Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

AWWU 2023 TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

REQUEST FOR PROPOSAL NUMBER 2023P024

SPECIFICATIONS AND CONTRACT DOCUMENTS

Prepared For:

Municipality of Anchorage

Anchorage Water and Wastewater Utility

3000 Arctic Boulevard

Anchorage, Alaska 99503

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

These documents were prepared under the supervision of a registered Professional Engineer.

Municipality of Anchorage

Anchorage Water and Wastewater Utility

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MASTER INDEX

The most current version of the Municipality of Anchorage Standard Specifications (M.A.S.S.) is provided on the Municipality website at

http://www.muni.org/departments/project_management/pages/mass.aspx.

Notifications will be sent when updates are made to the document, but each user of M.A.S.S. is responsible to verify that they are using the most current version.

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

SECTION I

REQUEST FOR PROPOSAL

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

Replace this page with these forms and documents provided by Purchasing.

Invitation to Bid

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

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SECTION II

SPECIAL PROVISIONS

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

INDEX TO THE SPECIAL PROVISIONS

GENERAL PROVISIONS

GENERAL STATEMENT AND EXTENT OF WORK

All proposed Work is located within the Anchorage Water and Wastewater Utility service area. This area includes the Anchorage Bowl, Northern Communities and Girdwood. The successful Contractor under these specifications shall furnish all labor, materials, supervision, tools, transportation, equipment, and other facilities necessary to successfully complete the work set forth in the specifications.

This Contract will provide the Anchorage Water and Wastewater Utility with the ability to respond to emergency or critical maintenance and construction activities. The Contractor will be on-call on an "as-required basis" to construct or reconstruct water and sewer facilities and related appurtenances. The work required will be agreed upon on a project-by-project basis. Payment for all work will be on a unit price basis as bid in the Bid Proposal except as described in these Special Provisions.

The Anchorage Water and Wastewater Utility does not guarantee a certain amount of work with this Contract. This method of contracting will generally be used for a variety of projects where the estimated cost is under $200,000 per task order. Task Orders can exceed $200,000 depending upon the nature of the work and with prior approval of the Purchasing Officer. Due to the uncertainty of the work, AWWU cannot guarantee or anticipate any amount of work. Two (2) Contracts shall be awarded. The estimated range of the first year's Contract amount will not exceed $1,500,000. The Contracts will also include an option of two, one year extensions not to exceed $750,000 per year.

As its option, AWWU reserves the right to perform work of a similar nature throughout its service area.

It shall be the responsibility of the bidder to prepare the bid so that all materials and working arrangements harmoniously conform to the intent of the Contract Specifications and Special Provisions.

SPECIFICATIONS, CODES, ORDINANCES, AND STANDARDS

The Contractor shall perform all Work in accordance with the Contract Documents which include the most current edition of the **Municipality of Anchorage Standard Specifications**, (hereinafter referred to as M.A.S.S.), and herein revised and supplemented as the Special Provisions.

The Contractor shall perform all Work in accordance with the latest edition of all applicable codes, ordinances, standards, and associated addenda including the AWWU Design and Construction Practices Manual (hereinafter referred to as D.C.P.M.).

The M.A.S.S. and D.C.P.M. are available for download at the following links:

M.A.S.S.
http://www.muni.org/departments/project_management/pages/mass.aspx

D.C.P.M.

https://www.awwu.biz/about-us/reliable-infrastructure/design-and-construction-practices-manual

CHANGES TO THE MUNICIPALITY OF ANCHORAGE STANDARD SPECIFICATIONS (MASS)

The following enumerated provisions of MASS are amended as hereinafter stated.

DIVISION 10 STANDARD GENERAL PROVISIONS

SECTION 10.01 DEFINITIONS

Add the following item to the list of definitions:
Contingent Sum – A method for paying a Contract bid item reserved by the Owner for specified contingencies. The Contractor shall perform Contingent Sum work only upon direction from the Engineer. Contingent sum bid items are to be billed against the sum listed in the Bid Proposal on a Time and Materials basis in accordance with Section 10.07, Article 7.4, B – Time and Materials Changes.

Record Drawings – Detailed drawings that accurately depict all changes in location (both horizontal and vertical), material, equipment, and other elements of Work accomplished by the Contractor. The drawings shall also depict the horizontal and vertical locations of all other utilities and obstructions encountered during construction. Final elevations and locations shall be clearly marked with actual dimensions.

SECTION 10.02 BIDDING REQUIREMENTS AND CONDITIONS

Article 2.1 Examination of Bidding Documents and Site

Add the following paragraph to the end of the Article:
For the purposes of this bid document the Contractor shall assume the site is of a typical nature in the developed portions of the Municipality of Anchorage. Typical items encountered in the developed portions of Anchorage can include, but are not limited to, active rights-of-way including vehicles and pedestrian traffic, electrical, lighting, traffic detectors, utility poles, cable television utility structures, telephone utility structures, natural gas utility structures, ground water, silts and clays, water and sewer mains and services and other items to consider in bidding.

Upon notification by the Owner to the Contractor of Work to be completed under this contract, the Contractor shall complete a site investigation. The site investigation shall not disturb or change the conditions found at the work site. Upon the completion of the inspection the contractor shall notify the Owner in writing of potential impacts to work costs and efforts that are not typical of projects in the developed portions of the Municipality of Anchorage.

SECTION 10.03 AWARD AND EXECUTION OF CONTRACT

Article 3.3 Bidder Qualifications

Bidders, when requested by the purchasing officer, are to show that they have successfully installed a combination of water and sewer main of at least one thousand five hundred (1,500) feet within the operating areas of the Anchorage Water and Wastewater Utility over the last five (5) years and have performed work on either PRV Vaults, booster stations, lift stations, or at AWWU treatment plants within same time period. Length of water and/or sewer pipe installed may be verified by AWWU through the use of bidder supplied information and corresponding record drawings that identify the bidder in the record drawing fields. Credit will not be given to the bidder if the bidder name is not provided on the record drawing.

The Bidder is to furnish a list of all bidder owned vehicles and equipment that could be used in the execution of the potential work under this contract.

Article 3.4 Action on Bids

Delete the seventh paragraph and replace with the following:

The amount of the contract will vary upon the Contract Task Orders (CTOs) assigned to the Contractor during the term of the contract. Individual CTOs will make use of bid items the Contractor provides in their bid proposal provided in this solicitation. Work tasks that deviate from the work description of the bid item or tasks not covered under any particular bid item shall be negotiated between the Owner and Contractor prior to the Notice to Proceed. Due to the variability of scope and work effort for individual Contract Task Orders, all Lump Sum bid items shall be negotiated regardless of the unit bid price submitted in this bid.

Article 3.6 Award and Execution of Contract

Delete the fifth paragraph and replace with the following:

The purchase order (PO) shall act as the Notice-to-proceed (NTP) for each task. A separate NTP may be used if noted as such in the PO. The Contractor shall commence performance of work for each task order included in the NTP. The Engineer or his authorized representative and the completion date shall be designated in the NTP.

SECTION 10.04 SCOPE OF WORK

Article 4.4 Estimates of Quantities

Delete the contents of Article 4.4 in its entirety and replace with the following:

The Bid Schedule is a partial list of construction activities, which may be required. The contractor shall submit unit prices with the understanding that the Bid Proposal contains an approximate amount of work expected. **The estimated quantities listed in the Bid Schedules are for evaluation of bids only**. The Utility does not warrant nor guarantee the quantity of work that will be required. Payment for work performed will be made in accordance with the lump sum and unit prices in the Bid Proposal, other miscellaneous work required to complete the bid items shall be considered incidental thereto.

Delete the text of Articles 4.5 Increased Quantities and 4.6 Decreased Quantities in their entirety.

Article 4.12 Public Convenience and Access

Delete the second sentence of the first paragraph and replace with the following:
Without prior approval of the Engineer, entrances or driveways of all kinds shall not be blocked for more than eight (8) hours.

Article 4.17 Utilities

Add the following sentence to the end of the seventh paragraph:
Utility locates are the responsibility of the Contractor to request, coordinate with the Work, maintain, and protect.

Replace the list of Utility Companies in Article 2.7 E with the following:

Alaska Communications (ACS) - Larry Smith, 564-1812

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Anchorage Water & Wastewater Utility (AWWU) – Shawn Dooley, 564-2786

AT&T – Mike Barsalou 264-7325

Chugach Electric Association (CEA) – Gary Meadows, 242-2191

ENSTAR Natural Gas - Stan Staples 334-7777

GCI Cable – David Blehm, 868-6769

Municipal Light & Power (ML&P) – Victor Willis 263-5812

Municipal Street and Storm Drain Maintenance, Paul VanLandingham, 343-8372, or 317-7054

Municipal Street Light Maintenance–343-8242

Municipal Traffic Signals Section –343-8355

Solid Waste Services (SWS) – Evalu Filitaula, 343-6258 or 317-6863

Matanuska Electric Association (MEA) – Tom O'Hare, 761-9281

Matanuska Telephone Association (MTA) – Robbie Nash, 761-2704

Eagle River Street & Storm Drain Maintenance – Mark Littlefield, 343-1512

Alaska Waste – Josh James, 688-4446

Add the following new Article:

New Article 4.22 Responsibility of Contractor to Act in Emergency

In case of an emergency that threatens loss and/or injury of property and/or safety of life, the Contractor shall act, without previous instructions from the Engineer, as the situation may warrant. The Contractor shall notify the Engineer thereof immediately thereafter. Any claim for compensation by the Contractor, together with substantiating documents in regard to expense, shall be submitted to the Owner through the Engineer. The amount of compensation shall be determined by agreement.

The Contractor shall supply the Engineer, prior to commencement of Work, with an emergency telephone number through which a responsible Contractor's representative can be contacted on a twenty-four (24) hour a day basis.

New Article 4.22 Responsibility of Contractor to Act in Emergency

The Contractor shall not accept any individual project or work order under this Contract in excess of $100,000 without prior consent of the Purchasing Officer, or his/her designee.

SECTION 10.05 CONTROL OF WORK

Article 5.3 Construction Progress Schedule and Schedule of Values

Add the following paragraphs after the second paragraph:

The Contractor shall also deliver, at the same time as the Construction Progress Schedule, in a form satisfactory to the Engineer, a Schedule of Values detailing the costs of providing all labor, equipment, supplies, transportation, handling, and disposal in connection with the removal of system plant infrastructure as listed in the table below.

Plant system category	Plant system subcategory
Wastewater collection plant	• Gravity sewer main (size) • Sewer force main (size) • Manhole (type) • Cleanout
Sewer pumping plant	• Pump station structure and improvements • Pump station wells • Electric pumping equipment
Wastewater treatment and disposal plant	• Treatment structures and improvements • Treatment and disposal equipment • Outfall sewer lines
Water source supply	• Structures and improvements • Collecting and impound reservoirs • Wells and springs • Supply mains (size)
Water pumping plant	• Structures and improvements (vaults or vertical building) • Electric pumping equipment (pumps, electrical systems) • Diesel pumping equipment • Other power production equipment • Booster pumping equipment
Water treatment plant	• Structures and improvements • Water treatment equipment
Water transmission and distribution plant	• Structures and improvements • Distribution reservoir • Transmission and distribution mains (pipe, valves, pressure reducing vaults) • Services (key box and pipe to main) • Meters • Fire hydrants
General plant	• Structures and improvements

Work items not listed in a subcategory shall be incidental to the subcategory item.

A. Schedule of values format and content:

1. Arrange the schedule of values in tabular form with separate columns to indicate the following for each item listed:

   a. Related specification section or division.

   b. Description of Work.

c. Name of subcontractor.

d. Name of manufacturer or fabricator.

e. Name of supplier.

f. Change orders (numbers) that affect value.

g. Dollar value (percentage of contract sum to nearest percent, adjusted to total 100 percent).

2. Provide a breakdown of the contract sum in sufficient detail to facilitate continued evaluation of applications for payment and progress reports. Coordinate with the project manual table of contents. Break principal subcontract amounts down into several line items.

3. Round amounts to nearest whole dollar. The total shall equal the contract sum.

4. Provide a separate line item in the schedule of values for each part of the Work where applications for payment may include materials or equipment, purchased or fabricated and stored, but not yet installed.

   a. Differentiate between items stored on-site and items stored off-site. Include requirements for insurance and bonded warehousing, if required.

5. Provide separate line items on the schedule of values for initial cost of the materials, for each subsequent stage of completion, and for total installed value of that part of the Work.

6. Margins of cost: Show line items for indirect costs and margins on actual costs only when such items are listed individually in applications for payment. Each item in the schedule of values and applications for payment shall be complete. Include the total cost and proportionate share of general overhead and profit margin for each item.

   a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be either shown as separate line items in the schedule of values or distributed as general overhead expense, at the Contractor's option.

7. Schedule updating: Update and resubmit the schedule of values prior to the next applications for payment when Change Orders or construction change directives result in a change in the contract sum.

Article 5.4 Non-Working Hours, Holidays, Saturdays, and Sundays

Add the following sentence to the end of the last paragraph:
A standard workday is a ten (10) hour workday (excluding meal times) within the timeframe of no earlier than 7:00 a.m. and no later than 7:00 p.m.

Article 5.22 Time for Completion of Work

Add the following sentence to the end of the first paragraph:
Time of completion for each Contract Task Order will be determined on a project-by-project basis and as specified during the negotiations for Work. The Contractor shall begin construction no later than the date specified in the written Notice-to-Proceed or issued Purchase Order for each Contract Task Order.

The term of these Contracts will be one (1) year from the execution date of these Contracts.

The Contracts may be extended for up to two (2) additional one (1) year periods upon mutual written consent by each party. Neither party is obligated to extend the Contract period. All unit bid prices and equipment sheets shall be updated and agreed upon in writing by the Contractor and Owner a minimum of 30 days prior to executing any contract extension.

Article 5.27 Liquidated Damages

Delete the first two sentences of the first paragraph and replace with the following:
The Owner may withhold out of any progress payment the sum of Five Hundred Dollars ($500.00) per day as Liquidated Damages for each and every calendar day that the Substantial Completion Date is delayed beyond the Contract Task Order Completion Date specified in Article 5.22, Time for Completion of Work. In addition, after substantial completion, the Owner may withhold out of any progress payment the sum of Two Hundred Fifty Dollars ($250.00) per day as Liquidated Damages for each and every calendar day that the Final Acceptance Date is delayed beyond the Contract Task Order Completion Date. If no money is due the Contractor, the Owner shall have the right to recover said sums from the Contractor, the Surety, or both. This applies only to each Contract Task Order and not the Master Contract.

SECTION 10.06 LEGAL RELATIONS AND RESPONSIBILITIES

Article 6.6 Permits

Add the following sentence to the end of the sixth paragraph:
The Contractor shall identify the “Anchorage Water and Wastewater Utility” as the applicant on any permit application forms.

Article 6.9 Insurance

Remove and replace the fifth sentence of the first paragraph with the following:
The insurance company must provide written notification to the MOA contract administrator of any material change, cancellation, or non-renewal of the insurance policies. If the insurer does not notify the MOA in these circumstances, it will be the contractor’s responsibility to make that notification.

Article 6.10 Indemnification

Add the following paragraph after the second paragraph:
Assumption and Indemnity. The Contractor shall perform this Contract and carry out its Work and operations related to this Project pursuant to and in conformance with the Utility Permit (Major) (the "Permit") issued by the State of Alaska Department of

Transportation and Public Facilities (the "Department") for this Project, a copy of which Permit is attached to this Contract in Section XIV. The Contractor hereby assumes all duties, obligations and liabilities imposed on the Utility Company/AWWU or the Owner/Municipality by the Permit, the Alaska Statutes specified or referred to in the Permit, the terms, requirements and regulations specified or referred to in the Permit, the applicable policies, directives and orders issued by the Commissioner of the Department as referred to in the Permit, and any other obligations or liabilities imposed on Utility Company/AWWU or the Owner/Municipality under any agreement or requirement of Utility Company/AWWU or the Owner/Municipality to indemnify, hold harmless and or defend the Department or the State of Alaska on this Project. In addition, the Contractor shall indemnify, hold harmless and defend Utility Company/AWWU and the Owner/Municipality for any claims, actions, charges, liabilities, obligations, penalties, damages, costs and expenses (including costs and attorney's fees) arising, claimed or charged against Utility Company/AWWU or the Owner/Municipality for damage to property or injury to or death of persons, arising wholly or in part from any action taken by or failure to be taken by the Contractor (including, but not limited to, its employees, officers, agents, contractors, subcontractors, licensees or similar persons), Utility Company/AWWU or the Owner/Municipality in relation to the Project.

SECTION 10.07 MEASUREMENT AND PAYMENT

Article 7.2 Scope of Payment

Add the following paragraphs:
The Contractor shall provide security for its equipment and materials at all job sites. The Contractor shall hold the Municipality harmless for any damage, which occurs to Contractor's equipment or materials during the course of any project.

Payment for work items shall be made at a single contract unit price based on the total quantity of materials used. Only one unit price shall be applied to the total quantity of material used. The single unit price paid shall correspond to the quantity-based unit price in the contract. Payment shall not be made incrementally.

For example: If the task requires 150 tons of Type IIA Classified Fill and Backfill and the contract has the following quantity-based work items:

Type IIA Classified Fill and Backfill	0 to 25 Tons
Type IIA Classified Fill and Backfill	26 to 100 Tons
Type IIA Classified Fill and Backfill	Over 100 Tons

Payment for all 150 tons of Type IIA Classified Fill and Backfill for the subject task or work order shall be paid under the contract unit price for "Type IIA Classified Fill and Backfill, Over 100 Ton." No payment will be made at the quantity-based unit prices for the 0 to 25 tons or for the 26 to 100 ton increments.

Article 7.4 Change Order Compensation Adjustments

Delete the first two paragraphs of this article and replace with the following:
The Engineer may request other construction services and materials, which may be required to fulfill the scope of the individual Contract Task Orders. The Contractor may be requested to provide to the Engineer a written quotation for approval prior to proceeding with any work and shall proceed only upon written notice by the Engineer. These additional services and materials will be paid for at negotiated unit or lump sum prices. The Contractor agrees, upon request of the Engineer, to provide for the benefit of AWWU any additional construction services, materials or non-bid items at the best available prices.

Prior to the Notice-to-Proceed for this Contract, the Contractor shall provide a list of equipment it currently has available. The equipment list shall include the description, model number, year the equipment was manufactured and hourly rates.

The Contractor may receive some of the materials required for individual Contract Task Orders from the AWWU Warehouse. When materials have been received from the AWWU Warehouse, such materials must be replaced by the Contractor and delivered to the AWWU supply yard. These materials will be paid for in accordance with this specification.

Article 7.5 Progress Payments

Add the following paragraphs after the second paragraph:

A. Applications for payment

1. Each application for payment shall be consistent with previous applications and payments as certified by the Owner's representative and paid for by the Owner.

    a. The initial application for payment, the application for payment at time of Substantial Completion, and the final application for payment involve additional requirements.

2. Application preparation: Complete every entry on the form. Include notarization and execution by a person authorized to sign legal documents on behalf of the Contractor.

    a. Entries shall match data on the schedule of values and the Contractor's construction schedule. Use updated schedules if revisions were made.

    b. Include amounts of Change Orders and construction change directives issued prior to the last day of the construction period covered by the application.

3. Transmittal: Submit one (1) signed and notarized original copy of each application for payment to the Owner's representative by a method ensuring receipt within twenty-four (24) hours. One copy shall be complete, including OEO reports and similar attachments, when required.

a. Transmit each copy with a transmittal form listing attachments and recording appropriate information related to the application, in a manner acceptable to the Engineer.

4. Initial application for payment: Administrative actions and submittals, that must precede or coincide with submittal of the first application for payment, include the following:

   a. List of subcontractors.

   b. List of principal suppliers and fabricators.

   c. Schedule of values.

   d. Contractor's construction schedule (preliminary if not final).

   e. Schedule of principal products.

   f. Schedule of unit prices.

   g. Submittal schedule (preliminary if not final).

   h. List of Contractor's staff assignments.

   i. List of Contractor's principal consultants.

   j. Copies of permits.

   k. Initial progress report.

5. Application for payment at substantial completion: Submit an application for payment following issuance of substantial completion.

   a. This application shall reflect certificates of partial substantial completion issued previously for Owner occupancy of designated portions of the Work.

   b. Administrative actions and submittals that shall precede or coincide with this application include:

      i. Occupancy permits and similar approvals.

      ii. Warranties (guarantees) and maintenance agreements.

      iii. Maintenance instructions.

      iv. Changeover information related to Owner's occupancy, use, operation, and maintenance.

      v. Final cleaning.

      vi. List of incomplete Work, recognized as exceptions to Engineer's issuance of substantial completion.

Contractor shall submit, with the first application for payment, a copy of the Notice of Work executed by the State Department of Labor, Wage & Hour Administration. Failure to submit a copy of this form with the first application for payment will result in the withholding of $5,000 from the progress payment. Additionally, a filing may be issued to the Wage & Hour Administration for failure to provide such notice.

Add the following to the list of Withholdings, the fourth paragraph:

9. Failure to submit the detailed Schedule of Values consisting of several elements as required. (The Engineer cannot pay on any of the items specified to be broken down until the breakdown is received and accepted).

10. A maximum of $5,000 for failure to provide a Notice of Work and/or a Notice of Completion as required by Alaska Statute 36.05.045. For final payments, the difference between $5,000 and the actual amount paid for the Notice of Work filing shall be withheld until such time as the Contractor provides a copy of the Notice of Completion executed by the Wage & Hour Administration to the Engineer.

11. The value of items missing by the contract documents. Examples include, but are not limited to, record drawings; operations and maintenance manuals; Department of Labor Notice of Work and/or Notice of Completion, ADEC Notice of Completion form, or other items as listed in the schedule of values or elsewhere required in the contract documents.

Add the following sentence to the end of the list of withholdings:
Monies withheld under Article 7.5 - Progress Payments, shall be paid to the Contractor by subsequent pay estimates that follow the date on which the Contractor satisfactorily corrects the deficiencies causing the withholding.

Delete the fifth paragraph and replace with the following:
The amount of any withholding for items one (1) through eight (8) above shall be the reasonable value of the Work or remedy to be accomplished as estimated by the Engineer, without regard to bid amount of cost to the Contractor. The amount of withholding for items seven (9) through eleven (11) shall be in accordance with the claimed amount or the applicable Contract provisions.

Add the following paragraph to the end of the Article:
The monthly pay estimate shall be computed on the basis of Work completed. All quantities shall be subject to review by the Engineer prior to approval for payment. Monthly price allocation for payment of lump sum items shall be based on the approved construction progress schedule and schedule of values.

The State of Alaska funds this Contract (in part); therefore, the provisions of Alaska Statute 36, Section 36.90, and Article 3 entitled "Public Construction Contract Payment" apply.

New Article 7.9 Compensation for Contract Task Order Work Not Paid at Unit Prices

Add the following paragraph:

The Municipality reserves the right to issue Contract Task Orders as either negotiated fixed price or as paid for on a time and materials basis. When the contract task order is issued as either a negotiated rate or under time and materials, the calculation and payment of costs shall be in accordance with Article 7.4, Change Order Compensation Adjustments, with the exception that Contractor Owned Equipment shall be allowed a 10% markup for profit and overhead.

DIVISION 20 EARTHWORK

SECTION 20.01 GENERAL

Article 1.6 Subsurface Investigation

Delete the first paragraph and replace with the following:
AWWU may or may not have soils information for the location where work is to be performed. If AWWU does have information, it will be provided to the Contractor.

SECTION 20.02 STORM WATER POLLUTION PREVENTION PLAN

Article 2.19 Basis of Payment

A*dd the following pay item:*

ITEM	UNIT
Storm Water Pollution Prevention Plan (Type)	Contingent Sum

SECTION 20.12 DEWATERING

Article 12.3 Construction

Add the following paragraph to the end of the Article:
Trench dewatering shall be required to protect adjacent utilities and property and to install the new utility lines successfully. The Contractor shall provide copies of any and all dewatering permits and approvals to the Engineer.

Article 12.5 Basis of Payment

Add the following Pay Items:

ITEM	UNIT
Dewatering	Contingent Sum

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SECTION 20.13 TRENCH EXCAVATION AND BACKFILL

Article 13.2 Trench Excavation and Backfill – Description

Add the following paragraphs after the fifth paragraph:
The Contractor shall minimize the width of the trench through use of shoring, sheeting, bracing, or portable trench shield for this Project.

Payment to the Contractor for Work resulting from any excavation required for this project, whether paid for on a cubic yard, ton, or linear foot basis, shall not exceed the following limits:

1. Horizontal pay limits: Horizontal pay limits shall be limited to a maximum of the outside diameter of the pipe, fittings, or other facility under construction, plus an additional 1.5 feet on each side of the facility at the bottom of the trench, to a maximum of 4 feet total bottom width for pipe trench, plus the projected horizontal width of the 1 horizontal to 1.5 vertical side slopes, beginning at the top of the bedding prism as shown on the Drawings.

2. Vertical pay limits: Vertical pay limits shall be limited to the depth from existing grade to the bottom of pipe, fittings, or other facility, plus any excess excavation necessary for bedding material and/or foundation material, as directed by the Engineer.

Article 13.3 Construction

E. Locator Tape

Delete the fourth sentence and replace with the following:
The Contractor shall install the locator tape at least 24 inches but no more than 36 inches above the crown of the pipe.

Add the following paragraph to the end of the article:

Article 13.5 Basis of Payment

Add the following Pay Items:

ITEM	UNIT
Trench Excavation and Backfill (various depths) 0-150 linear feet	Linear Foot
Trench Excavation and Backfill (various depths) 151-250 linear feet	Linear Foot

SECTION 20.16 FURNISH BEDDING MATERIAL

Article 16.2 Materials

D. Class “E” Bedding

Add the following paragraph to the end of the subarticle:
In addition to the grading limits above, the fraction of materials passing the #200 sieve shall not be greater than 20 percent of that fraction passing the #4 sieve. The material shall not include mechanically fractured materials.

SECTION 20.27 DISPOSAL OF UNUSABLE OR SURPLUS MATERIAL

Article 27.2 Construction

Add the following paragraph to the end of the Article:
If asbestos-cement pipe is encountered and has to be removed from the trench and disposed of, the Contractor is hereby notified that Federal regulations governing the removal and disposal of asbestos are NESHAP 40 CFR, Part 61, Subpart M, and OSHA 29 CFR 1910. The Alaska Department of Environmental Conservation requirements include, but are not limited to 18 AAC 50, Air Quality Control Regulations, and 18 AAC 60, Solid Waste Management Regulations. The Alaska Department of Labor governing regulations include, but are not limited to Occupational Safety and Health Standard, Subchapter 04.0103: Asbestos; 8 AAC 61.600.790 Article 8; and Alaska Workers Right to Know, AS 18.60. Asbestos-cement pipe removed from the trench must be handled and disposed in accordance with the applicable Federal and State regulations.

Asbestos-cement pipe must be disposed of and declared at the Hiland Road Municipal Landfill.

DIVISION 40 ASPHALT SURFACING

SECTION 40.04 TACK COAT

Article 4.5 Measurement

Delete this Article in its entirety and replace with the following:
Tack Coat shall not be measured as it is considered incidental to pay Item 40.06 A.C. Pavement.

Article 4.6 Basis of Payment

Delete this Article in its entirety and replace with the following:
No separate payment shall be made for tack coat as it shall be incidental to the Contract.

DIVISION 50 SANITARY SEWERS

SECTION 50.04 SANITARY SEWER PIPE CONNECTIONS AND EXTENSIONS

Article 4.1 General

Add the following paragraph after the list of the first paragraph:
The Work also includes, but is not limited to, the disconnection of existing Utility Company sewer customers presently served by the affected mains, the removal or abandonment of existing sewer services where required, and the reconnection of existing customers to the new sewer mains and service extensions at the property line.

For all current Utility Company customers affected by the new sewer mains, the Contractor shall replace the existing sewer service between the new main and the property or right-of-way line. This work includes disconnecting the existing sewer services at or near the property line and reconnecting the on-property portion of the existing sewer services to the new main with new service materials. The Contractor shall provide all necessary fittings, adapters, pipe, and other appurtenances to make a complete functioning system.

Delete the first two sentences of the third paragraph and add the following:
The actual location, type, and size of the existing sewer service may vary from that shown on the Drawings. The Contractor shall use whatever reasonable means or methods necessary to determine the actual location of the sewer service prior to beginning excavation.

Article 4.4 Construction

Add the following after the first paragraph of the subarticle, A:
The disconnection, new service materials, and reconnection of the existing sewer service shall be in accordance with this specification and in accordance with the most recent version of the AWWU Design and Construction Practices Manual. The Contractor shall construct the sewer service connection in a straight run to the main whenever possible. If bends are required to install the service connection, install bends less than 45 degrees so that cleanouts are not required in the new section. Pipe used in the new sewer service connection extension shall be installed so that deflections in pipe joints do not exceed 80 percent of the manufacturer's recommended maximum deflection. The new sewer service modification or extension pipe shall be the same diameter as the pipe being modified or extended.

The Contractor shall insulate all service lines less than 5.5 feet and greater than 4.5 feet in depth from the finish ground surface at the property line to 2 feet past the new sanitary sewer main. Insulation shall be installed per the most current version of the AWWU Design and Construction Practices Manual.

All surface areas disturbed or damaged by the installation of sewer service lines or other related construction activities of the Contractor shall be restored to their original condition. The Contractor shall replace surfacing or cover material with new material in kind.

Article 4.5 Measurement

Add the following to the end of the Article:
The removal and disposal of existing service piping and connection appurtenances encountered in the excavation is incidental to this Work.

Any manmade objects or improvements that conflict with the installation of the service lines shall be carefully removed by the Contractor and replaced in their original condition and at their original location at the completion of the Work. The restorations of manmade objects or improvements for a given lot, including landscaping, shall be considered incidental to the Contract, and no separate payment shall be made for this Work. Compaction of the sewer service trench shall be considered incidental to the Contract, and no separate payment shall be made for this Work.

SECTION 50.07 SEWER CLOSED CIRCUIT TELEVISION INPSECTIONS

Article 7.1 General

Add the following:

The Contractor shall furnish all labor, materials, and equipment necessary for the proper cleaning of the sewer lines and manholes designated for inspection by closed-circuit television and rehabilitation. Cleaning shall be completed prior to inspection by closed-circuit television and prior to rehabilitation. Sewer line cleaning may be performed with high-velocity hydro-cleaning equipment, or mechanical cleaning equipment.

Article 7.3 Materials

Add the following:

High velocity hydro-cleaning equipment shall have the following:

1. A minimum of 900 feet of high pressure hose.
2. Two or more high velocity nozzles capable of producing a scouring action from 10 degrees to 45 degrees in all size lines to be cleaned.
3. A high velocity gun for washing and scouring manhole walls and floor with the capability of producing flows from a fine spray to a long distance solid stream.
4. A water tank with a minimum 1000-gallon capacity, auxiliary engines and pumps, and a hydraulically driven hose reel.
5. Equipment operating controls located above ground.
6. Minimum working pressure of 1,000 pounds per square inch at a 50 gpm rate.

Mechanical cleaning equipment shall be either power buckets or power rodders.

For bucket machines, furnish with buckets in pairs and with sufficient dragging power to perform the Work efficiently. Use V-belts for power transmission or have an overload device. No direct drive machines will be permitted. Bucket machines shall be equipped with a take-up drum and a minimum of 500 feet of cable.

Rodding machines shall be either sectional or continuous and hold a minimum of 750 feet of rod. The rod shall be specifically heat-treated steel. The machine shall be fully enclosed and have an automatic safety throw out clutch or relief valve.

Article 7.3 Construction

Add the following:

A. Sewer Line and Manhole Cleaning

The designated sewer pipe sections from manhole to manhole shall be cleaned using high velocity jet, or mechanically powered equipment. Selection of the equipment used shall be based on the condition of the sewer lines and manholes at the time the Work commences. The equipment shall be capable of removing dirt, grease, rocks, sand, pipe coating debris and other materials and obstructions from the sewer lines and manholes. If cleaning of an entire section cannot be successfully performed from one manhole, the equipment shall be set up on the other manhole and cleaning again attempted. The cleaning Work shall be performed to a level required to provide satisfactory television inspections and to prepare the pipeline for rehabilitation as required in these Contract Documents

B. Cleaning Precautions

The Contractor shall be responsible and repair, at no cost to the Owner, any damage to the structure of a sound sewer pipe caused by use of the sewer cleaning equipment. Further, the Contractor shall be responsible for any damage to properties connected to the sewer which result from the sewer cleaning operation.

Cleaning shall be accomplished so that television inspection and sewer pipe or sewer manhole rehabilitation can be properly accomplished, as determined by the Engineer, or the line shall be re-cleaned at no additional cost to the Owner.

C. Material Removal

All sludge, dirt, sand, rocks, grease, and other solid or semisolid material resulting from the cleaning operation shall be removed at the downstream manhole of the section being cleaned. Passing material from manhole section to manhole section will not be permitted, as this may cause line stoppages, accumulation of sand in wet wells, or damage to pumping equipment.

D. Material Disposal

All solids or semisolids resulting from the cleaning operations shall be removed from the site and disposed of by the Contractor. All materials shall be removed from the Work site at the end of each workday. Under no circumstances will the Contractor be allowed to accumulate debris, etc., on the work site beyond a single workday, except in totally enclosed containers and as approved by the Engineer. The material resulting from the sewer pipe and manhole cleaning operations shall be disposed by the Contractor at the AWWU disposal station for solid or semisolid sewer debris that is located at the AWWU King Street maintenance facility.

E. Final Acceptance

Final acceptance of the sewer line cleaning shall be made upon the successful completion of the television inspection as required in these Contract Documents. If television inspection shows the cleaning to be unsatisfactory, the Contractor shall be required to re-clean and re-inspect the sewer line by television inspection until the cleaning is shown to be satisfactory, at no additional cost to the Owner.

Article 7.5 Measurement

Add the following:

Measurement for sewer line and manhole cleaning Work shall be based on the horizontal distance from center of manhole to center of manhole regardless of the size of the pipe.

Article 7.6 Payment

Add the following:

Payment for this Work includes all labor, tools, equipment, apparatus, and incidentals required to complete the Work described in this Section. There shall be no additional payments for resetting up equipment if the cleaning equipment will not pass through a section between manholes. In addition, payment for sewer line cleaning of a particular pipe section from one manhole to the next shall not exceed the total linear feet between the centerline of the manholes at each end of the pipe section.

ITEM	UNIT
Sewer Line Cleaning	Linear Foot
Manhole Cleaning	Each

DIVISION 60 WATER SYSTEMS

SECTION 60.01 GENERAL

Article 1.2 Applicable Standards

Add the following items to the list of standards:

ANSI/AWWA C550-05	Standard for Protective Epoxy Interior Coatings for Valves and Hydrants
AWWA M23	PVC Pipe - Design and Installation
ASTM D1784-07	Standard Specification for Rigid Polyvinyl Chloride (PVC) Compounds and Chlorinated Poly Vinyl Chloride (CPVC) Compounds
ASTM D2837-04	Standard Test Method for Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials or Pressure Design Basis for Thermoplastic Pipe Products

SECTION 60.02 FURNISH AND INSTALL PIPE

Article 2.3 Materials

I. Fittings and Gaskets

Delete the first two sentences of the fifth paragraph and add the following:
Only stainless steel bolts shall be used.

Add the following to the end of the fifth paragraph:
Only lubricants with NSF 61 certification shall be used as approved by the Engineer.

Article 2.4 Construction

Add the following to the end of the first paragraph:
The water interruptions should only occur during periods of low water demands, as determined by the Owner. The Contractor shall be responsible for minimizing the interruptions to the water service throughout the project.

Delete the first sentence of the seventh paragraph and add the following:
Where the supply of water of a Utility Company customer is interrupted in excess of six (6) hours, the Contractor shall furnish and install a temporary water system, unless an alternative arrangement has been made with the affected property owners or residents.

Add the following to the end of the seventh paragraph:
When authorized by the Engineer, water services may be shut-off between the hours of 8:00 a.m. and 5:00 p.m. At no time shall disruptions to areas larger than one block be permitted. The Contractor will not be permitted to begin additional excavation on another block until work on a previous block has received written notification of substantial completion for the pipe, water services, hydrants, and the trench excavation and backfill from the Engineer.

Article 2.5 Flushing and Testing

SECTION 60.03 FURNISH AND INSTALL VALVES

Article 3.4 Measurement

Add the following:

Adjustment of valve boxes will be measured on a per unit basis.

Article 3.5 Basis of Payment

Add the following pay item:

ITEM	UNIT
Adjust Valve Box to Finish Grade	Each

SECTION 60.05 WATER SERVICE LINES

Article 5.1 General

Add the following sentences to the end of the first paragraph:
Additionally, the Work includes the disconnection of existing Utility Company water customers presently served by the affected mains, the removal of existing water service lines and key boxes where required, and the reconnection of existing customers on-property service extension to the new water service lines and installation of a new key box.

Replace the first sentence of the third paragraph with the following:
A permit shall be obtained from the Utility Company/AWWU Field Services Division prior to any and all water service construction. Utility Company will pay the cost of water service connect permits.

Article 5.4 Construction

Delete the first sentence of the nineteenth paragraph and add the following:
All water service lines (including stub-outs) must be flushed, hydrostatically tested, and disinfected before the piping system can be put into service. All flushing, hydrostatic testing, and disinfection of water service lines (including stub-outs) must comply with MASS Section 60.02, Article 2.5 Flushing and Testing.

DIVISION 70 MISCELLANEOUS

SECTION 70.01 GENERAL

Add the following new Article:

Article 1.3 Utility Facilities

Prior to commencing any Work covered under this division or impacting utility facilities, the Contractor shall contact the Utility and obtain any permits, approvals, or other conditions as required by the Utility to complete any Work on or in the vicinity of their facilities.

SECTION 70.12 TRAFFIC MAINTENANCE

Article 12.11 Basis of Payment

Add the following Pay Items:

ITEM	UNIT
Traffic Maintenance	Contingent Sum

END OF SPECIAL PROVISIONS

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

SECTION III

TECHNICAL SPECIFICATIONS

(NOT USED)

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

SECTION IV

SUBMITTAL LIST AND STANDARD FORMS (NOT USED)

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

SECTION V

CONTRACT AND BID DOCUMENTS

Contract

Bid Bond

Performance & Payment Bond

Certificate of Insurance

Bidder's Checklist

Contractor Questionnaire

C O N T R A C T

Request for Proposals No. **2023P**_____

Contract No. **C-2023**_____

NAME AND ADDRESS OF CONTRACTOR:

_____

_____

_____

Check appropriate box:

☒ **Incorporated in the State of**

MUNICIPALITY OF ANCHORAGE, acting through _____ (hereinafter the Owner).

Contract for _____

BID SCHEDULES	**ITEMS**	**PLAN SHEET FILE NUMBERS**	**AMOUNT**
			$ _____

Total Amount : $ _____

THIS CONTRACT, entered into by the MUNICIPALITY OF ANCHORAGE, ALASKA, acting through the Owner named above, and the individual, partnership, or corporation named above, hereinafter called the Contractor, WITNESSETH that the parties hereto do mutually agree as follows:

Statement of Work: The Contractor shall furnish all labor, equipment and materials and perform the Work above described, for the amount stated, in strict accordance with the Contract Documents.

CONTRACT DOCUMENTS

I. This CONTRACT consisting of 4 pages.

II. The Bid Proposal Section ___ consisting of ____ pages numbered as ____, **as contained in RFP 2023P_____.**

III. The Contract Performance and Payment Bond _____.

IV. The Contractor's Certificate of Insurance Dated _____.

V. Municipality of Anchorage Standard Specifications dated 2015 (MASS) Incorporated by Reference, **as contained in RFP 2023P_____.**

VI. Specifications consisting of the following:

Supplemental Provisions Section _____ consisting of _____ pages, with attachments Exhibit A through F, **as contained in RFP 2023P_____.**

VII. Equal Opportunity Special Provisions and Forms Section _____ consisting of _____ pages, **as contained in RFP 2023P_____.**

VIII. Disadvantaged/Women-Owned Business Enterprise (DBE/WBE) Specification Section _____ consisting of _____ pages, **as contained in RFP 2023P_____.**

IX. The Laborers' and Mechanics' Minimum Rates of Pay dated September 1, 2015 Section _____ consisting of _____ pages, **as contained in RFP 2023P_____.**

X. Submittal List Section _____ consisting of _____ page, **as contained in RFP 2023P_____.**

XI. The Drawings consisting of _____ sheets numbered _____, **as contained in RFP 2023P_____.**

IN WITNESS WHEREOF, the parties hereto have executed this Contract as of the Contract Date entered below.

MUNICIPALITY OF ANCHORAGE, ALASKA

BY _____
Signature

Purchasing Officer or designee
Title

Date of Signature and Contract Date:

_____

VENDOR _____

BY _____
Signature

_____
Printed Name

_____
Title

_____
Date of Signature

CONTRACT AND PERFORMANCE AND PAYMENT
BOND SIGNATURE INSTRUCTIONS

1. The full name and business of the Contractor shall be inserted on Page 1 of the Contract and on the Performance and Payment Bond, hereinafter the Bond.
2. Two copies of the Contract and the Bond shall be manually signed by the Contractor. If the Contractor is a partnership or joint venture, all partners or joint ventures shall sign the Contract and the Bond except that one partner or one joint venturer may sign for the partnership or joint venture when all other partners or joint venturers have executed a Power-of-Attorney authorizing one partner or joint venturer to sign. The Power-of-Attorney shall accompany the executed contract and the Bond.
3. If the Contractor is a corporation, the President of the corporation shall execute the Contract and the Bond unless a Power-of-Attorney or corporate resolution shall accompany the executed Contract and Bond.
4. The Bond shall be returned to the Purchasing Division undated. The Contract Date shall be inserted on the Contract when the Municipality signs the Contract and the Bond shall be dated the same as the Contract Date.

BID BOND

KNOW ALL MEN BY THESE PRESENTS, That we, _____ as Principal, and _____ a corporation organized under the laws of the _____ and authorized to transact surety business in the State of Alaska, of _____ _____ as Surety, are held and firmly bound unto the MUNICIPALITY OF ANCHORAGE, as Obligee, in the full and just sum of _____ _____ ($_____) Dollars, lawful money of the UNITED STATES, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by the presents.

WHEREAS, the said Principle is herewith submitting its proposal for _____ _____.

The condition of this obligation is such that if the aforesaid Principal will, within the time required enter into a formal contract and give a good and sufficient bond to secure the performance of the terms and conditions of the contract, then this Obligation to be void; otherwise the Principal and Surety will pay unto to the Obligee the amount stated above.

Signed, sealed, and delivered _____, 20_____.

WITNESS AS TO PRINCIPAL:

_____ _____
Contractor Name

_____
Contractor Signature

_____
(AFFIX CORPORATE SEAL) Corporate Surety

_____

_____
Surety Business Address

BY: _____
(Attorney-In-Fact)

(AFFIX SURETY SEAL)

CONTRACT PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, That we _____

_____ of _____

as Principal, and _____

a corporation organized under the laws of the _____

_____ and authorized to transact surety business in the State of Alaska,

of _____

as Surety, are held and firmly bound unto the MUNICIPALITY OF ANCHORAGE, as Obligee, in the full and just sum of _____

($ _____) Dollars, lawful money of the UNITED STATES, for the payment which, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITIONS OF THIS OBLIGATION IS SUCH, that whereas the principal has entered into a certain contract dated the _____ date of _____ 20 _____, with the Obligee for the construction of _____

_____

which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract, and shall promptly make payments to all persons supplying labor and material in the prosecution of the work provided for in said contract, during the original term of said contract and any extensions of modifications thereof that may be granted by the Municipality, with or without notice to the Surety, then this obligation to be void; otherwise to remain in full force and effect.

This obligation is made for the use of said Obligee and also for use and benefit of all persons who may perform any work or labor or furnish any material in the execution of said Contract and may be sued on thereby in the name of said Obligee.

This said Surety, for the value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same, shall in anywise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

Whenever Principal shall be, and declared by Obligee to be in default under the Contract the Obligee having performed Obligee's obligations thereunder, the Surety may promptly remedy the default or shall promptly:

1. Complete the Contract in accordance with its terms and conditions, or
2. Obtain a bid or bids for submission to Obligee for completing the Contract in accordance with its terms and conditions and upon determination by Surety of the lowest responsible bidder, or, if the Obligee elects, upon determination by Obligee and the Surety jointly of the lowest responsible bidder, arrange for a contract between such bidder and Obligee and make available as Work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price but not exceeding, including other costs and damages for which the Surety may be liable hereunder the amount set forth in the first paragraph hereof. The term "balance of the contract price" as used in this paragraph, shall mean the total amount payable by Obligee to Principal under the Contract and any amendments thereto, less the amount properly paid by Obligee to Principal.

IN TESTIMONY WHEREOF, the parties hereunto have caused the execution hereof in _____ _____ original counterparts as of the _____ day of _____, 20_____.

WITNESS AS TO PRINCIPAL:

_____ _____

Principal Name

_____

Principal Signature

(AFFIX CORPORATE SEAL) _____

Corporate Surety

_____

_____

Surety Business Address

(AFFIX SURETY SEAL) BY: _____

(Attorney-In-Fact)

INSURANCE

By submitting a bid, the bidder agrees, if they are the successful bidder, to obtain and maintain the insurance required by this section. The bidder also agrees to provide the Municipality a copy of their Certificate of Liability Insurance prior to signing the contract and prior to commencement of any work under this contract.

GENERAL: The Contractor will not allow any subcontractor to commence work until the subcontractor has obtained insurance as listed in this section. The contractor and each subcontractor shall maintain this insurance throughout the life of this contract, including any maintenance and/or guarantee/warranty period. The contractor shall obtain separate insurance certificates for each contract.

ADDITIONAL INSURED: The Municipality of Anchorage shall be listed as an additional insured on all General and Auto Liability policies required by this contract. All policies shall contain a waiver of subrogation against the Municipality, except Professional Liability. All policies shall remain in effect during the life of the contract. The Contractors insurance certificate shall also indicate the Municipality of Anchorage as a certificate holder of the policy.

WORKERS COMPENSATION: The Contractor shall purchase and maintain during the life of this contract, workers compensation insurance for all employees who will work on this project and, if any work is sublet, the Contractor shall require the subcontractor similarly to provide such insurance. Employers' Liability with a minimum limit of $500,000 shall be maintained and Workers Compensation with minimum limits as required by Alaska State Workers Compensation Statutes. The policy shall contain a waiver of subrogation against the Municipality.

NOTICE TO "OUT-OF-STATE" CONTRACTORS WORKING IN ALASKA: The Contractor shall provide evidence of Workers Compensation insurance, either State of Alaska Workers Compensation coverage or an endorsement to the Contractor's home state Workers Compensation policy, evidencing coverage for "other states" including Alaska, prior to execution of a contract or, if approved, before commencement of contract performance in Alaska.

GENERAL LIABILITY: The Contractor shall purchase and maintain, in force, during the life of this contract such general liability insurance as shall protect the Owner and the Contractor against losses which may result from claims for damages for bodily injury, including accidental death, as well as from claims for property damages which may arise from any operations under this contract whether such operations be those of the Contractor, a subcontractor or anyone directly or indirectly employed by either of them.

Commercial General Liability	**Minimum Limits**
Products/Completed Operations	$2,000,000
Personal & Advertising Injury	$1,000,000
Each Occurrence	$1,000,000
General Aggregate	$2,000,000
Medical Payments	$5,000
Commercial Auto Liability	**Minimum Limits**
Combined single limit (Bodily Injury and Property Damage)	$1,000,000
Including all owned, hired, and non-owned	
Workers Compensation and Employers Liability	**Minimum Limits**
Per Alaska statute	$500,000
Errors and Omissions	**Minimum Limits**
Professional Liability (Not required unless limits appear in space provided)	
Umbrella Liability	**Minimum Limits**
(Not required unless limits appear in space provided)	
$ _____ S.I.R.	

Each insurance policy required by this section shall require the insurer to give advance notice to the MOA/Contract Administrator prior to the cancellation of the policy. IF the insurer does not notify the MOA upon policy cancellation, it shall be the Contractor's responsibility to notify the MOA of such cancellation.

COMPLIANCE WITH LAWS

The Contractor shall observe and abide by all applicable laws, regulations, ordinances and other rules of the State of Alaska and/or any political subdivisions thereof, or any other duly constituted public authority wherein work is done or services performed, and further agrees to indemnify and save the Municipality of Anchorage harmless from any and all liability or penalty which may be imposed or asserted by reason of the Contractor's failure or alleged failure to observe and abide thereby.

(Remainder of Page Initially left Blank)

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) shall be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
	PHONE (A/C, No, Ext):	FAX (A/C,
	E-MAIL ADDRESS:	

INSURED	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A :	
	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY						EACH OCCURRENCE	$
	☐ COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
	☐ ☐ CLAIMS-MADE OCCUR						MED EXP (Any one person)	$
	☐						PERSONAL & ADV INJURY	$
	☐						GENERAL AGGREGATE	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$
	☐ POLICY ☐ PRO - ☐ LOC							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	☐ ANY AUTO						BODILY INJURY (Per person)	$
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	☐ **UMBRELLA LIAB** ☐ OCCUR						EACH OCCURRENCE	$
	☐ **EXCESS LIAB** ☐ CLAIMS-						AGGREGATE	$
	☐ DED ☐ RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						☐ WC STATU-TORY LIMITS ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE ☐ N / A						E.L. EACH ACCIDENT	$
	OFFICER/MEMBER EXCLUDED? **(Mandatory in NH)**						E.L. DISEASE - EA	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

1. The Municipality of Anchorage is an additional insured on Auto and General Liability policies. All policies, including workers compensation, contain a WAIVER OF SUBROGATION against the Municipality, except Professional Liability, .
2. CANCELLATION: "Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the Policy Provisions."

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

Authorized Representative

BIDDER'S CHECKLIST

INSTRUCTION TO BIDDER

I. GENERAL:

Bidders are advised that notwithstanding any instructions or implications elsewhere in this Invitation to Bid only the documents shown and detailed on this sheet need be submitted with and made part of their bid. Other documents may be required to be submitted after bid time, but prior to award. Bidders are hereby advised that failure to submit the documents shown and detailed on this sheet shall be justification for rendering the bid nonresponsive. Evaluation of bids for responsiveness shall be accomplished in accordance with Anchorage Municipal Code, Title 7.

II. REQUIRED DOCUMENTS FOR BID

NOTE: "Only the following listed items as marked with an "X" are required to be completely filled out and submitted with the bid."

X Bid Proposal consisting of three (6) pages numbered BP-1 of 6 through BP-6 of BP 6. Bid Proposal Page **BP-2 of 6 must** be manually signed.

X Erasures or other changes made to the Bid Proposal Sheet must be initialed by the person signing the bid.

X Bid Bond, certified check, cashier's check, money order or cash shall be submitted with the bid in the amount indicated.

X All Addenda issued shall be acknowledged in the space provided on the Bid Proposal sheet or by manually signing the Addenda sheet and submitting it prior to the bid opening in accordance with Anchorage Municipal Code 7.20.020C.

III. REQUIRED DOCUMENTS AFTER BID OPENING

The following documents are required within **five (5)** working days of notification by the Purchasing Office. Failure, in whole or in part, to submit the documents required below shall be grounds to determine the Bidder as non-responsible.

X In accordance with AO No. 2019-130 (S), Anchorage Municipal Code 7.20.030 and 7.20.070, Contractor Questionnaire consisting of three (3) Pages, Prime Contractor Form Filled out by Prime Contractor **and** all known subcontractors. **Please review AO NO. 2019-130 (S), AMC 7.20.030 and 7.20.070, and the attached Contractor Questionnaire before submitting a bid.**

Municipality of Anchorage
Contractor Questionnaire

Contractors/Vendors wishing to qualify for award of a bid or proposal offered by the Municipality of Anchorage shall submit this completed form and any supplemental information requested by this form within five days following a request by the Purchasing Officer.

This form is to be filled out by the prime, and subcontractors that perform work "on-site". On-site is defined as the physical place or places where the building or work called for in the contract will remain, and any other site where a significant portion of the building or work is constructed, provided that such site is established specifically for the performance of the contract or project.

Contractor/Vendor Name: _____

Owner(s) of Company (if sole proprietorship or partnership): _____

_____

List all Alaska construction contractor's registration numbers, registration types and expiration dates of the Alaska business licenses held by your company in the past three years:

_____

_____

Has your company changed names, business license number, or contractor registration number in the past three years?

☐ Yes ☐ No

If "Yes," explain on a separate signed page, including the reason for the change.

Has any owner, partner or (for corporations) officer of your company operated any business offering similar services outlined in the bid or proposal under any other name in the past three years?

☐ Yes ☐ No

If "Yes," explain on a separate signed page, including the reason for the change.

Certifications & Disclosures

For these questions & certifications, "company" includes any entity that shares or has shared majority ownership or control with your company. "Determination of violation" includes any citations, orders or recommendations issued to or against the company.

Debarment

1. In the last three years has your company been debarred from bidding on, or being awarded, a state or federal project?

   ☐ Yes ☐ No

Occupational Safety & Health

Note: Only willful violations of state or federal occupational safety and health laws will result in disqualification; disclosure of other violations does not lead to automatic disqualification.

2. In the last three years has your company been determined to have committed a **willful violation** of state or federal occupational safety and health law? For purposes of this question, a state or federal occupational safety and health law includes laws enforced by the Occupational Safety and Health Administration (OSHA), Alaska Occupational Safety and Health (AKOSH), or another state's occupational safety and health agency.

☐ Yes ☐ No

3. In the last three years, has the federal Occupational Safety and Health Administration (OSHA), Alaska Occupational Safety and Health (AKOSH), or another state's occupational safety and health agency, made a determination of violation against your company?

Note: If you have filed an appeal of a citation and the appropriate appeals board has not yet ruled on your appeal, you need not include information about it.

☐ Yes ☐ No

If "Yes," attach a separate signed page describing each citation.

Wage & Hour

Note: Only willful violations of state or federal wage and hour laws will result in disqualification; disclosure of other violations does not lead to automatic disqualification.

4. In the last three years has your company been determined to have committed a **willful violation** of state or federal wage and hour law?

☐ Yes ☐ No

5. In the last three years has there been a determination of violation of wage and hour laws against your company? Wage and hour violations include failure to pay minimum wages, overtime, or prevailing wages.

☐ Yes ☐ No

If "Yes," attach a separate signed page describing each violation, identifying the claim by claimant, date, and status/outcome.

Unemployment Insurance & Workers' Compensation

6. In the last three years has there been a determination of violation of unemployment insurance or workers' compensation requirements against your company?

☐ Yes ☐ No

If "Yes," attach a separate signed page describing each violation, identifying the claim by claimant, date, and status/outcome.

Licensing & Registration

7. If a license or certificate of fitness is required to perform any services provided by your company, has there been a determination of violation of any certificate of fitness requirements against your company in the last three years?

☐ Yes ☐ No

If "Yes," attach a separate signed page describing each violation, identifying the claim by claimant, date, and status/outcome.

Subcontracting

8. I certify that all independent subcontractors engaged by my company meet the definition of an independent contractor under Alaska Statute 23.30.230.

☐ Yes ☐ No

9. I understand that my company is responsible for ensuring that each subcontractor my company uses on the project completes this form and associated documentation. I will submit any disclosures required by Anchorage Municipal Code.

☐ I understand

10. I understand that my company is responsible for providing this form and any associated documentation for each subcontractor hired after award within 30 days of hire, and that the subcontractor may not begin work on the project until such information is provided.

☐ I understand

11. I understand that my company is responsible for ensuring that if any event, such as a violation or loss of coverage, causes the information submitted by the subcontractor to change, the subcontractor shall submit updated certifications or disclosures within 30 days of occurrence to the department contract administrator.

☐ I understand

I declare under penalty of perjury that the foregoing is true and correct.

Dated: _____ _____
(Signature)

_____
(Printed name and title)

Right to Appeal: Anchorage Municipal Code provides that any person adversely affected in connection with the award of a municipal contract, including the Municipality's determination on responsibility, may request that the mayor or assembly refer the matter to the bidding review board.

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

SECTION VI

BID PROPOSAL

BID PROPOSAL
(CERTIFICATION)

TO: MUNICIPALITY OF ANCHORAGE _____, 2023
PURCHASING DEPARTMENT
632 W. 6TH AVENUE, SUITE 520
ANCHORAGE, ALASKA 99501

SUBJECT: Request for Proposal No. 2023P024

PROJECT TITLE: Misc. Construction Term Contracts

Pursuant to and in compliance with subject Request for Proposal, and other bid documents relating thereto, the bidder hereby proposes to furnish all labor and materials and to perform all work for the construction of the above referenced project in strict accordance with the bid documents at the prices established in the Bid Proposal, page **BP- 1 of 6 through BP- 3 of 6** submitted herewith.

The bidder agrees, if awarded the contract, to commence and complete the work within the time specified in the bid documents.

The bidder acknowledges receipt of the following addenda:

Addenda No._____ Addenda No. _____
Addenda No._____ Addenda No. _____
Addenda No._____ Addenda No. _____

Enclosed is a Bid Bond in the amount of _____.
(Dollar Amount or Percentage of Bid)

Type of Business Organization
The bidder, by checking the applicable box, represents that it operates as ( ) a corporation incorporated under the laws of the State of _____, ( ) an individual, ( ) an LLC, ( ) a partnership, ( ) a nonprofit organization, or ( ) a joint venture. If a partnership or joint venture, identify all parties on a separate page.

Is this project Federally Funded?
Yes ☐
No ☒

_____
Company Name

BID PROPOSAL
(CERTIFICATION)
Continued

SUBJECT: Request for Proposal No. 2023P024

PROJECT TITLE: Misc. Construction Term Contracts

Date	Alaska Contractor's License Number
Company Name (Printed)	Employer's Tax Identification Number
Authorized Representative Signature	Printed Name & Title
Company **Mailing** Address	Company Phone Number
City, State, Zip Code	Company Fax Number
Company **Physical** Address (if different from mailing address)	Company Email Address
City, State, Zip Code	

ANCHORAGE WATER WASTEWATER UTILITY
2023 Miscellaneous Construction Services Term Contract

BID ITEM NO.	SPEC. NO.	WORK DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT BID PRICE	TOTAL BID PRICE
1	10.07	Mobilization & Demobilization	LS	1	$1,000	$1,000
2	20.02	Storm Water Pollution Prevention Plan Type 2	CS	1	$5,000	$5,000
3	20.04	Clearing and Grubbing	ACRE	0.25		
4	20.06	Removal of Trees	EA	3		
5	20.07	Remove Existing Sidewalk or Concrete Apron	SY	50		
6	20.08	Remove Curb and Gutter	LF	250		
7	20.09	Remove Pavement	SY	20		
8	20.12	Dewatering	CS	1	$5,000	$5,000
9	20.13	Trench Excavation and Backfill, (Various Depths) 0-150 Linear Feet	LF	150		
10	20.13	Trench Excavation and Backfill, (Various Depths) 151-250 Linear Feet	LF	250		
11	20.15	Furnish Trench Backfill, Type II-A	TON	550		
12	20.16	Furnish Bedding Material (Class E)	LF	250		
13	20.19	Furnish Foundation Backfill (Type IV)	TON	50		
14	20.21	Classified Fill and Backfill, Type II-A	TON	150		
15	20.22	Leveling Course	TON	45		
16	20.25	Geotextile (Type A)	SY	200		
17	20.27	Disposal of Unusable or Surplus Material	CY	275		
18	20.27	Removal and Disposal of AC Pipe	LF	10		
19	30.02	P.C.C. Curb and Gutter (Type 1)	LF	250		
20	30.02	P.C.C. Curb and Gutter (Type 2)	LF	250		
21	30.03	P.C.C. Sidewalk (4”) (Broom)	SY	50		
22	30.03	P.C.C. Sidewalk (6”)(Broom)	SY	20		
23	30.04	P.C.C. Curb Ramp (Perpendicular)	EA	1		
24	30.04	P.C.C. Curb Ramp (Parallel)	EA	1		
25	30.08	P.C.C. Cluster Mailbox Base	EA	1		
26	30.10	Remove and Replace Pattern Imprinted Color PCC (4")	SY	20		
27	30.11	Sidewalk Joint Sealant	LF	20		

BID ITEM NO.	SPEC. NO.	WORK DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT BID PRICE	TOTAL BID PRICE
28	40.06	A.C. Pavement (Class 'E', 2" thickness)	SY	200		
29	40.06	A.C. Pavement (Class 'E', 4" thickness)	SY	200		
30	40.06	A.C. Pavement (Class 'E', 6" thickness)	SY	200		
31	40.08	Furnish and Install RAP	TON	150		
32	40.11	Remove Asphalt, Replace with Asphalt Surfacing Class D	SY	100		
33	50.02	Furnish & Install 8" Dia., PVC, DR18 Sewer Pipe (0-150 Linear Feet)	LF	150		
34	50.02	Furnish & Install 8" Dia., PVC, DR18, Sewer Pipe (151-250 Linear Feet)	LF	250		
35	50.02	Furnish & Install 12" Dia., PVC, DR18 Sewer Pipe	LF	50		
36	50.02	Furnish & Install 16" Dia., PVC, DR 18 Sewer Pipe	LF	50		
37	50.03	Construct Manhole, Type A, Standard Depth	EACH	4		
38	50.03	Construct Manhole, Type B, Standard Depth	EACH	2		
39	50.03	Additional Depth to Manhole, Type A	LF	8		
40	50.03	Additional Depth to Manhole, Type B	LF	5		
41	50.03	Watertight Manhole Frame and Cover	EACH	2		
42	50.06	Connect to Existing Sanitary Sewer Manhole	EACH	2		
43	50.04	Sanitary Sewer Service Connections, 4-inch	EACH	5		
44	50.04	Existing Sanitary Sewer Service Disconnect and Reconnect	EACH	3		
45	50.04	Construct Sanitary Sewer Cleanout	EACH	2		
46	50.05	Bypass Pumping Sanitary Sewage Flows - Main	CS	1	$7,500	$7,500
47	50.05	Bypass Pumping Sanitary Sewage Flows - Service	CS	1	$1,500	$1,500
48	50.06	R&R Manhole Frame & Cover	EACH	40		
49	50.06	R&R Manhole Grade Rings	EACH	40		
50	50.06	R&R Manhole Cone Section	EACH	10		
51	50.06	R&R Manhole Barrel (Ring/Riser) Section	EACH	10		
52	50.06	R&R Existing Sewer Manhole Cone, Frame and Cover	EACH	10		

BID ITEM NO.	SPEC. NO.	WORK DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT BID PRICE	TOTAL BID PRICE
53	50.03	Adjust Sanitary Sewer Manhole Ring to Finish Grade	EACH	10		
54	50.07	Manhole CCTV Inspection	EA	5		
55	50.07	Condition Assessment CCTV	LF	300		
56	50.07	Pre-rehabilitation CCTV	**LF**	**500**		
57	50.07	Post-rehabilitation CCTV	**LF**	**500**		
58	50.07	**Sewer Line Cleaning for CCTV**	LF	**500**		
59	50.07	Manhole Cleaning	EA	5		
60	60.02	Furnish & Install 8” Dia., PVC, DR18, Water Pipe (0-150 Lineal Feet)	LF	150		
61	60.02	Furnish & Install 8” Dia.,PVC, DR18 Water Pipe (151-250 Lineal Feet)	LF	250		
62	60.02	Furnish & Install 12” Dia., PVC DR18 Water Pipe (0-150 Lineal Feet)	LF	150		
63	60.02	Furnish & Install 12” Dia., Ductile Iron, Class 52 Water Pipe (151-250 Lineal Feet)	LF	250		
64	60.02	Furnish & Install 16” Dia., Ductile Iron, Class 52 Water Pipe	LF	40		
65	60.03	Furnish and Install 8” Gate Valve, Valve Box and Marker	EACH	6		
66	60.03	Furnish and Install 12” Gate Valve, Valve Box and Marker	EACH	2		
67	60.03	Furnish and Install 16” Butterfly valve, Valve Box and Marker	EACH	1		
68	60.04	Furnish & Install Fire Hydrant Assembly (Single Pumper)	EACH	3		
69	60.04	Furnish & Install Fire Hydrant Assembly (Double Pumper)	EACH	2		
70	60.05	Furnish & Install 1-inch Water Service Line	LF	50		
71	60.05	Furnish & Install 1-1/2-inch Water Service Line	LF	30		
72	60.05	Furnish & Install 2-inch Water Service Line	LF	60		
73	60.07	Provide Temporary Water System	CS	1	$15,000	$15,000
74	60.02	1” Live Tap Connection on DIP Water Main	EACH	8		

ANCHORAGE WATER WASTEWATER UTILITY
2023 Miscellaneous Construction Services Term Contract

BID ITEM NO.	SPEC. NO.	WORK DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT BID PRICE	TOTAL BID PRICE
75	60.02	1.5” Live Tap Connection on DIP Water Main	EACH	2		
76	60.02	2” Live Tap Connection on DIP Water Main	EACH	2		
77	60.04	Remove & Salvage Fire Hydrant Assembly	EACH	2		
78	60.02	Raise or Lower Water Line	EACH	1		
79	60.06	Furnish and Install Galvanic Anode	EACH	6		
80	60.03	Adjust Valve Box To Finish Grade	EACH	10		
81	65.02	Two Person Survey Crew	Hour	20		
82	70.10	Traffic Markings, Painted (4")	LF	60		
83	70.11	Remove and Reset Sign Assembly	EACH	2		
84	70.12	Traffic Maintenance	CS	1	$3,500	$3,500
85	70.13	Bollard Concrete Pipe (Yellow)	EACH	6		
86	70.13	Remove and Reset Bollard	EACH	4		
87	70.17	Relocate Mailbox	EACH	8		
88	75.03	Topsoil (4-inch depth)	MSF	2		
89	75.04	Seeding (Type “A” Hydraulic Method)	MSF	2		

Miscellaneous Construction Services Contract Total _____

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

SECTION VII

OTHER UTILITY REQUIREMENTS

CEA Facility Requirements

ENSTAR Safety Requirements

Pipeline and Hazardous Materials Safety Administration

CHUGACH
POWERING ALASKA'S FUTURE

April 2014

ELECTRICAL FACILITY CLEARANCE REQUIREMENTS

Enclosed is a copy of the Chugach Electric Association, Inc. (Chugach) Electrical Facility Clearance Requirements policy. Periodically, copies of the policy are mailed out to various companies and agencies whose activities may bring their personnel in close proximity to electrical facilities. Chugach distributes copies of this policy in an effort to help minimize and identify potential hazards for construction personnel and the general public. In addition, we are concerned with preventing possible damage to our electrical facilities and disruption of electrical service to our customers. Please note that the Electrical Facility Clearance Requirements publication is now on Chugach's web site at: www.chugachelectric.com. Click on the "Customer Service" tab and go to either "For your Home" or "For Your Business", click on "Electrical Facility Clearance Requirements" (April 2014).

For your additional information, Alaska State Statute ("Article 6. Locating Underground Facilities") has been included as an attachment.

Please thoroughly read and understand the entire document. It could save your life or the life of your employees, and the general public. We request that particular attention be paid to the following provisions:

(Paragraph B. 2.) "Under no circumstances will Chugach allow any of its underground cable(s) to remain energized after it has been exposed, unless it is protected by supplementary mechanical protection approved by Chugach or unless a *qualified person* is on site at all times".

(Paragraph H. 7.) "Chugach defines a *qualified person* as a journeyman lineman who holds a current Certificate of Fitness in the Journeyman Lineman category issued by the State of Alaska". These two provisions clearly emphasize Chugach's position relating to the exposure and approach to energized facilities.

Chugach strongly recommends that prior coordination with us, either during the design phase of a project or prior to the start of actual construction, can help eliminate or minimize conflicts. If you have questions please contact the Line Operations Division at 762-7655 and your call will be directed to the appropriate department for assistance.

Sincerely,

William J. Bernier
Director, Substations and Line Operations
Enclosures

cc: Statewide Bonding Companies; State of Alaska OSHA Inspector; State of Alaska Electrical Inspector; Alaska General Contractors

Chugach Electric Association, Inc.
5601 Electron Drive, P.O. Box 196300, Anchorage, Alaska 99519-6300 • (907) 563-7494 Fax (907) 562-0027 • (800) 478-7494
www.chugachelectric.com • info@chugachelectric.com

CHUGACH ELECTRIC ASSOCIATION, INC.

ELECTRICAL FACILITY CLEARANCE REQUIREMENTS FOR CONSTRUCTION OR MAINTENANCE NEAR ELECTRICAL FACILITIES

Chugach's concern for the safety of non-qualified personnel working adjacent to its electrical facilities, its concern for the public in general, and its requirement that only *qualified personnel* under the employ of *qualified electrical contractors* handle electrical facilities such as cable, poles, padmounted equipment, etc., is based upon the following considerations:

- The potential for serious injury and resulting liability is extremely high when dealing with voltages as high as 230,000 volts on overhead and underground lines.

- Certain types of equipment, particularly cable, can easily be damaged by improper handling. For example, when cable is hit or improperly suspended (common during excavation adjacent to cables), the scraped, cut, or over-stressed insulation will almost always result in premature failure of the cable. The highest risk to personnel is a failure while the cable is being handled during excavation or construction. Undetected construction damage may result in a subsequent cable failure with consumer outages for periods of up to 48 hours during winter conditions.

- The stability of overhead pole lines or padmounted equipment is jeopardized with improper excavation and backfill. This may expose the public, as well as maintenance or construction personnel, to high voltages and create consumer power outages.

The above concerns can be minimized or eliminated by the use of properly trained, licensed, and certified electrical outside linework personnel. The National Electrical Safety Code (NESC), the United States Occupational Safety and Health Administration (OSHA) and the Alaska State OSHA support this position as well as the clearances addressed herein.

NESC, Section 2, *Definitions of Special Terms* defines *"qualified"* as *"Having been trained in and having demonstrated adequate knowledge of the installation, construction, or operation of lines and equipment and the hazards involved, including identification of and exposure to electric supply and communication lines and equipment in or near the workplace."* Only qualified persons are permitted to handle or work on or adjacent to energized electrical facilities. This includes not only overhead pole lines but also padmounted and underground facilities. Within the NESC, two rules specifically address the need for qualified persons to perform work on or near energized facilities:

> Rule 420B1 states, *"Employees whose duties require working on or in the vicinity of energized equipment or lines shall perform only those tasks for which they are trained, equipped, authorized, and so directed. Inexperienced employees shall:*

(a) work under the direction of an experienced and qualified person at the site; and (b) perform only directed tasks."

Rule 420B4 states, *"Employees who do not normally work on or in the vicinity of electric supply lines and equipment but whose work brings them into these areas for certain tasks shall proceed with this work only when authorized by a qualified person."*

OSHA 29CFR 1910.269 contains the training and documentation requirements for a qualified person.

OSHA 29CFR 1926.550 (a) (15) addresses crane operations near electrical lines. For lines rated over 50 kilovolts (kV), minimum clearance between the lines and any part of the crane or load must be 10 feet plus 0.4 inch for each 1 kV over 50 kV -- or twice the length of the line insulator, but never less than 10 feet.

CHUGACH SYSTEM VOLTAGES	
Normal Voltage (Phase-to-Phase)	**Minimum Clearance Required**
Operations Near High-Voltage Overhead Power Lines to 50 kV	10 Feet
Over 50 kV to 200 kV	15 Feet
Over 200 kV to 350 kV	20 Feet

Specifically, 29CFR1926 (a) (15) (iv) requires a "Safety Observer" during crane operations if the equipment is operating where it is difficult for the operator to maintain the desired clearance to the overhead power line(s) by visual means. Alaska Statutes (AS) Sections 18.60.670 through Section 18.60.695 govern placement and operation of equipment near overhead electrical lines or conductors. 29CFR1926, Subpart P addresses the specific requirements involved with trenching operations. These include prior notice to utility companies, prior location of utility facilities, and proper supports once the facilities are exposed. Furthermore 29CFR Sections 1910.180; 1910.333; 1926.416; 1926.550; and 1926.651 regulate activities relative to job site electrical facilities.

Again, Chugach's concern for the safety of all personnel affected by work adjacent to its energized facilities has led to the development of the attached policy.

ELECTRICAL FACILITY CLEARANCE REQUIREMENTS

The following requirements have been developed to help provide a safer work site to those personnel working adjacent to Chugach's electrical facilities and to protect Chugach facilities that are located in the area of work being done by State or Municipal entities and private construction and maintenance projects.

A. NOTIFICATION

It is recommended that Chugach be informed of construction/maintenance activities as early as possible in the design process and be included in timely plan reviews. Any work that needs to be performed on Chugach facilities must have prior Chugach approval.

1. Overhead Facilities

Any work in the proximity of overhead power lines shall be preceded by a call to Chugach at 762-7659 or 762-7669, 48 hours in advance, to notify the Line Construction and Maintenance Department of the planned work and be in compliance with OSHA 29CFR1926 (a) (15), and AS 18.60.670. If equipment, tools, machinery, or material must work in proximity closer than the minimum clearances outlined in OSHA 29CFR1926 (a) (15), and AS 18.60.670, the requirements of AS 18.60.680 shall be complied with before work can proceed. All necessary arrangements to be made with Chugach by the requesting party for compliance with AS 18.60.680 shall be arranged in advance of the project start date.

2. Underground Facilities

Alaska Statutes 42.30.400 through 42.30.490, Anchorage Municipal Code, 24.40 and 26.90, and 29CFR1926, Subpart P place requirements on contractors who will be excavating around or adjacent to underground utilities. Advance notification requirements, underground facility locates, and the responsibilities for protection of utility facilities by contractors are specified in these regulations. All requests for locates of Chugach underground facilities are to be made through the Alaska Digline at 811. In addition, prior to excavating, Chugach shall be contacted a minimum of two (2) business days in advance. Contact the Line Operations Division at 762-7655 and your call will be directed to the appropriate department for assistance.

Locate surface markings are only reasonably accurate to +/- two (2) feet. As a general rule, Chugach requires hand-digging within two (2) feet of locate marks but in some cases may require three (3) or four (4) feet, depending on the actual facility involved and field conditions at the project site. Maintaining locate marks is the responsibility of the party requesting the locate. Chugach may charge for re-locating and re-marking facilities that were previously marked.

B. UNDERGROUND CABLE EXCAVATION

1. Any excavation which is within a three (3) foot radius of a cable and parallels a cable for a distance greater than twenty (20) feet in length (see Section H-1 below) may require relocation of that cable. Excavations shorter in length and/or closer may also require relocation. At a minimum, cables that will require exposure must be exposed by *hand-digging* only, by a *qualified person* under the employ of a *qualified electrical contractor* (see Section H). See Drawing No. F-062388 attached.

2. Any excavation, such as a trench which crosses cable and/or conduit, shall be limited to twenty (20) feet in width and have provisions for the exposed cable/conduit to be supported every two (2) feet on a cross beam in such a manner that the outer cable jacket and/or conduit shall not be damaged in any way. The cable support work and excavation within the three (3) foot radius (see Section H-1) shall be done by a *qualified* person under the employ of a *qualified electrical contractor*.

   NOTE: When excavation must occur within the limits specified in B.1, and B.2, above, reasonable efforts will be made by Chugach to de-energize the direct buried cable if system conditions and personnel requirements allow. Even if the cable has been de-energized, a "Cable Watch" by a qualified person under the employ of a qualified contractor is still required. To request the de-energization of the cable, contact the Line Operations Division at 762-7655 and your call will be directed to the appropriate department for assistance. Requests must be made three (3) working days in advance of the outage date requested. After hours, contact Chugach's Power Control Center at 762-4660.

   Under no circumstances will Chugach allow any of its underground cable(s) to remain energized after it has been exposed, unless it is protected by supplementary mechanical protection approved by Chugach or unless a qualified person is on site at all times.

3. Should any cable be exposed by non-qualified personnel, Chugach must be immediately contacted for field investigation before work may resume in the immediate area of such exposed cable.

   Chugach recognizes that reasonable continuation of work may be required around energized underground cables after Chugach inspects the site. When this occurs, it is the responsibility of the construction contractor working at the site to arrange for qualified personnel as well as payment of the costs of said personnel and/or equipment. Chugach will neither arrange for, nor provide qualified personnel to satisfy this requirement unless it determines it is in its best interest on a case-by-case basis. Where Chugach is otherwise forced to subsequently take

steps to ensure the safety of the site, it will advise the construction contractor that it will pass these costs to the construction contractor.

4. In all cases, a final minimum burial depth of 40 to 60 inches (depending on the operating voltage) for high-voltage (above 1000 volts) primary cable/conduit and 30 inches for secondary low-voltage cable/conduit shall be maintained. If, however, existing Federal, State, or Municipal permit conditions require depths in excess of the 40 inches, then the cable/conduit shall be buried at the depth required in the permit. The depth is measured from the top of the cable/conduit to final grade at the shallowest depth. Burial shall be in compliance with Chugach Construction Standard SUR2-3 through 6 (supplied upon request).

5. Projects which increase the final grade over Chugach underground distribution cable that are direct buried shall require relocation if the final depth of burial exceeds 60" from the proposed final grade. Where the distribution cables are in conduit a review and written approval by Chugach are required for proposed grade increases resulting in a depth of burial above 60".

6. Projects which propose to modify the grade over Chugach underground transmission cables (voltages above 25kV) require review and written approval by Chugach.

7. In addition to the foregoing, excavations near transmission underground cable/conduit will require the following:

   a) Excavation Adjacent to Transmission Voltage Level Power Lines: Chugach will require its Locate Contractor to notify excavators when a locate request includes the locating of cables that exceed 25kV distribution voltages.

      When excavation is planned that will come within close proximity (ten (10) feet), expose, parallel or undermine sections of Chugach's transmission underground cables (voltages above 25kV), special precaution and safety consideration must be taken. These cables operate at voltages between 34,000 volts and 230,000 volts phase-to-phase, provide power to tens of thousands of Chugach customers and require extraordinary protection. The following guidelines shall apply:

      Chugach Operations Department shall be contacted at (907) 762-7655 in advance of the planned excavation a minimum of five (5) business days prior to beginning excavation. Chugach requires that a *qualified person* be on site at all times during excavation activity that comes within ten (10) feet of any transmission cable. The contractor shall arrange and pay for a *qualified person* from Chugach or, with approval, from one of Chugach's approved and *qualified contractors*. Excavations closer than ten (10) feet

shall require exposure of the cables at the intersecting point or at intervals of not less than every twenty-five (25) feet for parallel excavations by *qualified personnel* to determine the exact location of the cable prior to machine excavation.

Because of the high voltage, excavations within ten (10) feet of a transmission cable can expose unqualified workers to extremely unsafe conditions. Prior planning by the excavator with coordination through Chugach and Chugach approval of construction activity within ten (10) feet of transmission cable is required.

Chugach shall approve, in advance, any plan for directional drilling, boring, pile driving or other type of "trenchless" construction in the vicinity of its transmission cables prior to any construction activity.

Chugach may require a special locate utilizing Ground Penetrating Radar to locate critical facilities. "Pothole" locates utilizing vacuum excavation in conjunction with an air-knife tool may be used, with Chugach approval.

C. STRUCTURE EXCAVATION

1. Equipment Pads or Vaults

Temporary excavation is allowed with a maximum slope of 1:1 beginning three (3) feet from the exterior edge of a concrete pad or vault. The final grade shall consist of a level area radiating out a minimum of four (4) feet, measured from the exterior edge of the pad or vault, and a maximum slope of 2:1 beginning from that four (4) foot distance from the exterior edge of the pad or vault. For both temporary and final grade situations, a level area extending ten (10) feet out from the edge of the concrete pad in front of equipment doors or access panels is necessary. Refer to Drawing No. F-062388 attached.

If the slope cannot be maintained at the grades specified above, additional protection such as barriers or piling is required. All shoring and excavation (closer than the above limits) shall be done by a qualified person(s) under the employ of a qualified electrical contractor.

2. Concrete-Encased Duct

Excavation under a concrete-encased duct requires a method designed and certified by an Alaska-registered civil engineer and approved by Chugach. Installation of the temporary shoring or bracing shall be done under the supervision of a qualified person under the employ of a qualified electrical contractor.

D. POLE/GUY ANCHOR EXCAVATION

Excavation beginning no closer than a three (3) foot radius from a pole or guy anchor in stable soil conditions or a ten (10) foot radius from a pole or guy anchor in organic/unstable soil conditions is allowed, provided the slope from that point does not exceed 1:1. Refer to Drawing No. F-062388 attached.

Excavation closer than the limits defined above or within a ten foot radius of more than one consecutive pole where excavation will be open while more than one pole is affected, may require shoring of each pole. Chugach review and approval of shoring plan is required for all excavations where more than one pole is subject to an open excavation. Pole shoring shall conform to Chugach specifications XP-X/Y (steel pile shoring) or XM40/XM40A (wood pole shoring) as approved by Chugach for the specific excavation. Specifications will be supplied upon request. All work for installing the piles must be performed within the OSHA guidelines. Shoring by other methods requires prior approval by Chugach on a case-by-case basis. Street light poles may be temporarily removed, subject to a written agreement with Chugach, prior to excavation.

Any excavation that may expose the pole butt requires a structural analysis of the pole shoring method. The analysis shall be performed by an Alaska-licensed professional engineer familiar with electrical transmission and distribution design standards in use by Chugach.

All shoring and excavation (closer than the above limits) shall be done by a qualified person under the employ of a qualified electrical contractor.

E. RELOCATION REQUIRED

Where protection of the cable and structures cannot be maintained, as required in Sections A, B, and C, relocation of those facilities will be required prior to the intended work and at the contracting agency's expense.

F. BACKFILL

Replacement backfill for electrical facilities must be in accordance with Chugach specifications and done by a qualified person under the employ of a qualified electrical contractor.

A damaged underground facility may not be reburied until it is repaired or relocated to the satisfaction of Chugach.

G. INSPECTION AND APPROVAL

All work on or in the immediate vicinity of Chugach facilities, such as backfilling, temporary support, shoring, and relocations are subject to prior approval and

inspection by Chugach. On large projects where inspection time is substantial, all costs for inspection shall be the responsibility of the agency or entity contracting for the work. Reimbursement to Chugach shall be in accordance with Chugach's tariff, Section 8.

For any questions or approvals involving these requirements contact the Line Operations Division at 762-7655 and your call will be directed to the appropriate department for assistance.

H. MISCELLANEOUS

1. Depending on the soil type, depth and length of the excavation, type of Chugach facility involved, and the certainty of the cable locate, excavations can be approved within a two (2) foot radius of cable on a case-by-case basis.

2. Stable soil conditions are defined as all dry and non-organic. Soil conditions shall be evaluated and approved on a case-by-case basis by Chugach. The evaluation will be done using 29CFR1926, Subpart P, "*Excavations*" as a guide.

3. Excavation, except as noted, shall be defined as mechanically done by a backhoe, scraper, grader, auger, or other piece of equipment.

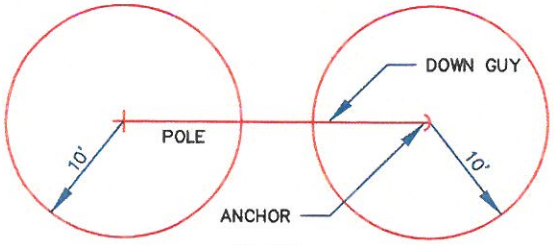
4. Cables are defined as insulated cable whether buried directly or in conduit. The guidelines for cables also include 600-Volt pedestals and other small electrical apparatus associated with cable but not included under pads or vaults.

5. Spare conduit is not included in these provisions except to the extent of providing temporary support when exposed and inspected by Chugach prior to the placement of proper backfill.

6. Chugach defines a *qualified electrical contractor* as a contractor registered in the State of Alaska who has an Electrical Administrator's License in the Outside Linework category; or who has an employee with an Electrical Administrator's License in the same category registered with the contractor.

7. Chugach defines a *qualified person* as a journeyman lineman who holds a current Certificate of Fitness in the Journeyman Lineman category issued by the State of Alaska.

8. Chugach defines *hand-digging* as the removal of soil with hand tools or with an air-knife tool (compressed air jet).

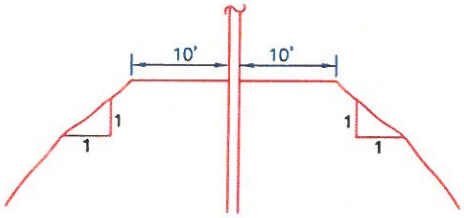


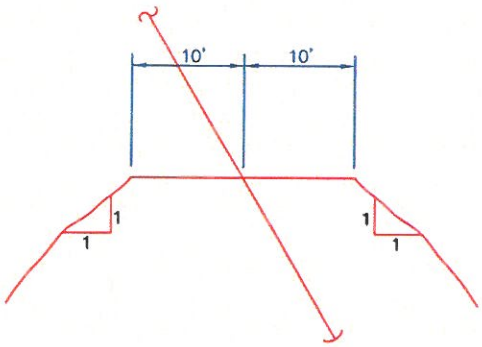
PLAN

(RADIUS OF UNDISTURBED SOIL)

NOTE:

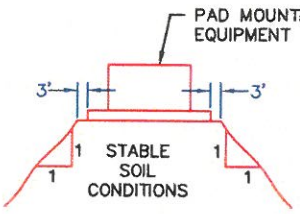
FOR VERY UNSTABLE SOIL CONTACT CHUGACH ELECTRIC.





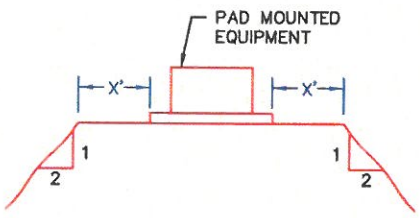
PROFILE

POLES/GUYS



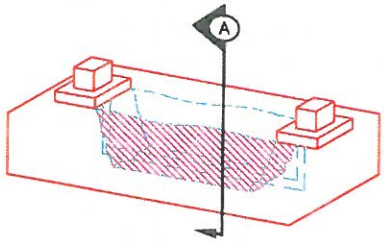
DURING CONSTRUCTION

SUPPLEMENTAL SUPPORT REQUIRED FOR EXCAVATIONS WITHIN 5' OF PADMOUNTED EQUIPMENT LOCATED ON UNSTABLE SOIL CONTACT CHUGACH ELECTRIC

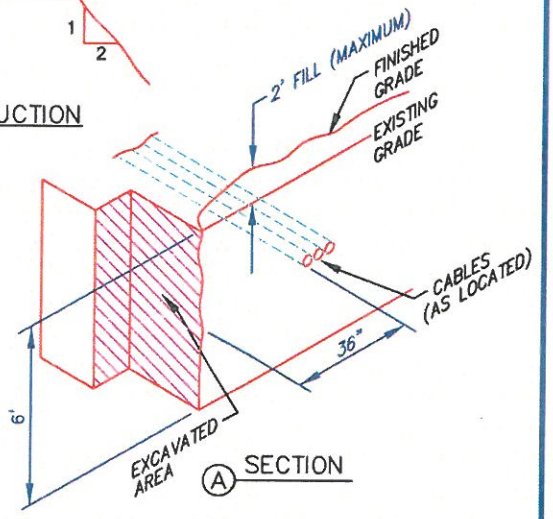


AFTER CONSTRUCTION

X': 10' ON DOOR/ACCESS SIDES. 4' ON OTHER SIDES.



PARALLEL EXCAVATION



SECTION

STRUCTURES/CABLES

REV. NO.: 3 DATE: 1/28/98

Standards Engineer:

Mgr., Dist. Engineering:

Mgr., Const. & Maint.:

Dir., T&D Services Div.:

Chugach Electric Association, Inc.

EXCAVATION LIMITS

DEFINITION OF LIMITS REQUIRING NO ADDITIONAL STRUCTURAL SUPPORT

DRAWING NUMBER F-062388

SHEET 1 OF 1

Sec. 42.30.450. Waiver of requirements by written agreement.

An operator and an excavator may, by written agreement, waive the requirements of AS 42.30.400 - 42.30.490 that the excavator notify the operator of planned excavations and that the operator locate underground facilities. The agreement must identify the geographic areas to which the waiver applies and the time period for which the waiver is valid.

Sec. 42.30.460. Underground facility owner.

If the operator of an underground facility is not the owner of the facility and if the operator cannot be identified or has been identified but cannot be reached in a reasonable amount of time, the excavator may give the notice required by AS 42.30.400 - 42.30.490 to the owner of the underground facility and the owner shall assume the duties and responsibilities of the operator under AS 42.30.400 - 42.30.490.

Sec. 42.30.490. Definitions.

(1) "damage" means

(A) the substantial weakening of structural or lateral support of an underground facility;

(B) penetration, impairment, or destruction of any underground protective coating, housing, or other protective device; and

(C) the partial or complete severance of an underground facility to the extent that the project owner or facility operator determines that repairs are required;

(2) "emergency" means

(A) a condition that constitutes a clear and present danger to life, health, or property; or

(B) an unplanned service interruption;

(3) "excavation" means

(A) an activity in which earth, rock, or other material on or below the ground is moved or otherwise displaced by any means;

(B) road maintenance that changes the original road grade;

(C) demolition or movement of earth by equipment, tools, or explosive device except tilling of the soil less than 12 inches in depth for agricultural purposes;

(4) "excavator" means a person who conducts excavation in the state;

(5) "inaccessible" means impossible or unreasonably difficult to reach due to conditions beyond the control of the underground facility operator;

(6) "notification center" or "center" means a service through which a person is able to call one number to notify member operators of underground facilities that an excavation is proposed and to request the operators to mark facilities located inside of the proposed excavation area;

(7) "operator" means a person who supplies a service for commercial or public use by means of an underground facility;

(8) "person" means any individual, public or private corporation, political subdivision, government agency, municipality, industry, partnership, copartnership, association, firm, trust, estate, or any other entity whatsoever;

(9) "remote" means not accessible by road;

(10) "underground facility" means a pipe, sewer, conduit, cable, valve, line, or wire, including attachments and those parts of poles or anchors that are below ground, for use in connection with the storage or conveyance of water, sewage, telecommunications, cable television, electricity, petroleum, petroleum products, hazardous liquids, or flammable, toxic, or corrosive gas;

(11) "unstaffed" means not normally staffed with employees;

(12) "working day" means a day on which an underground facility operator is open for regular business.

ALASKA STATUTES

TITLE 42

PUBLIC UTILITIES & CARRIERS

Sec. 42.30.400. Excavator's notice of proposed excavation.

(a) Before beginning an excavation, an excavator shall give notice of the proposed excavation to each underground facility operator who has an underground facility in the area of the proposed excavation and request the operator to field mark the location of its underground facility. The excavator shall notify an underground facility operator who subscribes to a notification center by giving notice to the center. The excavator shall notify an underground facility operator listed in the applicable telephone directory who is not a subscriber to a notification center by giving notice directly to the operator.

(b) Except in the case of an emergency locate request or a request to locate in a remote, unstaffed, or inaccessible location, the excavator shall notify an underground facility operator who may have a facility in the area of a proposed excavation at least two but not more than 15 working days before the date scheduled for beginning the excavation. In the case of a request to locate in a remote or unstaffed location, the excavator shall notify the operator at least 10 but not more than 20 working days before the scheduled date for beginning excavation.

(c) In an emergency, the excavator shall immediately notify each underground facility operator in the area of the emergency and of the need for the excavation and request prompt location of underground facilities.

Sec. 42.30.410. Operator's response to request to locate; immunity related to unmarked or inaccurately marked facilities.

(a) An underground facility operator shall accept requests to locate underground facilities during the operator's regular business hours. An operator who receives a request to locate shall maintain for at least one year an accurate record of the request and responses to the request.

(b) When an underground facility operator receives a request to locate, it shall notify the excavator of the location of the underground facilities that the operator is able to field mark with reasonable accuracy and field mark those facilities. If the operator owns, uses, or operates an underground facility that is identified as being in the area of the proposed excavation but that the operator cannot field mark with reasonable accuracy, the operator shall provide the excavator with the best information available to the operator about its location and shall provide on-site assistance until the facility is located or until the excavator no longer needs assistance in locating that facility.

(c) The field marks for an underground facility buried 10 feet deep or less must be located within 24 horizontal inches of the outside dimensions of the facility. For a facility buried deeper than 10 feet, the operator shall locate the field marks within 30 horizontal inches of the outside dimensions of the facility. The operator shall use stakes, paint, or other clearly identifiable material to show the field location of the underground facility. The marker used to designate the approximate location of an underground facility must follow the current color code standard used by the American Public Works Association.

(d) Except for an underground facility in a remote, unstaffed, or inaccessible location, an underground facility operator shall respond to a request to locate promptly. A response is considered to be prompt if it is made within two working days after the operator receives the request or at a later time so long as the response occurs before the beginning of the excavation. For an underground facility in an accessible remote or unstaffed location, the operator shall respond within 10 working days after the operator receives the request or at a later time so long as the response occurs before the beginning of excavation.

(e) After an operator has field marked an underground facility, the excavator is responsible for maintaining the markings.

(f) An excavator may not begin to excavate until each underground facility has been field marked.

(g) When an operator has field marked an underground facility once at the request of an excavator, the operator has the right to receive compensation from the excavator for costs incurred in responding to subsequent requests to locate the same underground facility during the same excavation project if the excavator failed to maintain the original marking.

(h) If an excavator discovers an underground facility that was not field marked or was inaccurately field marked, the excavator shall immediately stop excavating in the vicinity of the facility and shall notify the operator of the discovery. The excavator may notify the operator by means of a notification center. The operator shall treat the notification as a request to locate in an emergency and shall respond accordingly. An excavator may not be held liable for inadvertent damage caused to an unmarked or an inaccurately marked underground facility.

(i) Unless the request to locate is made in response to an emergency, an underground facility operator has the right to receive compensation for costs incurred in responding to a request to locate that gives the operator less notice than the minimum notice required by this section. This subsection may not be interpreted to require the operator to respond to the request to locate within the time requested in the notice.

Sec. 42.30.420. Responsibility of construction project owners.

The owner of a construction project that will require excavation shall indicate in bid documents or contracts for construction the existence of underground facilities that the project owner knows are located inside of the proposed area of excavation. This requirement does not release the excavator from the excavator's responsibility under AS 42.30.400 - 42.30.490.

Sec. 42.30.430. Obligations concerning the conduct of excavations.

(a) An excavator shall use reasonable care to avoid damaging an underground facility. The excavator shall

(1) determine, without damage to the facility, the precise location of an underground facility whose location has been marked;

(2) plan the excavation to avoid damage to and minimize interference with an underground facility in or near the excavation area; and

(3) to the extent necessary to protect a facility from damage, provide support for an underground facility in and near the construction area during the excavation.

(b) An excavator who, in the course of excavation, contacts or damages an underground facility shall notify the operator. If the damage causes an emergency, the excavator shall also alert appropriate local public safety agencies and take reasonable steps to ensure public safety. A damaged underground facility may not be reburied until it is repaired or relocated to the satisfaction of the operator. The operator of an underground facility that was damaged during excavation shall arrange for repair or relocation of the facility as soon as practical.

Sec. 42.30.440. Penalties; injunctive relief.

(a) In addition to all other remedies provided by law, a person who violates a provision of AS 42.30.400 - 42.30.490 is subject to a civil penalty of not less than $50 nor more than $1,000 for each offense if the violation results in or significantly contributes to damage to an underground facility.

(b) If the court finds that an excavator is violating or threatening to violate a provision of AS 42.30.400 - 42.30.490 and the violation may result in damage to an underground facility, the court may grant injunctive relief to the underground facility operator.

Safety Requirements For Excavation Adjacent To Natural Gas Pipelines

ENSTAR Natural Gas Company / Alaska Pipeline Company

Safety

ENSTAR Natural Gas Company provides natural gas service through 3,200 miles of gas mains to over 133,000 customers in South Central Alaska. ENSTAR's gas pipeline system is designed, installed, and maintained with the highest regard for safety in compliance with applicable federal, state, and local government statutes and regulations. ENSTAR is regularly inspected to ensure that its operation meets industry standards.

The US Department of Transportation, Pipeline & Hazardous Materials Safety Administration (PHMSA) oversees minimum safety regulations for the transportation of natural gas by pipelines. The DOT safety regulations are currently published in Title 49, Part 190, 191, 192 & 199 of the Code of Federal Regulations (CFR).

As an operator of a natural gas system, ENSTAR is required by the DOT regulations to:

1. Deliver gas safely and reliably to customers.
2. Provide training and written instruction for employees.
3. Establish written procedures to minimize hazards resulting from gas pipeline emergencies.
4. Keep records of inspections and testing.
5. Test employees in safety-sensitive positions for prohibited drugs and alcohol.

Pipeline Reliability

Safety is and always will be unequivocally the number one priority for the natural gas industry. The industry spends billions of dollars each year to ensure the safety and reliability of the natural gas infrastructure. Natural gas utilities are subject not only to their own stringent internal controls, but also must meet rigorous federal and state oversight. Inspections are performed regularly by PHMSA regulators to ensure that compliance is being met.

Historically, excavation damage is the leading cause of most serious pipeline failures. Over 50% of the 312 damages to ENSTAR's pipelines last year were done by excavators that failed to obtain locates. Call before you dig, it's free and it's the law. Calling for locates is now as simple as dialing **811**. Dialing **811** anywhere in the United States connects you with the Locate Call Center for that area. In Alaska, dialing **811** connects you with Alaska Digline Inc. Alaska Digline Inc. will take your excavation information and notify all affected utilities. Utilities have two business days to mark their utilities after receiving your call.

Pressure Classification

Natural gas is a potentially dangerous, compressible gas. Gas pipelines with the highest pressure contain the highest stored potential energy and present the greatest risk. Caution is always warranted when working around natural gas facilities. **Extreme caution must be exercised whenever transmission pipelines are encountered. Contact ENSTAR Engineering Dept., (907) 264-3740 for specific instructions before working within 10 feet of any transmission pipeline.**

Pressure Classification	Pressure Rating Range	Pipeline Material
Transmission Pressure	Greater than 60 psig	Steel
Distribution Pressure	60 psig or less	Polyethylene, Steel, Copper

Recognizing ENSTAR's Pipelines

ENSTAR transmission pipelines are generally marked above ground with pipeline markers similar to the one shown. Transmission pipelines are located in the vicinity of the pipeline markers. Transmission pipelines are steel and range in size from 4" to 20" in diameter. They are typically coated with a protective coating. There is no single color but yellow and black are the predominant color while some are green or brown.

Typical ENSTAR Pipeline Marker

Distribution pipelines are steel, copper or polyethylene with locate wire. These pipelines range in size from ½" diameter to 12" in diameter. Gas "Mains" are typically found in street right-of-ways or utility easements and supply the natural gas to an entire street or subdivision. They are typically steel or polyethylene and range in size from 2" to 12" in diameter.

Natural gas "service lines" are connected to the gas main. Service lines generally serve a single building or small group of buildings on private property. Service lines are typically ½" to 1" in diameter. Service lines can be rigid steel, steel tubing, copper or polyethylene with locate wire. Gas mains and service lines are generally black or yellow in color.

Excavation Requirements for Natural Gas Pipelines

1 **Line Locating is a Free Service:** To request a locate, dial **811** the new Nationally recognized One-Call number and you will be connected to Alaska Digline Inc. Call at least two but not more than 15 working days before the date scheduled for beginning the excavation. Hand digging is advised when excavating within 2 feet of a marked facility. After ENSTAR has field marked with yellow paint, or flagged the location of an underground facility, the excavator is responsible for maintaining the markings. **Failure to call is a violation of state statutes and could result in fines well in excess of the cost of the damage.**

2 **Support for Steel Line Crossings:** If an excavation below a **steel gas** pipeline leaves the pipeline unsupported for a distance of more than 20 feet, the excavator must provide additional support for the pipeline. Support must be provided in a way as to not damage the pipe or its coating during construction, backfill placement, and compaction. Generally, a support spacing of 5 feet or less will provide the needed bracing. ENSTAR Engineering must approve all excavations crossing steel pipelines above 4-inch diameter. If support is required, ENSTAR engineering written approval is required prior to beginning construction. Call ENSTAR Engineering (907) 264-3740 for further information. Extra care must be taken when geotextile fabric and/or rigid insulation are used. In addition to continuous support under the pipeline, compacted fill material shall be placed between the geotextile fabric/rigid insulation and the pipeline. Care shall be taken to insure stability for the ENSTAR facility. Failure to properly protect ENSTAR's facilities could result in future damage if differential settlement occurs.

3 **Support for Polyethylene Line Crossings:** If an excavation is below a **polyethylene gas pipeline** the excavator must continuously support such pipeline during construction, backfill placement, and compaction. Geotextile fabric and/or rigid insulation shall be sufficiently separated from the polyethylene gas pipeline to prevent undue stress during the compaction/settlement process. (see item 8 clearance)

4 **Excavation Parallel to Pipeline:** When parallel excavations are expected to expose or undermine sections of pipeline, the excavator must notify ENSTAR engineering in advance. Care must be taken not to damage the pipeline, or to induce stresses due to differential settlement following construction**. Long parallel excavations exposing pipelines can be very dangerous if not properly performed and shall not be attempted without prior approval by ENSTAR.** Contact ENSTAR Engineering at 264-3740 for additional information.

5 **Blasting:** All blasting that is to be done within 500' of any Company Facility, shall be reviewed by an ENSTAR engineer, with the person performing the blasting and appropriate measures, (i.e. require minimum distance from facilities, minimize blasting charge intensity, etc.) shall be taken to protect the integrity of the Company's Facilities. A leak survey shall be performed after any blasting activity, which is within 500' of any Company Facility. The leak survey zone shall include all Company Facilities within 500' radius of the blasting.

6 **Trenchless Excavation (Vertical or Horizontal):** **Whenever a trenchless excavation (horizontal or vertical) is performed within 5 feet of a distribution pressure pipeline and 10 feet of a transmission pressure pipeline, the gas pipeline must be exposed to visually determine the exact location.** If the trenchless excavation is expected to cross the pipeline within the aforementioned distances, the pipeline in question shall be fully exposed to a minimum of 1 foot beneath the pipeline prior to the expected crossing to ensure that the pipeline is not unduly damaged due to ground movement in the immediate vicinity of the pipeline. **When performing a trenchless excavation parallel to a gas pipeline, the gas pipeline must be exposed at intervals of 25 feet or less to visually determine the pipeline's exact location.** Trenchless excavation is defined as drilling, directional drilling, boring, pile installation etc.

7 **Clearance:** Natural Gas pipelines require a **12 inch minimum separation from other underground structures** not associated with ENSTAR's pipeline system. Additional clearance from other underground structures may be required to allow proper maintenance and reduce the possibility of damage due to the proximity of other structures (49 CFR § 192.325.) This clearance requirement includes rigid insulation and geotextile fabrics. **ENSTAR requires a 36-inch minimum separation from certain electrical facilities, including any grounded components i.e. ground rods, non-insulated conductors and associated structures.**

8 **Pipeline Cover:** ENSTAR pipelines in public rights-of-way are generally installed with 36 inches to 48 inches of cover, and in private rights-of-way with 12 inches to 36 inches of cover. Projects that decrease cover or increase cover in excess of 60 inches must receive prior approval from ENSTAR Engineering Department (907) 264-3740**.** ENSTAR has limited ability to prevent the removal of cover over gas pipelines. Increasing pipeline cover more than 5 feet or decreasing pipeline cover to less than 3 feet may be considered a damage that may result in relocation of the gas pipeline at the expense of the Excavator. The depth of cover listed above cannot be assumed after installation. The excavator is responsible for any damage to ENSTAR pipelines regardless of the depth at which they are encountered.

9 **Inspection:** All excavations in the immediate vicinity of ENSTAR Natural Gas facilities (including backfill, compaction, temporary support, and shoring), is subject to prior approval and inspection by ENSTAR personnel. Transmission pipeline inspections are provided whenever an excavator is working within ten feet of a transmission pipeline. If it has been determined that there was excavation either by hand or machinery within 5 ft. of ENSTAR Natural Gas Distribution mains or 10ft. from ENSTAR Natural Gas Transmission mains without either locates or standby (qualified ENSTAR personnel), ENSTAR Natural Gas reserves the right to excavate to determine if there has been any damage to ENSTAR Natural Gas facilities. If damage has occurred ENSTAR Natural Gas has the right to charge the excavator for repairs.

Pipeline Components

Pipe Wall Protection

Dents, scrapes, gouges and scratches reduce pipeline wall thickness and affect the safety of the facility in two ways. First, the reduced wall thickness decreases the pressure at which the pipeline can safely operate. Second, the damage serves as a stress concentration that can cause a future brittle failure of the pipeline. **An ENSTAR representative must inspect each dent, scrape, gouge or scratch, no matter how small, before it is reburied.**

Corrosion Protection

ENSTAR's **steel** pipelines are protected from corrosion by a dielectric coating and an impressed current or galvanic anode cathodic protection system. Direct contact with metallic objects (a short) or removal of the protective coating can compromise this system. Contact the ENSTAR Engineering Department (907) 264-3740, whenever coating damage or a short is encountered. **An ENSTAR representative must inspect each short or section of damaged coating before it is reburied.**

Locate Wire Protection

ENSTAR's **polyethylene** pipelines are installed with a parallel copper wire, which is used to locate the pipeline. If the locate wire or wire coating is damaged, ENSTAR's ability to properly locate the pipeline may be severely compromised. Electrical continuity must be maintained. **An ENSTAR representative must inspect each possible locate wire damage before it is reburied.**

Service Line Excess Flow Valves

Excess Flow Valve (EFV) is a safety device installed in a natural gas service line near the gas main that is designed to automatically shut off the flow of natural gas in the event that the service line is broken. Effective February 12, 2010, all gas companies nationwide were required to install an EFV in any newly installed service line that serves one single family dwelling.

ENSTAR will not be installing EFVs on service lines that branch to multiple buildings, multi-family, commercial or industrial structures. ENSTAR will not be installing EFVs on the existing 100,000 service line currently in use.

What does this mean to you as an Excavator?

Should you dig into a natural gas service line that has an EFV, the gas will blow for a short duration and shut off automatically if the flow of gas is sufficient to close the EFV. Damages that do not sever the service line completely may not cause the EFV to close and the gas will continue to blow. Regardless, **you must report all damages to ENSTAR immediately**. EFVs are designed to allow a small amount of "bleed-by" so they can be reset without excavating the gas main. Backfilling a damaged service line with gas bleeding underground is extremely dangerous and could fuel an explosion if it is not repaired timely. **Do not assume a damaged service is dead or abandoned if it is not blowing gas**. The EFV may have shut down the flow of gas. Report all damages immediately by calling 277-5551.

Please remember that the vast majority of ENSTAR service lines WILL NOT have an EFV. Should you damage a service line without an EFV, gas will blow at full line pressure until ENSTAR can arrive to shut it off. Your best protection against damaging underground utilities is to call **811** for locates and hand dig within 2 feet of the locate marks.

What to do if You Damage a Gas Line or Smell Gas

If you damage a pipeline facility, call ENSTAR's 24-hour dispatch number at 277-5551. Call ENSTAR any time a gas line is broken, scraped, pulled, cut or otherwise damaged. **If the damage results in a release of natural gas and there is a danger to life or property, you should call the local Fire Department or 911.** Eliminate all ignition sources and evacuate the area of the damage. Wait for an ENSTAR employee to shut off the flow of gas and make repairs.

Gas lines that have been pulled, stretched, kinked or bent could be damaged underground away from where the line is connected. If you pull or stretch gas lines call ENSTAR at 277-5551 and an ENSTAR Representative will investigate for possible underground leakage.

Qualified Personnel Requirements

Only qualified individuals meeting all applicable requirements may perform work on ENSTAR Natural Gas Company facilities. At a minimum, such individuals must comply with applicable federal, state and local regulation, statutes, and ordinances.

For further information about ENSTAR, visit our web site @ www.enstarnaturalgas.com

U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

May 1, 2017

Dear Excavator:

The U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA), is writing to notify you that anyone conducting a digging project in the state of Alaska who fails to comply with the one-call requirements and damages a natural gas or hazardous liquid pipeline, may be subject to Federal enforcement action. Currently, the state of Alaska does not adequately enforce its own one-call law; therefore, PHMSA may enforce Chapter 49, Code of Federal Regulations (CFR), Part 196 in Alaska. The Federal regulation prescribes the minimum requirements that excavators must follow to protect underground pipelines from excavation-related damage and requires excavators to do the following:

- Prior to and during excavation activity, the excavator must:
  - Use an available one-call system before excavating to notify operators of underground pipeline facilities of the timing and location of the intended excavation;
  - If underground pipelines exist in the area, wait for the pipeline operator to arrive at the excavation site and establish and mark the location of its underground pipeline facilities before excavating;
  - Excavate with proper regard for the marked location of pipelines an operator has established by taking all practicable steps to prevent excavation damage to the pipeline; and,
  - Make additional use of the one-call system as necessary to obtain locating and marking before excavating to ensure that underground pipelines are not damaged by excavation.
- If a pipeline is damaged in any way by excavation activity, the excavator must promptly report such damage to the pipeline operator, whether or not a leak occurs, at the earliest practicable moment following discovery of the damage.
- If damage to a pipeline from excavation activity causes the release of any PHMSA regulated natural and other gas or hazardous liquid from the pipeline, as defined in Chapter 49, CFR, Parts 192, 193, or 195, the excavator must promptly report the release to appropriate emergency response authorities by calling the 911 emergency telephone number.

Excavators who fail to comply with these requirements may be subject to civil penalties not to exceed $205,638 for each violation for each day the violation continues, except that the maximum administrative civil penalty may not exceed $2,056,380 for any related series of violations (49 CFR 190.223). Additionally, PHMSA may enforce existing requirements applicable to pipeline operators, including those specified in 49 CFR 192.614, 49 CFR 195.442

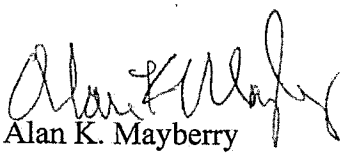
and 49 U.S.C. 60114, if a pipeline operator fails to properly respond to a locate request or fails to accurately locate and mark its pipeline.

PHMSA's excavator enforcement rule was developed to address one of the leading causes of pipeline accidents that hurt or kill people – damage to the pipeline occurring during a digging project. In 2006, through the Pipeline Inspection, Protection, Enforcement and Safety Act (Public Law 109–468, December 29, 2006), Congress directed PHMSA to take enforcement actions, including civil penalties, against excavators who fail to comply with one-call requirements and damage a natural gas or hazardous liquid pipeline. Under this program, PHMSA annually evaluates the state enforcement programs. **Federal enforcement is only applicable in States where enforcement of the state one-call law is inadequate.** PHMSA conducted its evaluation of the Alaska enforcement program in 2016 and determined that the Alaska enforcement program is inadequate. Therefore, PHMSA may now conduct Federal enforcement when Alaska excavators fail to comply with 49 CFR 196.

It is PHMSA's intent to encourage adequate State enforcement of the one-call law. In States with fully developed enforcement programs that include civil penalties, there is improved safety and a reduction in damage rates. Therefore, PHMSA continues to work with stakeholders to improve damage prevention, by providing grant funding, educating policy-makers in support of strong damage prevention laws and programs, participating in informational meetings, and other outreach efforts. We encourage you to support Alaska's efforts to develop an adequate enforcement program in Alaska.

More information about this program can be found on our website at http://phmsa.dot.gov/pipeline/safety-awareness-and-outreach/excavator-enforcement#. If you have any questions, please contact PHMSA's Damage Prevention Team by email at excavation.enforcement@dot.gov.

Sincerely,



Alan K. Mayberry
Associate Administrator, Office of Pipeline Safety

Safety Requirements For Excavation Adjacent To Natural Gas Pipelines

ENSTAR Natural Gas Company/Alaska Pipeline Company

Safety

ENSTAR Natural Gas Company provides natural gas service through 3080 miles of gas mains to over 140,000 customers in South Central Alaska. ENSTAR's gas pipeline system is designed, installed, and maintained with the highest regard for safety in compliance with applicable federal, state, and local government statutes and regulations. ENSTAR is regularly inspected to ensure that its operation meets industry standards.

The US Department of Transportation, Pipeline & Hazardous Materials Safety Administration (PHMSA) oversees minimum safety regulations for the transportation of natural gas by pipelines. The DOT safety regulations are currently published in Title 49, Part 190, 191, 192 & 199 of the Code of Federal Regulations (CFR).

As an operator of a natural gas system, ENSTAR is required by the DOT regulations to:

1. Deliver gas safely and reliably to customers.
2. Provide qualification training and written instruction for employees.
3. Establish written procedures to minimize hazards resulting from gas pipeline emergencies.
4. Keep records of inspections and testing.
5. Test employees in safety-sensitive positions for prohibited drugs and alcohol.

Damage Prevention Law Enforcement Program

The Pipeline and Hazardous Materials Safety Administration (PHMSA) is the excavation damage enforcement agency in the State of Alaska. The enforcement program protects the public from the risk of pipeline ruptures caused by excavation damage. Should an excavator violate any of the damage prevention requirements prescribed in 49 CFR part 196, they may face civil and or criminal penalties. Civil penalties of not more than $200,000 for each violation, not to exceed $2,000,000 may be levied. Criminal penalties may be enforced with imprisonment of not more than 5 years per violation. More information about the PHMSA ruling can be found at http://www.phmsa.dot.gov/.

Public Safety & Pipeline Reliability

Safety is and always will be unequivocally the number one priority for the natural gas industry. The industry spends billions of dollars each year to ensure the safety and reliability of the natural gas infrastructure. Natural gas utilities are subject not only to their own stringent internal controls, but also must meet rigorous federal and state oversight. Inspections are performed regularly by PHMSA regulators to ensure that compliance is being met.

Excavation damage is the leading cause of most serious pipeline failures. Over 30% of the 284 damages to ENSTAR's pipelines were done by excavators that failed to obtain locates.

Call 811; it's the Law

Call before you dig, it's free and it's the law. Calling for locates is now as simple as dialing **811** or go online to www.akonecall.com . In Alaska, dialing **811** connects you with Alaska Digline Inc. Alaska Digline Inc. will take your excavation information and notify all affected utilities. Utilities have two business days to mark their utilities after receiving your call.

Pressure Classification

Natural gas is a potentially dangerous, compressible gas. Gas pipelines with the highest pressure contain the highest stored potential energy and present the greatest risk. Caution is always warranted when working around natural gas facilities. **Extreme caution must be exercised whenever transmission pipelines are encountered. Contact ENSTAR Engineering Dept., (907) 334-7740 for specific instructions before working within 10 feet of any transmission pipeline.**

Pressure Classification	Pressure Rating Range	Pipeline Material
Transmission Pressure	Over 100 psi	Steel
Distribution Pressure	100 psi and under	Polyethylene, Steel, Copper

IDENTIFYING ENSTAR's PIPELINES

ENSTAR transmission pipelines are generally marked above ground with pipeline markers similar to the one shown. Transmission pipelines are located in the vicinity of the pipeline markers. Transmission pipelines are steel and range in size from 2" to 20" in diameter. They are typically coated with a protective coating. There is no single color but yellow and black are the predominant color while some are green or brown.

Typical ENSTAR Pipeline Marker

Distribution pipelines are steel, or High Density polyethylene with locate wire. These pipelines range in size from 1" diameter to 12" in diameter. Gas "Mains" are typically found in street right-of-ways or utility easements and supply the natural gas to an entire street or subdivision.
Natural gas "service lines" are connected to the gas main. Service lines generally serve a single building or small group of buildings on private property. Service lines are typically ½" to 1" in diameter. Service lines can be rigid steel, steel tubing, copper or polyethylene with locate wire. Gas mains and service lines are generally black or yellow in color.

Excavation Requirements for Natural Gas Pipelines

1 **Line Locating: A Free Service:** To request a locate, dial **811** the new Nationally recognized One-Call number and you will be connected to Alaska Digline Inc. Call at least two but not more than 15 working days before the date scheduled for beginning the excavation.

2 **Request a Relocate Ticket when**: the marks have not been maintained, the excavator is unable to accurately "read" the locate marks, the marks have been destroyed, or the marks are more than 14 days old.

3 **Hand Dig or use other non-intrusive means:** In Alaska, you must use caution and hand dig (or employ other non-intrusive means of excavation) within 24 horizontal inches of the outside dimensions of the facility. If you are digging to a depth of 10 feet or greater you must hand dig within 30 horizontal inches of the outside dimensions of the facility. *Treat all buried lines as if they were live.*

4 **Standby/Inspection Requirements:** All excavations in the immediate vicinity of ENSTAR Natural Gas facilities (including backfill, compaction, temporary support, and shoring), are subject to prior approval and inspection by ENSTAR personnel. Pipeline inspections are provided whenever an excavator is working within 10 feet of a transmission pipeline, or within 5 feet of a distribution line. If excavation occurs without either locates or standby (qualified ENSTAR personnel), ENSTAR Natural Gas reserves the right to excavate to determine if there has been any damage to ENSTAR Natural Gas facilities. If damage has occurred ENSTAR Natural Gas has the right to charge the excavator for repairs.

5 **Excavation Parallel to Pipeline: Whenever an excavation (horizontal or vertical) is performed within 5 feet of a distribution pressure pipeline and 10 feet of a transmission pressure pipeline, the gas pipeline must be exposed to visually determine the exact location.** When parallel excavations are expected to expose or undermine sections of pipeline, the excavator must notify ENSTAR engineering in advance. Care must be taken not to damage the

pipeline, or to induce stresses due to differential settlement following construction. **Long parallel excavations exposing pipelines can be very dangerous if not properly performed and shall not be attempted without prior approval by ENSTAR.** Unless otherwise approved by ENSTAR engineering, all excavations parallel to a gas pipeline require that the pipeline be exposed at intervals no greater than every 25 feet to visually determine the pipeline's exact location. Contact ENSTAR Engineering at (907)334-7740 for additional information.

6 **Trenchless Excavation (Vertical or Horizontal): Whenever a trenchless excavation (horizontal or vertical) is performed within 5 feet of a distribution pressure pipeline and 10 feet of a transmission pressure pipeline, the gas pipeline must be exposed to visually determine the exact location.** If the trenchless excavation is expected to cross the pipeline within the aforementioned distances, the pipeline in question shall be fully exposed to a minimum of 1 foot beneath the pipeline prior to the expected crossing to ensure that the pipeline is not unduly damaged due to ground movement in the immediate vicinity of the pipeline. **When performing a trenchless excavation parallel to a gas pipeline, the gas pipeline must be exposed at intervals of 25 feet or less to visually determine the pipeline's exact location.** Trenchless excavation is defined as drilling, directional drilling, boring, pile installation etc.

7 **Support for Steel Pipeline Crossings:** If an excavation below a **steel gas** pipeline leaves the pipeline unsupported for a distance of more than 20 feet, the excavator must provide additional support for the pipeline. Support must be provided in a way as to not damage the pipe or its coating during construction, backfill placement, and compaction. Generally, a support spacing of 5 feet or less will provide the needed bracing. ENSTAR Engineering must approve all excavations crossing steel pipelines above 4-inch diameter. If support is required, ENSTAR engineering written approval is required prior to beginning construction. Call ENSTAR Engineering (907)334-7740 for further information. Extra care must be taken when geotextile fabric and/or rigid insulation are used. Geotextile fabric and/or rigid insulation shall be sufficiently separated from steel pipeline and in addition to continuous support under the pipeline, compacted fill material shall be placed between the geotextile fabric/rigid insulation and the pipeline (see item 10 clearance). Care shall be taken to insure stability for the ENSTAR facility. Failure to properly protect ENSTAR's facilities could result in future damage if differential settlement occurs.

8 **Support for Polyethylene Line Crossings:** If an excavation is below a **polyethylene gas pipeline** the excavator must continuously support such pipeline during construction, backfill placement, and compaction. Geotextile fabric and/or rigid insulation shall be sufficiently separated from the polyethylene gas pipeline to prevent undue stress during the compaction/settlement process. (see item 10 clearance)

9 **Blasting:** All plans for blasting that will occur within 500' of any Company Facility, shall be reviewed by an ENSTAR engineer. The person performing the blasting shall take all appropriate measures as recommended by ENSTAR engineering, (i.e. require minimum distance from facilities, minimize blasting charge intensity, etc.) to protect the integrity of the Company's Facilities. A leak survey shall be performed before and after any blasting activity, within 500' of any Company Facility.

10 **Clearance:** Natural Gas pipelines require a **12 inch minimum separation from other underground structures** not associated with ENSTAR's pipeline system. Additional clearance from other underground structures may be required to allow proper maintenance and reduce the possibility of damage due to the proximity of other structures (49 CFR § 192.325.) This clearance requirement includes rigid insulation and geotextile fabrics. **ENSTAR requires a 36-inch minimum separation from certain electrical facilities, including any grounded components i.e. ground rods, non-insulated conductors and associated structures.**

11 **Pipeline Cover:** ENSTAR pipelines in public rights-of-way are generally installed with 36 inches to 48 inches of cover, and in private rights-of-way with 12 inches to 36 inches of cover. Projects that decrease cover or increase cover in excess of 60 inches must receive prior approval from ENSTAR Engineering Department (907)334-7740. ENSTAR has limited ability to prevent the removal of cover over gas pipelines. Increasing pipeline cover more than 5 feet or decreasing pipeline cover to less than 3 feet may be considered a damage that may result in relocation of the gas pipeline at the expense of the Excavator. The depth of cover listed above cannot be assumed after installation. The excavator is responsible for any damage to ENSTAR pipelines regardless of the depth at which they are encountered.

12 **Landscaping-** Most landscaping activities require locates, and when it is determined that landscaping activities are within 5 feet of a distribution pipeline, or 10 feet of a transmission pipeline, Inspection/Standby requirements as listed above are applicable. Planting of trees and shrubs over existing pipelines is not permissible and can present a safety and reliability hazard to the pipeline.

Pipeline Components

Pipe Wall Protection

Dents, scrapes, gouges and scratches reduce pipeline wall thickness and affect the safety of the facility in two ways. First, the reduced wall thickness decreases the pressure at which the pipeline can safely operate. Second, the damage serves as a stress concentration that can cause a future brittle failure of the pipeline. **An ENSTAR representative must inspect each dent, scrape, gouge or scratch, no matter how small, before it is reburied.**

Corrosion Protection

ENSTAR's **steel** pipelines are protected from corrosion by a dielectric coating and an impressed current or galvanic anode cathodic protection system. Direct contact with metallic objects (a short) or removal of the protective coating can compromise this system. Contact the ENSTAR Engineering Department (907)334-7740, whenever coating damage or a short is encountered. **An ENSTAR representative must inspect each short or section of damaged coating before it is reburied.**

Locate Wire Protection

ENSTAR's **polyethylene** pipelines are installed with a parallel copper wire, which is used to locate the pipeline. If the locate wire or wire coating is damaged, ENSTAR's ability to properly locate the pipeline may be severely compromised. Electrical continuity must be maintained. **An ENSTAR representative must inspect and/repair each possible locate wire damage before it is reburied,** accidental locate wire damage repair is free of charge.

Service Line Excess Flow Valves

An Excess Flow Valve (EFV) is a safety device installed in a natural gas service line near the gas main that is designed to automatically shut off the flow of natural gas in the event that the service line is broken. Effective ~~February~~ April ~~7~~12, 201~~7~~0, all gas companies nationwide are required to install an EFV in any newly installed or replaced service line that serves ~~a~~one single or multi family dwelling.

What does this mean to you as an Excavator?

Should you damage a natural gas service line that has an EFV, the gas will blow for a short duration and shut off automatically if the flow of gas is sufficient to close the EFV. Damages that do not sever the service line completely may not cause the EFV to close and the gas will continue to blow. Regardless, **you must report all damages to ENSTAR immediately**. EFVs are designed to allow a small amount of "bleed-by" so they can be reset without excavating the gas main. Backfilling a damaged service line with gas bleeding underground is extremely dangerous and could fuel an explosion if it is not repaired timely. **Do not assume a damaged service is dead or abandoned if it is not blowing gas**. The EFV may have shut down the flow of gas. Report all damages immediately by calling **(907)277-5551.**

Please remember that the vast majority of ENSTAR service lines WILL NOT have an EFV. Should you damage a service line without an EFV, gas will blow at full line pressure until ENSTAR can arrive to shut it off. Your best protection against damaging underground utilities is to call **811** for locates and hand dig within 2 feet of the locate marks.

What to do if You Damage a Gas Line or Smell Gas

If you damage a gas line, immediately **Call 911** and ENSTAR at **1-844-SMELL GAS (1-844-763-5542).** It's the Law.

Gas lines that have been pulled, stretched, kinked or bent could be damaged underground away from where the line is connected. If you pull or stretch gas lines call ENSTAR at **(907)277-5551** and an ENSTAR Representative will investigate for possible underground leakage.

Qualified Personnel Requirements

Only qualified individuals meeting all applicable requirements may perform work on ENSTAR Natural Gas Company facilities. At a minimum, such individuals must comply with applicable federal, state and local regulation, statutes, and ordinances.

Additional pipeline information can be found on the following websites:

PHMSA/DOT	https://phmsa.dot.gov/pipeline
Common Ground Alliance	http://www.commongroundalliance.com
Pipeline 101	http://www.pipeline101.com
Alaska Digline, Inc.	http://www.akonecall.com/

For further information about ENSTAR, visit our web site @ www.enstarnaturalgas.com

ENSTAR
Natural Gas Company

ENSTAR Natural Gas Company
401 E. International Airport Road
Anchorage, AK 99519-0288
(907) 277-5551

April 18, 2017

AWWU
2121 PETE'S PLACE
ANCHORAGE, AK 99517

Safety Requirements for Excavation Adjacent To Natural Gas Pipeline

ENSTAR would like to assist you in working around gas lines and avoid the cost of repairs and potential injury. That's why we've developed the enclosed policy: "**Safety Requirements for Excavation Adjacent to Natural Gas Pipelines**". **Please read and review this policy with all your employees who may be working near natural gas pipelines. We've also included information about PHMSA (Pipeline and Hazardous Materials Safety Administration) and their new excavation enforcement laws and penalties that could affect you.**

ENSTAR distributes copies of this policy in an effort to help minimize and identify potential hazards for construction personnel and for the safety of the general public. We are concerned with preventing possible damage to ENSTAR gas facilities and disruption of gas service to customers.

ENSTAR needs your coordination and cooperation in working near gas lines. Either during the design phase or prior to the start of actual construction don't hesitate to call our Engineering Department for help to eliminate or minimize conflicts. If you have questions, please call **ENSTAR's Engineering Department, at 334-7740.**

Over the past 5 years, excavation related damages to ENSTAR's gas mains and service lines have dropped from an average of 319 damages per year to 259 damages last year. Although this is a great trend, more than half of last year's damages could have been prevented had the damaging party called for locates. Additionally, ENSTAR will continue to expand our service areas during the 2017 construction season.

Simply call **811** for your **Free** locate and you will be connected to Alaska Digline, Inc. Utilities in the area of your excavation will be marked within 2 working days. Remember to hand dig within 2 feet of any locate marks.

Sincerely,

ENSTAR Natural Gas Company

Joseph L. Lepley
Engineering Services Manager

cc: State of Alaska OSHA
Enclosure

Protection of Underground Pipelines from Excavation Activities

(information presented at the 2017 Safe Digging Conference)

811 It's FREE! and it's the LAW!

PHMSA Excavation Enforcement. What Can PHMSA Enforce (Part 196)?

THIS IS NOW AN ENFORCEABLE LAW!

- ❑ Failure to use one-call system before excavating . [196.103(a)]
- ❑ Failure to wait for the pipeline operator to arrive at the excavation site and establish and mark the location. [196.103(b)]
- ❑ Failure to excavate with proper regard for the marked location of pipelines. [196.103(c)]
- ❑ Failure to make additional use of one-call as necessary. [196.103(d)]
- ❑ Failure to promptly report any damage of a pipeline due to excavation activity to the pipeline operator. [196.107]
- ❑ Failure to promptly report any release of any PHMSA-regulated natural and other gas or hazardous liquid by calling the 911 emergency telephone number. [196.109]

Note: Pipeline operators and their contractors are subject to the excavation damage prevention requirements of 49 CFR Parts 192, 195 and 196.

How Can You Help?

- ❑ Require each excavator to open a dig ticket
- ❑ Excavation activities include both mechanized and non-mechanized equipment, including hand tools and include excavation, blasting, boring, tunneling, backfilling, the removal of above ground structures by mechanical or explosives means, and other earth moving operations.
- ❑ Confirm markings are on ground prior to any excavator begins work
- ❑ If project digging locations change, re-file dig tickets
- ❑ Do not allow excavators to perform locates on pipelines
- ❑ Do not allow excavators to move or make repairs to pipelines
- ❑ If damage is caused to pipeline, report it to the pipeline operator before covering up
- ❑ When in doubt, call the operator of the pipeline

ENSTAR Natural Gas Company

907-334-7788

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

SECTION VIII

MINIMUM RATES OF PAY

State of Alaska Wage Rate

Laborers' & Mechanics' Minimum Rates of Pay

Title 36. Public Contracts AS 36.05 & AS 36.10 Wage & Hour Administration Pamphlet No. 600 (Pamphlet 600) is hereby incorporated in its entirety. Pamphlet 600 is available for free download at http://labor.state.ak.us/lss/pamp600.htm.

The Municipality of Anchorage will include a paper copy of the wage rates in the signed Contract.

SECTION IX

AWWU DISADVANTAGED BUSINESS ENTERPRISE PROGRAM (MBE/WBE) (NOT USED)

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

SECTION X

EEO CONTRACT COMPLIANCE SPECIFICATIONS

EEO Special Provisions

EQUAL EMPLOYMENT OPPORTUNITY SPECIAL PROVISIONS

CONTRACT COMPLIANCE SPECIFICATIONS

Every municipal contract shall include language substantially the same as the following: The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, ancestry, age, sex, sexual orientation, gender identity, marital status, or physical or mental disability. The contract will comply with all laws concerning the prohibition of discrimination including, but not limited to, Title 5 and Title 7 of the Anchorage Municipal Code.

Every municipal contract shall state, in all solicitations or advertisements for employees to work under the contract, that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, ancestry, age, sex, sexual orientation, gender identity, marital status, or physical or mental disability.

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

SECTION XI

RECORD DRAWINGS (NOT USED)

SECTION XII

SOIL BORING LOGS (NOT USED)

SECTION XIII

TEMPORARY CONSTRUCTION PERMITS AND EASEMENTS (NOT USED)

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

SECTION XIV

PERMITS (NOT USED)

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

SECTION XV

TRAFFIC CONTROL PLANS (NOT USED)

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

SECTION XVI

ANNOTATED SITE PHOTOGRAPHS (NOT USED)

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

SECTION XVII

HAZARDOUS MATERIALS SURVEY REPORT (NOT USED)

Municipality of Anchorage

Anchorage Water and Wastewater Utility

2023 WATER AND SEWER IMPROVEMENTS

TERM MISCELLANEOUS CONSTRUCTION CONTRACTS

SECTION XVIII

MAXIMO ASSET REPORTS (NOT USED)

SECTION XIX

DRAWINGS (UNDER SEPARATE COVER) (NOT USED)