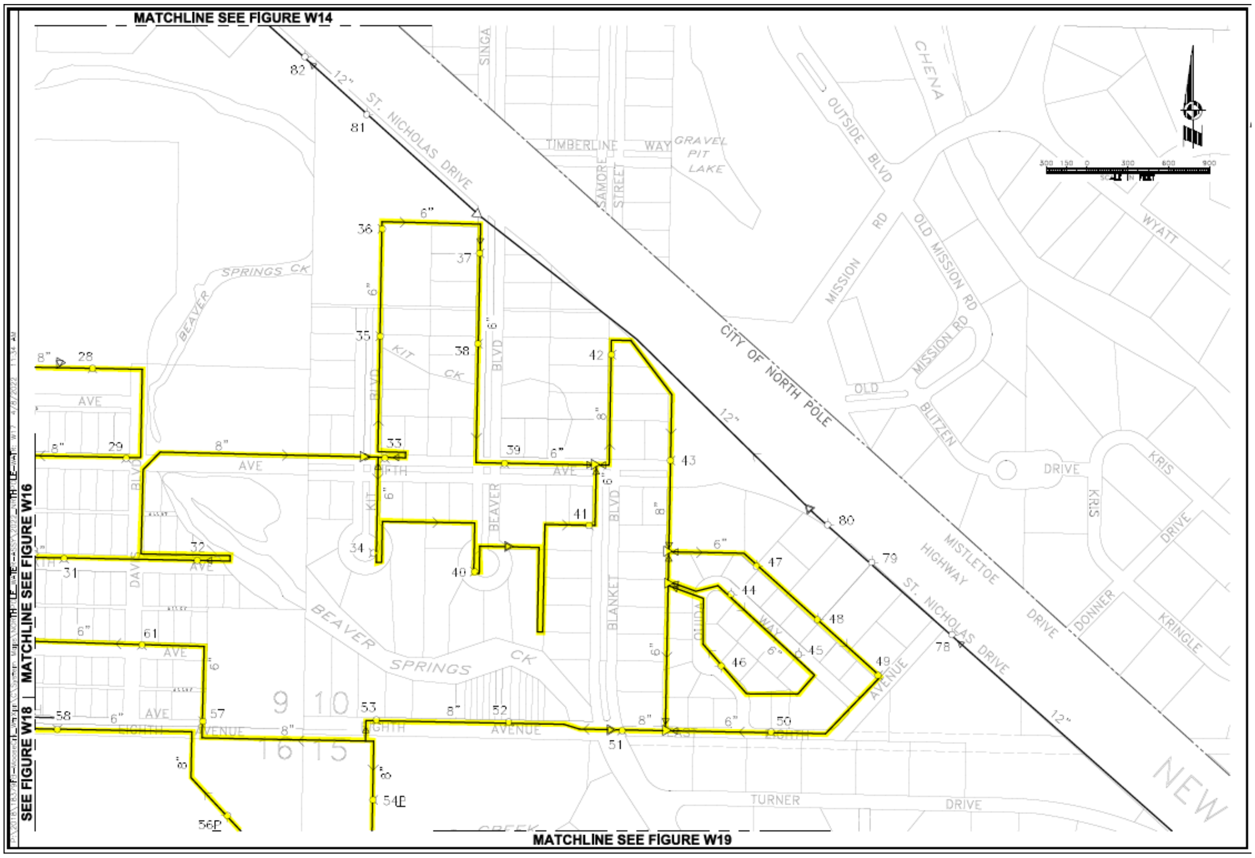
Attachment 1 – Existing Downtown Loop

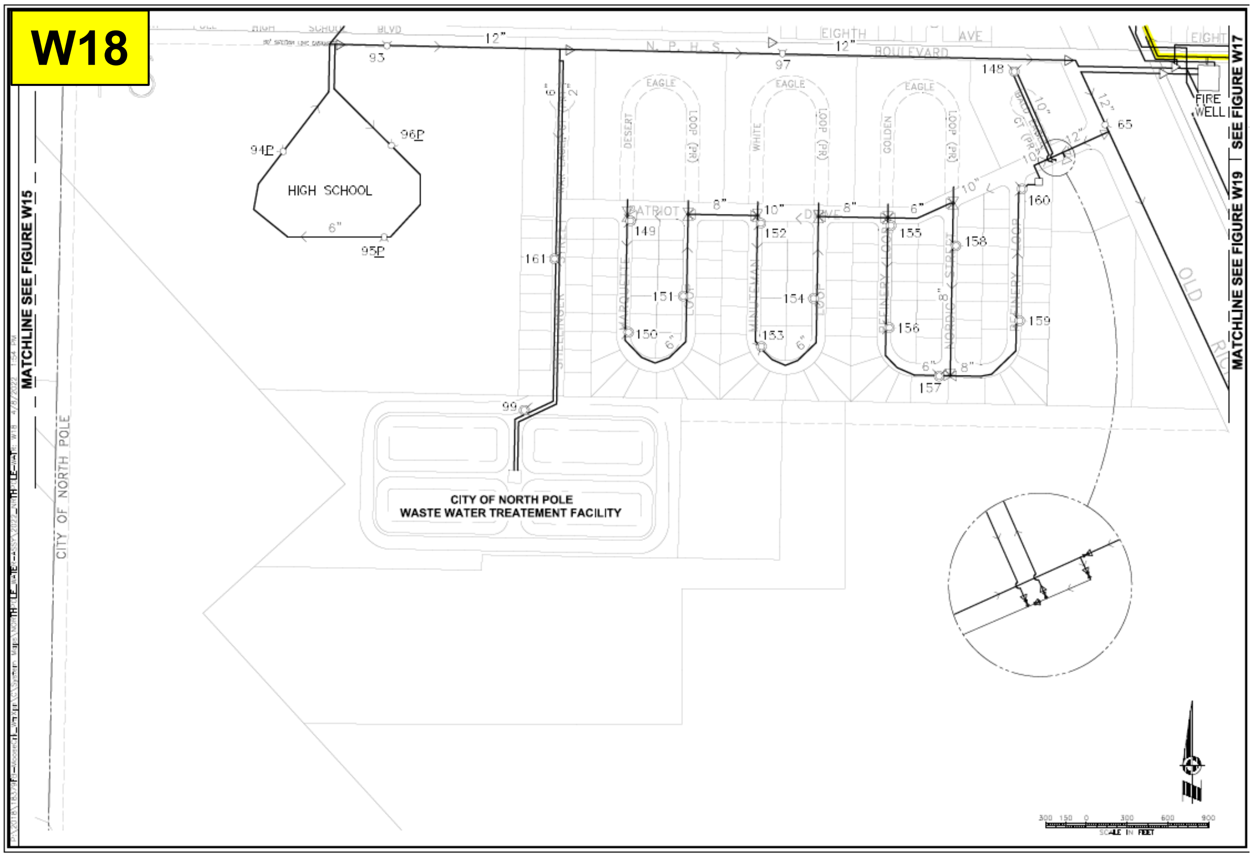


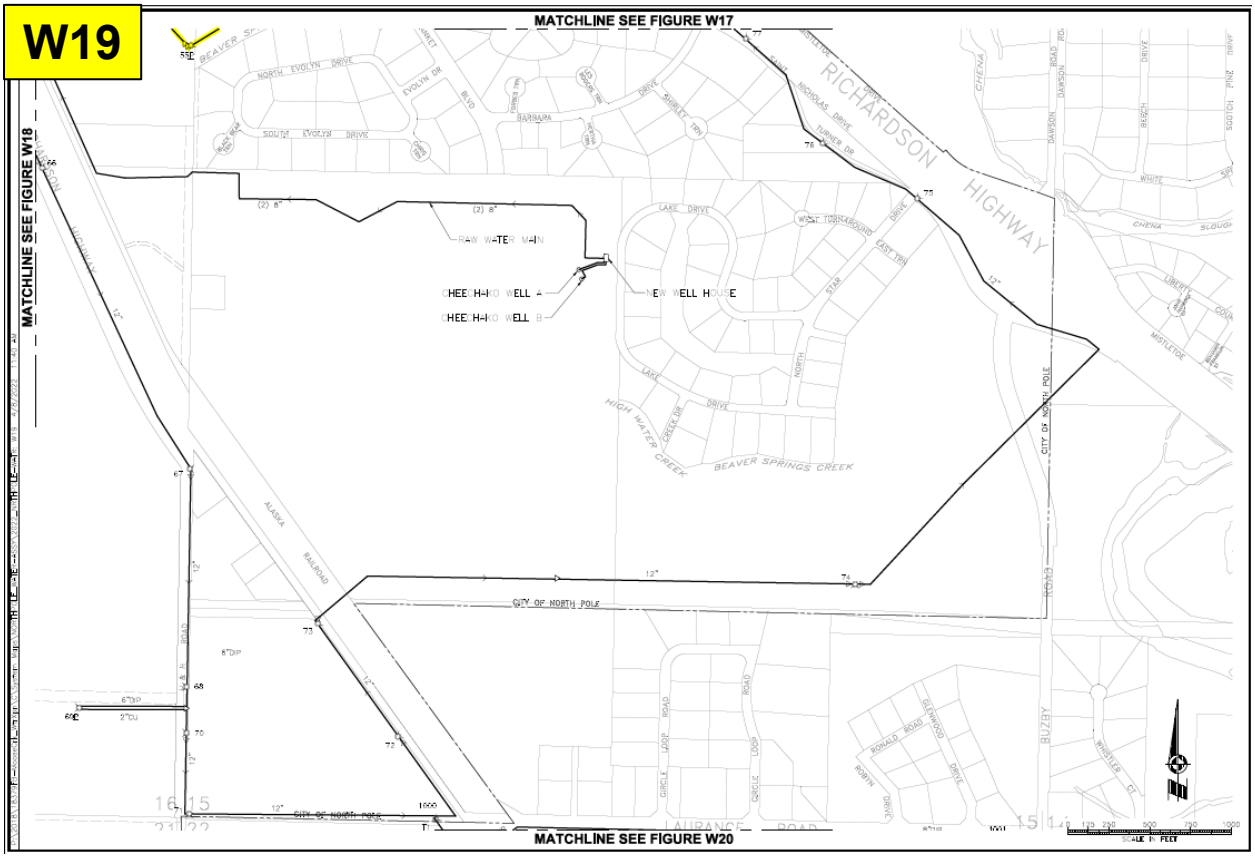

W14
MATCHLINE SEE FIGURE W11
MATCHLINE SEE FIGURE W13
MATCHLINE SEE FIGURE W16
MATCHLINE SEE FIGURE W17
HURST
ROAD
HIGHWAY
NEW
RICHARDSON
HIGHWAY
THERRIAULT DRIVE
ANDREA DR
PARK WAY
YUKON DR
CROSS WAY
SAINT NICHOLAS DR
DOUGHCHEE
SAN AUGUSTIN DR
BEAVER SPRINGS CREEK
BEAVER SPRINGS CK
CHENA SLOUGH
SEA LYON DRIVE (PR)
LORI LANE
SPRINGS BLVD
STREET
CITY OF NORTH POLE
SCHUTZEN
SINGA
FIRE WELL


W16
MATCHLINE SEE FIGURE W13
MATCHLINE SEE FIGURE W14
MATCHLINE SEE FIGURE W15
MATCHLINE SEE FIGURE W17
MATCHLINE SEE FIGURE W18
FIRST AVENUE
SECOND AVENUE
THIRD AVENUE
FOURTH
FIFTH AVENUE
SIXTH
SEVENTH AVENUE
ROSSON'S CROSS WAY
TANANA DRIVE
HOMESTEAD
CITY OF NORTH POLE
OLD RICHARDSON
ALASKA RAILROAD
SANTA CLAUS LANE
MANLEY DR
WATER TREATMENT PLANT
SNOWMAN WELL
RAW WATER MAIN
SCALE IN FEET

W17


MATCHLINE SEE FIGURE W14
MATCHLINE SEE FIGURE W19
MATCHLINE SEE FIGURE W16
SEE FIGURE W18
ST. NICHOLAS DRIVE
CITY OF NORTH POLE
TIMBERLINE WAY
GRAVEL PIT LAKE
OUTSIDE BLVD
OLD MISSION RD
MISSION RD
MISTLETOE HIGHWAY
BEAVER SPRINGS CK
KIT CK
BLANKET BLVD
BEAVER BLVD
TURNER DRIVE
EIGHTH AVENUE
DONNER DRIVE
KRINGLE
WYATT
CHENA
BLITZEN
NEW


W18
MATCHLINE SEE FIGURE W15
MATCHLINE SEE FIGURE W17
MATCHLINE SEE FIGURE W19
HIGH SCHOOL
CITY OF NORTH POLE
WASTE WATER TREATEMENT FACILITY
FIRE
WELL
N. P. H. S.
EIGHTH
BOULEVARD
AVE
12"
10"
8"
6"
93
94P
95P
96P
97
99
148
149
150
151
152
153
154
155
156
157
158
159
160
161
65
SCALE IN FEET


W19
MATCHLINE SEE FIGURE W17
MATCHLINE SEE FIGURE W18
MATCHLINE SEE FIGURE W20
RICHARDSON HIGHWAY
BEAVER SPRINGS CREEK
HIGH WATER CREEK
CHEECHAKO WELL A
CHEECHAKO WELL B
NEW WELL HOUSE
RAW WATER MAIN
CITY OF NORTH POLE
LAURANCE ROAD
ALASKA RAILROAD
BUZBY ROAD
SCALE IN FEET