

**STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES**

**INVITATION FOR QUOTES FOR
A SMALL PROCUREMENT
(CONSTRUCTION RELATED)**

[per AS 36.30.320(a)]

Project Name & No.: <u>Copper River Septic Construction</u> <u>IFQ # 10-003-27</u> Location: <u>Tazlina, Alaska</u>	Procurement Agency and Address: <u>DNR/SSD/Procurement Section</u> <u>550 W 7th Ave., Suite 1330</u> <u>Anchorage, Alaska 99501</u>
Procurement Officer: <u>Chris Brooks, Procurement Specialist 5</u> Date of Issuance: <u>07/21/2026</u>	
DESCRIPTION OF WORK, REQUIRED COMPLETION DATE, LISTING OF ATTACHMENTS: See Scope of Work.	
The Project cost estimate is: ☐ under \$25,000 ☐ \$25,000 - \$50,000 ☐ \$50,001 - \$100,000 ☒ \$100,001 - \$200,000^{1,2} 1. Quotes in excess of \$200,000 will be deemed non-responsive. 2. Any project in excess of \$100,000 must be bonded. Davis-Bacon Wages (Title 36.05): are ☒ are not ☐ required on this project.	
The following insurance coverages are required: ☒ Workers Comp ☒ General Liability ☒ Automobile	
<u>Bonding Requirement:</u> Bid Bond, Payment Bond, & Performance Bond are ☒ are not ☐ required on this project.	
Quotes for furnishing all labor, equipment and materials and performing all work for the above Project are invited. To be eligible for consideration, quotes must be received before <u>2:00 PM</u> local time on the <u>14th</u> day of <u>August</u>, 202<u>6</u>. Late quotes cannot be accepted. Disadvantaged Business Enterprises (DBE's) may submit quotes and will not be discriminated against on the grounds of race, color, national origin or sex in consideration for an Award which results from this invitation. Any errors, omissions, or questions pertaining to solicitation procedures or Project requirements, requests for additional documents, or inquiries pertaining to site conditions or scheduled visits must be made to: Title: <u>Chris Brooks, Procurement Specialist 5</u>, at: <u>christopher.brooks@alaska.gov</u> Applicable provisions of AS 36.30 and 2 AAC 12 govern this solicitation.	
SUBMITTAL OF QUOTES: Quotes for this Project must be submitted in the manner noted below. All Offerors must familiarize themselves with the <i>Instructions to Offerors</i>, page 2 of this form, prior to submitting their quote. ☐ - VERBAL QUOTES SHALL BE GIVEN TO _____ AT THE ABOVE NOTED TELEPHONE NUMBER, PRIOR TO THE STATED DEADLINE. (See above Bonding Requirements.) ☒ - WRITTEN QUOTES, INCLUDING AMENDMENTS OR WITHDRAWALS, MUST BE RECEIVED PRIOR TO THE ABOVE NOTED DEADLINE. QUOTES MUST BE SUBMITTED ON FORM SPC-002, QUOTE SUBMITTAL, ATTACHED. (See above Bonding Requirements.) Written quotes may be submitted by electronically, hand delivered, or mailed in a sealed envelope. Confidentiality is only assured for sealed quotes. Mailed quotes must allow time for delivery and the envelope must be marked as follows:	
<u>Quote for Project:</u> Name: <u>Copper River Septic Construction</u> Number: <u>IFQ # 10-003-27</u> Attn: <u>Chris Brooks, Procurement Specialist 5</u>	
<u>Procurement Agency Address:</u> <u>DNR/SSD/Procurement Section</u> <u>550 W 7th Ave., Suite 1330</u> <u>Anchorage, Alaska 99501</u>	
Quote amendments or withdrawals must be made in writing to the individual of the Procurement Agency receiving the quotes, and must be received prior to the time for quote submittal.	

**STATE OF ALASKA
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INSTRUCTIONS TO OFFERORS

The State of Alaska desires that all Offerors submitting quotes on construction contracts are given a fair and equal opportunity to compete. Offerors are required to follow these instructions:

REVIEW THE PROJECT DOCUMENTS: Most construction Projects in excess of \$1,000 will have some type of written documentation prepared expressly for the Work. If you are asked to submit a quote and no written information has been provided, you should ask the procurement Agency for written documentation. If the scope of services have been described to you verbally, and you are selected for Contract Award, you must ensure that the information of the services to be performed (scope of work) is put in writing prior to accepting the Contract. When providing a Quote, carefully review and consider all materials related to the solicitation and work of the contract. **By submitting a quote the Offeror warrants that they are familiar with the Project requirements, have visited or otherwise examined the site, and are aware of the conditions to be encountered.** Offeror's can verify the contents and completeness of their quote documents by contacting the procurement Agency individual named on the front of this form.

SUBMITTING THE QUOTE: The Quote must be submitted in one of the following formats as called for in the Invitation:

1. **ORALLY** - if a verbal quote is solicited, the Offeror must provide, in addition to their quote amount and mailing address -- (1) their valid Alaska Business License number, (2) if applicable, a valid Contractor's Registration number, (3) their status as an Alaskan Bidder (Offeror), (4) their intended use of Alaskan products, (5) the carrier's name and policy number for their Workers' Comp Insurance (or a statement of sole proprietorship, if applicable), and (6) the Employer (Tax) Identification Number or Social Security Number. The Procurement Agency will enter this information on the quote schedule.

2. **WRITTEN** - if a written quote is solicited, the Offeror must complete, in ink or typewritten, the *Small Procurement Quote Submittal*, Form SPC-002. Failure to acknowledge receipt of addenda or to execute the form correctly and completely may disqualify the quote.

NOTE: The Department of Labor requires an Offeror to be licensed and registered for the required type of work prior to submitting a quote. If the procurement Agency determines the Offeror is improperly registered or licensed, their quote may be deemed nonresponsive.

SUBCONTRACTOR LISTING: Subcontractors intended to be utilized on this contract must be listed in the response to the solicitation. Work shall not be awarded to any subcontractor without prior approval from the procurement Agency. Subcontractors may be added or removed only as approved by the procurement Agency.

DETERMINATION OF THE LOWEST RESPONSIBLE QUOTE AND CONTRACT AWARD: Following receipt and determination of all **responsive** oral, written or sealed quotes, the procurement Agency will compare the quotes and determine the lowest Offeror. If the procurement Agency discovers a discrepancy between the unit price amount and the extended amount; the unit price amount will prevail. Conditioned quotes, unless expressly requested, will not be considered. When the quote schedule is composed of a basic amount with alternates, the procurement Agency will base its determination of the low quote and the amount of the Contract Award solely upon those quotes, basic and alternates, that are priced within the extent of available construction funds. Alternates will be considered for Award in the order listed, except that if the order of Offerors is not affected, the Award may include any combination of funded alternates, or none, as may be in the best interest of the procurement Agency.

When determining the lowest quote, the procurement Agency will also give a 5% Alaska Offeror's preference and an appropriate Alaska Products preference to quotes designating the applicability of a preference. To qualify for the Offeror's preference (per AS 36.30.170) the Offeror **must** (1) hold a current Alaska Business License, (2) submit the quote under the name appearing on the license, (3) have staffed and maintained a place of business within Alaska for the previous six months and (4) be incorporated or qualified to do business under the laws of the State. In addition, if the Offeror is a partnership or joint venture, all parties must meet the criteria to be eligible for the preference. A booklet fully describing the Alaska Preferences (Bidder, Offeror, Product, Disabilities, Veteran) program is available at <http://doa.alaska.gov/dgs/pdf/pref2.pdf>. A detailed description of the Alaska Products Preference Program is available at <http://www.commerce.state.ak.us/ded/dev/prodpref/prodpref.htm>.

The procurement Agency will make a determination of **responsibility** as required by 2 AAC 12.500. If the lowest Offeror is declared responsible, the procurement Agency will execute the *Notice of Award / Notice to Proceed*, Form SPC-003, and send it to the Offeror for acknowledgement. If the lowest Offeror is found to be nonresponsive, this process will be repeated with the second lowest Offeror -- and so on until the lowest responsive and responsible Offeror is determined.

NOTICE OF AWARD AND PROTEST: A written notice will be provided on all Awards exceeding \$ 25,000 (2 AAC 12.400(h)). All protests must be filed with the Commissioner of the procurement Agency (or designee) and copied to the Procurement Officer. Protest procedures are described in AS 36.30.560 and 2 AAC 12.695. The extent of the protest remedy is limited to quote preparation costs (AS 36.30.585).

INDEMNITY AND INSURANCE – The following insurance is required for all construction contracts:

Article 1. Indemnification

The Contractor shall indemnify, hold harmless, and defend the contracting agency from and against any claim of, or liability for error, omission or negligent act of the Contractor under this agreement. The Contractor shall not be required to indemnify the contracting agency for a claim of, or liability for, the independent negligence of the contracting agency. If there is a claim of, or liability for, the joint negligent error or omission of the Contractor and the independent negligence of the Contracting agency, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. "Contractor" and "Contracting agency", as used within this and the following article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term "independent negligence" is negligence other than in the Contracting agency's selection, administration, monitoring, or controlling of the Contractor and in approving or accepting the Contractor's work.

Article 2. Insurance

Without limiting Contractor's indemnification, it is agreed that Contractor shall purchase at its own expense and maintain in force at all times during the performance of services under this agreement the following policies of insurance. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the Contractor's policy contains higher limits, the state shall be entitled to coverage to the extent of such higher limits. Certificates of Insurance must be furnished to the Contracting Officer prior to beginning work and must provide for a notice of cancellation, nonrenewal, or material change of conditions in accordance with policy provisions. Failure to furnish satisfactory evidence of insurance or lapse of the policy is a material breach of this contract and shall be grounds for termination of the Contractor's services. All insurance policies shall comply with, and be issued by insurers licensed to transact the business of insurance under AS 21.

2.1 Workers' Compensation Insurance: The Contractor shall provide and maintain, for all employees engaged in work under this contract, coverage as required by AS 23.30.045, and; where applicable, any other statutory obligations including but not limited to Federal U.S.L. & H. and Jones Act requirements. The policy must waive subrogation against the State.

2.2 Commercial General Liability Insurance: covering all business premises and operations used by the Contractor in the performance of services under this agreement with minimum coverage limits of \$300,000 combined single limit per claim.

2.3 Commercial Automobile Liability Insurance: covering all vehicles used by the Contractor in the performance of services under this agreement with minimum coverage limits of \$300,000 combined single limit per claim.

**STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES**

(CONSTRUCTION RELATED)

Offeror to Complete this Portion

**STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES**

**SMALL PROCUREMENT
(CONSTRUCTION RELATED)
OFFEROR'S QUESTIONNAIRE**

Project Name & Number: Copper River Septic Construction – IFQ # 10-003-27

Project Location: _____

A. FINANCIAL

1. Have you ever failed to complete a contract due to insufficient resources?

Yes ☐ No ☐ If yes, explain: _____

2. Describe any arrangements you would make to finance this work: _____

B. EQUIPMENT

1. Describe the equipment you have available and would use for this project.

ITEM	QUAN.	MAKE	MODEL	SIZE/ CAPACITY	PRESENT MARKET VALUE

2. What percent of the total value of this contract would you subcontract? _____
3. Would you purchase any equipment for use on this project: Yes ☐ No ☐
If yes, describe type, quantity, and approximate cost: _____

4. Would you rent any equipment for this work? Yes ☐ No ☐
If yes, describe type, quantity, and approximate cost: _____

5. Is your proposal based on firm offers for all materials for this project? Yes ☐ No ☐
If no, please explain: _____

C. EXPERIENCE

1. Have you had previous construction contracts or subcontracts with the State of Alaska?
Yes ☐ No ☐
Describe the most recent or current contract, its completion date, and scope of work:

2. List, as an attachment to this questionnaire, other construction projects you have completed; the dates of completion, scope of work, and total contract amount for each project completed in the past 12 months.

I hereby certify that the above statements are true and complete.

Contractor Name

Signature

Date

Name and Title of Person Signing

Scope of Work

Copper River Septic Construction

Tazlina, Alaska

Invitation for Quotes # 10-003-27

Scope of Work

The Department of Natural Resources (DNR), Division of Forestry and Fire Protection (DFFP) requires construction services to replace an existing failing septic system at its Wildfire Fighting facility near Copper River, Alaska.

The existing septic system is experiencing backflow from the drain field into the septic tank. This is an indication that the septic drain field has reached the end of its useful life. The existing system was installed in 1981 and consists of a 1,500-gallon steel septic tank and a 100-foot-long deep trench soil absorption system.

The scope of work includes all labor, materials, and equipment to replace the existing septic system according to the design plan documents produced by design firm, AK Built Construction & Design LLC. See the attached engineering drawings and narrative.

Attachment 1: ADNDR DFFP Copper River Septic Design (7 pages / dated: 07/01/2026)

Attachment 2: AK Built Construction & Design, LLC (19 pages / dated: 06/22/2026)

Project Location

Mile Marker 110
Richardson Hwy
Tazlina, Alaska 99588

Worksite Inspection

Potential offerors are encouraged to visit the worksite so they can see the conditions and areas under which the work described will be performed. Offeror's failure to visit the worksite will in no way relieve the offeror of the responsibility of performing the work in strict compliance with the true intent and meaning of the terms, conditions and specifications of this Invitation for Quotes. The worksite may be inspected by contacting Daniel Smyth, (907) 250-8267

daniel.smyth@alaska.gov.

Project Completion Deadline

This project must substantially completed by December 1, 2026 with final completion no later than June 30, 2027. The Contractor is responsible for notifying the DNR Project Manager or Designee prior to mobilization/beginning operations, any time operations shut down or begin during the contract period, following completion of operations, and when all equipment is demobilized from the project site. The Contractor can request an extension of time from the

DNR Project Manager or Designee for completion of work, due to unforeseen weather conditions prohibiting work. Any extension for completion of services must be approved in writing by the Procurement Specialist via written change order to the contract.

Contractor Responsibilities

1. Provide all necessary materials, equipment, labor, maintenance, transportation, lodging, and per-diem to complete the scope of work;
2. Provide equipment and operator capable of performing work;
3. Mobilization/Demobilization;
4. Obtaining all required permits and licenses prior to beginning work;
5. Demobilize and clean-up of work site. All areas will be left in as clean or better condition than when the Contractor arrived. All construction debris is to be removed from the construction site;
6. Adhere to indemnification and insurance requirements outlined in this Invitation for Quotes during the life of the contract.

Mobilization and Demobilization

Mobilization and demobilization costs must be included in the quote prices offered for this Invitation for Quotes.

Problems and/or Discrepancies

If at any time contract operations do not meet DNR standards, the problem or discrepancy will be brought to the attention of the Contractor. Upon such notice, the Contractor will take expedient actions to remedy the discrepancy to standards using methods identified by DNR. Failure to correct operational problems in a timely manner will result in the termination of the Contractor on the project. DNR will then determine if any fiscal compensation for work completed is appropriate for payment to the Contractor.

Contractor Representative

During all periods of operation, the Contractor shall have a representative in the contract area authorized to act on his/her behalf in response to notices and instructions given by the DNR Project Manager or Designee regarding performance of this contract.

Contract Scheduling

Contractor will be required to submit an operating plan to the DNR Project Manager or Designee for approval prior to construction services beginning. The operating plan will identify all timelines, hours of operation, areas of concern, procedures for mitigating potential safety issues, equipment to be used, names of personnel working on the project, and contact numbers. The

work schedule under this contract will be included in the operating plan and approved by the DNR Project Manager or Designee.

Subcontractors

A list of subcontractors must be provided along with the offerors quote.

Minimum Prior Experience Requirement

In order for a quote to be considered responsive, the offeror must meet the minimum prior experience requirement(s) identified below:

- 5+ years experience installing Department of Environmental Conservation approved septic systems in interior Alaska.

Important: Offerors shall acknowledge on the Quote Submittal Form whether they meet the minimum prior experience requirement(s). Quotes that fail to meet the minimum prior experience requirement(s) shall be deemed non-responsive.

Pre-Construction Meeting

A pre-construction meeting will be required before the Contractor begins construction services. The Contractor will coordinate a date/time with the DNR Project Manager or Designee to conduct the pre-construction meeting.

Contract Cost

The value of a contract resulting from this Invitation for Quotes shall not exceed \$160,000.00 unless approved in writing by the DNR Project Manager or Designee and a written change order to the contract issued by the Procurement Specialist.

The State is a government entity and it is understood and agreed that the State's payments herein provided for may be paid from Alaska State Legislative appropriations; and approval or continuation of a contract is contingent upon Legislative appropriation. The State reserves the right to terminate the contract in whole or part if, in its sole judgment, the Legislature of the State of Alaska fails, neglects, or refuses to appropriate sufficient funds as may be required for the State to continue such payments; or if the Executive Branch mandates any cuts or holdbacks in spending, or if funds are not budgeted or otherwise available. Further, in the event of non-appropriation, the State shall not be liable for any penalty, expense, or liability; or for general, special, incidental, consequential, or other damages resulting therefrom.

Bid Bond, Payment Bond, Performance Bond

A bid guaranty is required with the bid in the amount of 5% of the amount bid (alternate bid items as well as supplemental bid items appearing on the bid schedule shall be included as part of the total amount bid when determining the amount of bid guaranty required for the project.)

The apparent successful offeror must furnish a payment bond in the amount of 100% of the contract and a performance bond in the amount of 100% of the contract as security conditioned for the full, complete and faithful performance of the contract. The apparent successful offeror

must execute the said contract and bonds within fifteen calendar days, or such further time as may be allowed in writing by the Procurement Specialist, after receiving notification of the acceptance of their quote.

Method of Award

Award shall be made based on the lowest responsive and responsible quote.

Invitation for Quotes – Deadline for Receipt of Questions

Questions regarding this Invitation for Quotes shall be sent to christopher.brooks@alaska.gov. The deadline for submission of questions is July 31, 2026 at 2:00 PM Alaska Time.

Invitation for Quotes – Deadline for Receipt of Quotes

Quotes shall be sent to christopher.brooks@alaska.gov. The deadline for submission of quotes is August 14, 2026 at 2:00 PM Alaska Time. Quotes received after this deadline shall be deemed non-responsive.

Offerors are required to submit the following completed documents prior to the established deadline for quote submission:

Quote Submittal – Form SPC-002

Offeror's Questionnaire – Form SPC-008

Bid Bond – Form 25D-14DNR

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion

Certification Regarding Drug-Free Workplace Requirements

Offerors who do not submit all required forms by the established deadline for quote submission will be considered non-responsive.

Offerors seeking to claim a preference must submit the relevant, fully completed preference certification form together with their quote prior to the deadline for submission of quotes. Preference certification forms submitted after the established deadline for submission of quotes will not be considered. The following is a list of preferences available under this Invitation for Quotes:

- Alaska Bidder Preference
- Alaska Product Preference
- Alaska Veteran Preference
- Alaska Military Skills Preference

Contract Administration

Contract administration for issuing any written change orders to a contract resulting from this Invitation for Quotes will be the responsibility of the DNR Procurement Specialist. The DNR Procurement Specialist may be contacted by email at christopher.brooks@alaska.gov. Only the Procurement Specialist has full authority to alter, amend, or change a contract resulting from this Invitation for Quotes.

Day-to-day contract administration is the responsibility of the DNR Project Manager, Daniel Smyth, or Designee. Daniel Smyth may be contacted by phone at (907) 250-8267 or by email at daniel.smyth@alaska.gov. Neither Daniel Smyth nor Designee can substantially change or alter a contract resulting from this Invitation for Quotes.

Inspection and Modification – Reimbursement for Unacceptable Deliverables

The Contractor is responsible for the completion of all work set out in the contract. All work is subject to inspection, evaluation, and approval by the DNR Project Manager or Designee, responsible for coordinating this project. DNR may employ all reasonable means to ensure that the work is progressing and being performed in compliance with the contract. DNR may instruct the Contractor to make corrections or modifications if needed in order to accomplish the contract's intent. The Contractor will not unreasonably withhold such changes. Substantial failure of the Contractor to perform the contract may cause DNR to terminate the contract. In this event, DNR may require the Contractor to reimburse monies paid (based on the identified portion of unacceptable work received) and may seek associated damages.

Contract Changes – Unanticipated Change Orders

During the course of the contract, the Contractor may be required to perform additional work. That work will be within the general scope of the initial contract. When additional work is required, the DNR Project Manager or Designee will provide the Contractor a written description of the additional work and request the Contractor to submit a firm time schedule and price for accomplishing the additional work. Cost and pricing data must be provided to justify the cost of such change orders per AS 36.30.400. The Contractor will not commence additional work until DNR has secured any required approvals necessary for the change order and issued a written change order.

Substantial Completion Inspection and Final Completion Inspection

The Contractor shall notify the DNR Procurement Specialist when the substantial completion inspection and final completion inspection process shall begin. The DNR Procurement Specialist will issue a substantial completion inspection form to the Contractor. The final completion inspection will occur once all physical work for the project has been completed. The DNR Project Manager or Designee will coordinate with the Contractor to conduct the final inspection.

Termination for Cause

The occurrence of any of the following events shall be an event of default under the contract and cause for termination:

- A material breach of any term or condition of the contract.
- Any representation or warranty by Contractor in its quote that proves to be untrue or materially misleading.
- Any default or non-compliance as otherwise specified in the contract.

DNR may terminate the contract if DNR provides the Contractor written notice of default and the Contractor has failed to cure the default within 30 calendar days. If DNR terminates the contract for default, DNR reserves the right to take any action it may deem necessary including, without limitation:

- Exercise any remedy provided by law or equity.
- Withhold payment until the default is remedied.
- Offset of damages against payment due.

Termination for Convenience

DNR may terminate the contract at its convenience, in whole or in part, by providing the Contractor written notice 30 calendar days prior to termination of the contract.

If DNR terminates the contract for convenience, DNR is liable only for payment in accordance with the payment provisions of this contract for goods or services provided before the effective date of termination.

Effect of Termination

Upon termination by DNR, the Contractor shall:

- Stop work as directed by DNR. Place no further orders or requests of subcontractors, if any, for goods or services;
- Take actions necessary, or that DNR may direct, for the protection and preservation of the goods or services;
- Terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the termination notice;
- Deliver or otherwise make available to DNR all data, reports, estimates, confidential information, summaries and such other information and materials, as may have been accumulated by the Contractor in performing the contract, whether completed or in process.

Payment of Work

Complete payment will be made 1) upon completion of the project to the satisfaction of the DNR Project Manager or Designee 2) upon receipt of the Contractor's original, accurate and complete invoice, 3) upon receipt of an approved Notice of Completion from the Department of Labor and Workforce Development and 4) and a Final Completion letter issued by DNR.

DNR Invoice Recipient

Contractor shall send invoices to:

Attn: Daniel Smyth, Engineering Associate

101 Airport Rd

Palmer, Alaska 99645

Phone: (907) 250-8267

E-mail: daniel.smyth@alaska.gov

Questions concerning payment must be addressed to the DNR point of contact identified above.

DNR Project Manager

The DNR Project Manager or Designee is responsible for monitoring the operations and performance of the Contractor for contract compliance, and to coordinate actions and communications between DNR and the Contractor. The DNR Project Manager for this project is:

Attn: Daniel Smyth, Engineering Associate

101 Airport Rd

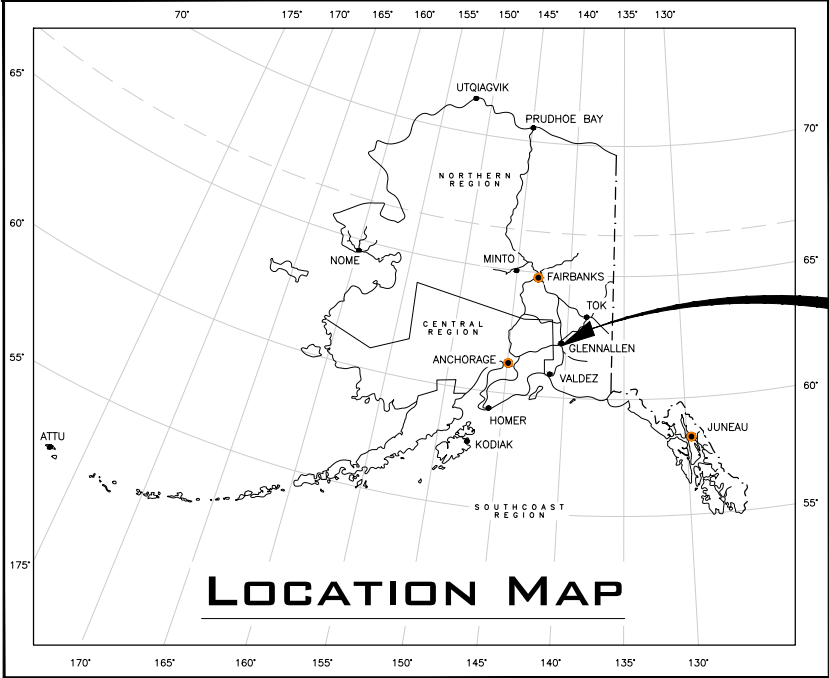
Palmer, Alaska 99645

Phone: (907) 250-8267

E-mail: daniel.smyth@alaska.gov

FILE PATH: C:\Users\colle\OneDrive - AK Built Construction & Design\AK Built - FileHub\Projects\0029.02 ADNR DOF Copper River Septic Design\6_ACAD\0029.02-Cover.dwg PLOT DATE: 7/1/2026

ADNR DFFP COPPER RIVER SEPTIC DESIGN



PROJECT
LOCATION



PREPARED FOR:
STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF FORESTRY AND FIRE PROTECTION

PREPARED BY:
AK BUILT CONSTRUCTION & DESIGN, LLC
PO BOX 771203
EAGLE RIVER, AK 99577
AECL204451
907-854-9115

Sheet List Table	
Sheet Number	Sheet Title
G1	COVER
C1	SPECIFICATIONS
C2	SPECIFICATIONS
C3	SITE PLAN
C4	SEPTIC SYSTEM
C5	SUMMARY TABLES
C6	DETAILS



AK BUILT
CONSTRUCTION & DESIGN, LLC

PO BOX 771203
EAGLE RIVER, AK 99577
(907)854-9115

CERTIFICATE OF AUTHORIZATION
#204451

ADNR, DIVISION OF FORESTRY
AND FIRE PROTECTION
COPPER RIVER SEPTIC SYSTEM
TAZLINA HILL SUBDIVISION TRACT D
PROJECT NO: WO 06-26
AK BUILT PROJECT NO: 0029.02

SHEET TITLE:
COVER

DATE:
7/1/2026

G1 OF G1

SYSTEM DESIGN:

1.

DESIGNED SYSTEM IS FOR TAZLINA HILL SUBDIVISION TRACT D. MP 110 RICHARDSON HWY, TAZLINA AK, 99588. T3N R1W S16 CM.
2.

DESIGNED SYSTEM WILL SERVE TWO FIRE FIGHTING OPERATIONS MANAGEMENT BUILDINGS.
3.

A TEST HOLE WAS EXCAVATED TO COLLECT SOIL, PERCOLATION, AND GROUND WATER DATA FOR THE DESIGNED SYSTEM. AN ADDITIONAL TEST HOLE IS TO BE EXCAVATED AT THE TIME OF CONSTRUCTION.
4.

WASTEWATER MINIMUM DAILY FLOWS.

4.1.

COMMERCIAL FACILITY @ 15 GAL/DAY/EMPLOYEE + 25 GAL/DAY/PERSONNEL + 550 GAL/DAY/LAUNDRY MACHINE = (5 EMPLOYEES x 15 GAL/DAY/EMPLOYEE) + (15 PERSONNEL X 25 GAL/DAY/PERSONNEL) + (1 LAUNDRY MACHINE X 550 GAL/DAY/LAUNDRY MACHINE) = 1,000 GAL/DAY.

4.2.

TOTAL ONSITE DESIGN FLOW = 1,000 GAL/DAY.
5.

TANK CAPACITY (PER ADEC OWSIM SECTION 4.2.1).

5.1.

COMMERCIAL FACILITIES WITH DESIGN FLOWS FROM 751 TO 1,000 GPD SHALL HAVE A MINIMUM TANK SIZE EQUAL TO 1,500 GAL. TANK SIZE INCREASED TO ACCOMMODATE FUTURE GROWTH POTENTIAL.

5.2.

SIZED TANK AT 2,000 GAL.
6.

THE MINIMUM EFFECTIVE ABSORPTION AREA OF A DISPOSAL FIELD SHALL BE CALCULATED USING THE MOST CONSERVATIVE WASTEWATER APPLICATION RATE CORRESPONDING TO THE PERCOLATION RATE OR SOIL TEXTURE (USCS) (PER ADEC OWSIM SECTION 4.3.1).

6.1.

WASTEWATER APPLICATION RATE = 0.6 GAL/DAY/SqFt.

6.2.

MINIMUM EFFECTIVE ABSORPTION AREA = 1,000 GAL/DAY / 0.6 GAL/DAY/SqFt = 1,666.7 SqFt.
7.

DESIGNED SYSTEM SHALL BE THREE 5-WIDE TRENCHES.

7.1.

TRENCH WIDTH (W) = 5 Ft.

7.2.

SYSTEM SIZING FACTOR (PER ADEC OWSIM SECTION 4.3.4). A SYSTEM WITH 48 INCHES OF SEWER ROCK BENEATH THE PERFORATED PIPE HAS A SIZING FACTOR OF 0.5.

7.3.

TRENCH LENGTH (L) = ABSORPTION AREA/(SIZING FACTOR x WIDTH)

7.4.

L = 1,666.7 SqFt / (5 Ft x 0.5) = 166.7 Ft.

7.5.

MINIMUM LENGTH REQUIRED OF FIVE-WIDE TRENCH WITH 48" OF SEWER ROCK IS 166.7Ft. SIZE SYSTEM AT 60 Ft LONG x 3.

7.6.

DESIGNED ABSORPTION AREA = (60 Ft x 5Ft)/0.5 x3 = 1,800 SqFt.

MATERIAL SPECIFICATIONS:

1.

THERE ARE TWO SPECIFICATIONS FOR SEWER ROCK, COARSE AND FINE. THE FINE GRADED SEWER ROCK MUST BE USED IN BED, SHALLOW TRENCH, OR MOUND TYPE SYSTEMS. COARSE GRADED SEWER ROCK MAY BE USED FOR ALL OTHER TYPES OF CONVENTIONAL LEACH FIELDS. SEWER ROCK SHOULD BE ROUNDED AND NOT COMPACTABLE TO ALLOW FOR ADEQUATE VOID SPACE. THE USE OF TAILINGS IS NOT ALLOWED, ANGULAR ROCK MUST BE AVOIDED.
2.

SAND LINER MATERIAL SHALL CONFORM TO EITHER STANDARD 1 OR STANDARD 2 PER THE SAND LINER TABLE.
3.

FOR A CONVENTIONAL BED OR SHALLOW TRENCH SYSTEM USING A CUT AND FILL TECHNIQUE, THE MATERIAL USED TO FILL THE EXCAVATION MUST MEET THE SAND LINER REQUIREMENTS OR THE CLASSIFIED FILL CRITERIA.
4.

ALL GEOTECHNICAL FABRIC PRODUCTS SHALL BE TYPAR 3401 OR EQUIVALENT. GEOTECHNICAL FABRIC PRODUCTS SHALL CONFORM TO AASHTO M288 CLASS 3, A MINIMUM PERMITTIVITY (ASTM D4491) OF 0.5 PER SECOND, AND MAXIMUM APPARENT OPENING SIZE (ASTM D4751) OF 0.20 - 0.21 mm (US SIEVE #70).
5.

ALL GEOTECHNICAL INSULATION PRODUCTS SHALL MEET THE CURRENT ASTM C578 TYPE IV STANDARD SPECIFICATIONS FOR "RIGID CELLULAR POLYSTYRENE THERMAL INSULATION" AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25 PSI. EXAMPLES OF PRODUCTS THAT MEET THIS STANDARD ARE DUPONT STYROFOAM BRAND SCOREBOARD, OWENS CORNING FOAMULAR 250, AND INSULFOAM TYPE IX.
6.

BUILDING SEWER LINES, DISPOSAL SEWER LINES, LEACH FIELD LINES, CLEANOUTS, AND STANDPIPES SHALL USE SOLVENT WELDED COUPLINGS AND FITTINGS OF THE SAME DESIGNATION AS THE PIPE BEING JOINED. REFER TO APPROVED PIPE MATERIALS TABLE FOR APPROVED MATERIALS.
7.

ALL BUILDING SEWER OR PRIVATE SEWER LINES MUST BE A MINIMUM FOUR-INCH DIAMETER FOR GRAVITY FLOW. SEWER LINES SHALL BE PRE-INSULATED WITH 4" OF SPRAY FOAM, FACTORY APPLIED.

8.

MANUFACTURERS AND TYPES OF BANDED RUBBER COUPLINGS INCLUDE, BUT ARE NOT LIMITED TO, FERNCO BRAND, MISSION BRAND, OR EQUAL.
9.

WHEN A SEPTIC TANK IS USED AS A STEP TANK, THE MINIMUM OPERATING VOLUME MUST BE INCREASED BY AT LEAST 250-GALLONS.
10.

MANHOLE RISERS FOR STEP TANKS MUST BE PRE-MANUFACTURED AND COMPATIBLE WITH THE MANHOLES ACCESS AND CONNECT TO THE TANK WITH A BONDED OR MECHANICAL CONNECTION THAT IS WATERTIGHT. THE TOP TWO FEET OF THE MANHOLE RISER MUST BE INSULATED. THE MANHOLE RISER MUST HAVE A LID THAT IS SECURED.
11.

PUMP STATIONS/LIFT STATIONS THAT ARE NOT PRE-MANUFACTURED FOR USE AS A LIFT STATION MUST FIRST BE SUBMITTED TO ADEC FOR APPROVAL THROUGH THE NORMAL PLAN REVIEW PROCESS PRIOR TO CONSTRUCTION.
12.

SEPTIC TANKS SHALL HAVE TWO COMPARTMENTS WITH BAFFLES LOCATED AT THE INLET, COMPARTMENT DIVIDER, AND OUTLET. CLEANOUT PIPES MUST BE AT LEAST FOUR INCHES IN DIAMETER TO ACCOMMODATE A PUMPING HOSE, AND SHOULD EXTEND ABOVE GRADE AND THE TOPS CAPPED. INSTALLATION RECOMMENDATIONS OR REQUIREMENTS OF THE MANUFACTURER MUST BE FOLLOWED.
13.

STEEL SEPTIC TANKS SHALL BE CONSTRUCTED OUT OF 3/16" A36 DOMESTIC STEEL WITH INTERIOR AND EXTERIOR SURFACES COATED WITH AN EPOXY PRODUCT RELATED FOR SEWER APPLICATIONS. THE SEPTIC TANK SHALL BE INSULATED AT THE FACTORY WITH A MINIMUM OF 2" OF SPRAY FOAM INSULATION.
14.

IF A KITCHEN SINK GARBAGE DISPOSAL IS USED, AN ADDITIONAL 250-GALLON CAPACITY SEPTIC TANK IS RECOMMENDED.
15.

AN INSULATED, WATERTIGHT, FLANGED MANHOLE RISER, AND COVER ARE REQUIRED IN PLACE OF CLEANOUT OR VENT PIPES ON SEPTIC TANKS WITH TANK VOLUMES GREATER THAN 2,000 GALLONS.
16.

HEAT TAPE SHALL BE A TEMPERATURE LIMITING HEATING CABLE RATED FOR 7 WATTS PER FOOT AT 120 VAC, CONSTRUCTED OF A COPPER BUS WIRE (12 AWG), TEMPERATURE LIMITING METAL RESISTANCE WIRE, WELDED HEATER-BUS CONNECTION, NICKEL PLATED COPPER BRAID, AND 316 STAINLESS STEEL BRAID.

CONSTRUCTION SPECIFICATION:

1.

MINIMUM HORIZONTAL AND VERTICAL SEPARATION DISTANCES SHALL BE MAINTAINED AS REQUIRED BY ADEC REGULATIONS. REFERENCE SEPARATION DISTANCES TABLE FOR MORE INFORMATION. NOTIFY THE ENGINEER OF ANY SITE DISCREPANCIES OR CONFLICTS PRIOR TO START OF CONSTRUCTION OR AS SOON AS DISCOVERY IS MADE.
2.

SOILS WITH PERCOLATION RATES FASTER THAN ONE MINUTE PER INCH REQUIRE A SAND LINER.
3.

A TWO-FOOT THICK SAND LINER MUST BE PLACED BENEATH ALL LEACH FIELDS WHEN THE RECEIVING SOIL IS CLASSIFIED AS GRAVEL (GW OR GP), UNLESS A PERCOLATION TEST VERIFIES THE RATE OF WATER INFILTRATION IS SLOWER THAN ONE MINUTE PER INCH.
4.

A SAND LINER MAY ONLY BE USED WITH A BED OR SHALLOW TRENCH SYSTEM.
5.

COMPACTION OF THE SAND LINER MUST BE AVOIDED.
6.

FILTER FABRIC IS REQUIRED ON TOP OF SEWER ROCK AND CHAMBERS TO PREVENT SOIL BACKFILL FROM MIGRATING INTO THE VOID SPACES.
7.

ONE INCH OF MANUFACTURED INSULATION MAY BE SUBSTITUTED FOR ONE FOOT OF SOIL COVER, UP TO A MAXIMUM OF TWO FEET OF SOIL COVER WITH AT LEAST TWO INCHES OF INSULATION. THE MINIMUM SOIL COVER SHALL NOT BE REDUCED TO LESS THAN TWO FEET.
8.

SPRAY FOAM INSULATION MUST NOT BE USED OVER A LEACH FIELD.
9.

FILTER FABRIC IS STILL REQUIRED WITH INSULATION.
10.

SOLID PIPE WITH NO JOINTS SHALL SPAN FIVE FEET FROM THE INLET AND OUTLET OF SEPTIC TANKS ONTO UNDISTURBED EARTH, OR THE SOIL MAY BE BACKFILLED AND COMPACTED IN SIX-INCH LIFTS BEFORE LAYING THE PIPE.
11.

ALL PIPE JOINTS IN MONITORING TUBES, CLEANOUTS, SOLID LINES, MANIFOLDS, AND DISTRIBUTION PIPING MUST BE CLEANED PRIOR TO GLUING, AND GLUED WITH PROPER CEMENT FOR THAT PIPE TYPE.
12.

MECHANICAL WATERTIGHT COUPLINGS ARE REQUIRED ON THE INLET, OUTLET, AND CLEANOUT OR VENT PIPES ON SEPTIC TANKS. THE USE OF BANDED RUBBER COUPLINGS ARE ONLY ALLOWED FOR CONNECTING THE BUILDING SEWER, THE DISPOSAL SEWER, AND THE CLEANOUT PIPES TO THE SEPTIC TANKS. DO NOT USE BANDED RUBBER COUPLINGS FOR ANY OTHER PURPOSE.
13.

SEWER LINES SHALL BE LAID ON UNDISTRUBED OR COMPACTED SOIL AND MUST BE PROPERLY BEDDED AND COMPACTED TO THE SPRING LINE TO PREVENT DEFLECTIONS AND LOW POINTS IN THE LINE.
14.

IN A MULTIPLE TRENCH OR BED TYPE LEACH FIELD, THE WASTEWATER MUST BE DISTRIBUTED TO EACH LATERAL BY A SOLID PIPE MANIFOLD.
15.

ALL LEACH FIELD PIPING MUST BE LEVEL, INCLUDING MANIFOLD PIPE AND PERFORATED PIPES.
16.

THE SLOPE OF THE BUILDING SEWER PIPE IN THE TEN FEET IMMEDIATELY PRECEDING THE SEPTIC TANK MUST BE BETWEEN ⅛" TO ¼" PER FOOT (NOT TO EXCEED 2% SLOPE). THE SLOPE OR

GRADE OF THE SEWER PIPES SHOULD BE AS UNIFORM AS POSSIBLE.

17.

DROP CONNECTIONS SHALL HAVE A MAXIMUM DROP OF TEN VERTICAL FEET. A DROP CONNECTION SHALL BE CONSTRUCTED USING A COMBO FITTING WITH THE SWEEP POINTING DOWNWARD AND A CLEANOUT PIPE TO THE SURFACE. THE BOTTOM OF THE VERTICAL DROP SHALL BE CONSTRUCTED WITH A 90 DEGREE SWEEP.
18.

A FOUNDATION CLEANOUT SHALL BE INSTALLED WITHIN FIVE FEET OF THE OUTSIDE WALL OF THE FOUNDATION.
19.

ADDITIONAL BUILDING SEWER OR PRIVATE SEWER LINE CLEANOUTS SHALL BE INSTALLED AT INTERVALS NOT TO EXCEED 100-FEET IN STRAIGHT RUNS AND FOR EACH AGGREGATE HORIZONTAL CHANGE IN DIRECTION OF 45 DEGREES OR MORE PRIOR TO THE SEPTIC TANK OR PRE-TREATMENT TANK.
20.

COMMUNITY SEWER LINES SHALL BE LAID STRAIGHT AND AT A UNIFORM SLOPE. MANHOLES MUST BE INSTALLED AT LOCATIONS WHERE THERE ARE CHANGES IN PIPE SLOPE, SIZE, ALIGNMENT, AND AT INTERSECTIONS. WHERE A COMMUNITY SEWER LINE IS ENTIRELY LOCATED ON A SINGLE PROPERTY OR SERVING A SINGLE FACILITY, AND THE SEWER LINE IS SIX-INCHES IN DIAMETER OR LESS, A CLEANOUT MAY BE INSTALLED INSTEAD OF A MANHOLE.
21.

A STEP TANK REQUIRES A MANHOLE RISER THAT EXTENDS TO THE GROUND SURFACE TO PROVIDE ACCESS TO THE PUMP AND FLOATS FOR MAINTENANCE. THE USE OF A FROST PLUG IS RECOMMENDED.
22.

SEPTIC TANKS OR LIFT STATIONS INSTALLED IN AREAS OF HIGH GROUNDWATER REQUIRE BUOYANCY PROTECTION.
23.

THE BOTTOM OF THE LEACH FIELD EXCAVATION AND THE BOTTOM OF THE SEPTIC TANK EXCAVATION SHALL BE LEVEL BEFORE THE PLACEMENT OF THE TANK OR LEACH FIELD MEDIA. EXCAVATIONS SHALL NOT BE LEFT OPEN.
24.

CONSTRUCTION MACHINERY SHALL NOT BE DRIVEN OVER THE INFILTRATIVE AREA.
25.

IF DURING THE EXCAVATION PROCESS, THE INFILTRATIVE SURFACE BECOMES SMEARED, THE SURFACE SHOULD BE RAKED OR OTHERWISE ROUGHENED, TO REMOVE THE SMEARED SOILS.
26.

FINAL GRADING OVER A WASTEWATER DISPOSAL SYSTEM SHOULD BE SLIGHTLY MOUNDED TO ALLOW FOR SETTLING AND GRADED TO HELP PRECIPITATION TO DRAIN WATER AWAY FROM BOTH THE SEPTIC TANK AND THE ABSORPTION AREA. THE FINAL GRADED AREA MUST BE COVERED WITH TOPSOIL AND SEEDED WITH GRASS.



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CERTIFICATE OF AUTHORIZATION
#204451

ADNR, DIVISION OF FORESTRY
AND FIRE PROTECTION
COPPER RIVER SEPTIC SYSTEM
TAZLINA HILL SUBDIVISION TRACT D
PROJECT NO: WO 06-26
AK BUILT PROJECT NO: 0029.02



SHEET TITLE:
SPECIFICATIONS

DATE:
7/1/2026

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MINIMUM HORIZONTAL SEPARATION DISTANCES TO DRINKING WATER SYSTEMS							
ALL HORIZONTAL SEPARATION DISTANCES MUST BE MEASURED FROM NEAREST EDGE TO NEAREST EDGE							
	PRIVATE SEWER LINE ^A AND CLEANOUTS, BASEMENT SUMP	SEWER LINE ^B AND CLEANOUTS, MANHOLES, LIFT STATION	SEPTIC TANK, WASTEWATER HOLDING TANK, LIFT STATION, MANHOLES	PIT PRIVY, SOIL ABSORPTION SYSTEM	FUEL TANK ^C AND LINES	DRINKING WATER TREATMENT WASTE DISPOSAL SYSTEM	OTHER SOURCES OF CONTAMINATION ^D
PUBLIC WATER SYSTEM	100'	200'	200'	200'	100'	100'	200'
PRIVATE WATER SYSTEM	25'	100'	100'	100'	25'	25'	100'
WATER LINE	10'	10'	10'	10'	10'	10'	CONTACT DWP
PRIVATE WATER LINE	1'	5'	5'	5'	10'	5'	--
ADDITIONAL SEPARATION DISTANCE REQUIREMENTS MAY APPLY FOR PUBLIC WATER SYSTEMS; 18 AAC 80 MUST BE REFERENCED FOR ALL PUBLIC WATER SYSTEM REQUIREMENTS. A. A DRAIN PIPE BURIED IN THE GROUND BELOW A BUILDING IS REQUIRED TO MEET THE SAME SEPARATION DISTANCE AS A PRIVATE SEWER LINE TO A PUBLIC WATER SYSTEM. B. SEWER LINE INCLUDES SEWER MAIN, COMMUNITY SEWER LINE, AND STORMWATER SEWER LINES. C. THE SEPARATION DISTANCE TO FUEL TANKS APPLIES TO BELOW-GROUND FUEL TANKS AND FUEL LINES, AND TO ABOVE-GROUND TANKS GREATER THAN 500 GALLONS. D. TOHER SOURCES OF CONTAMINATION INCLUDE, BUT ARE NOT LIMITED TO, ANIMAL BYPRODUCTS, MANURE, AND AGRICULTURAL WASTE. THE SEPARATION DISTANCE TO LANDFILLS IS COVERED UNDER 18 AAC 60.							
MINIMUM VERTICAL SEPARATION DISTANCES TO DRINKING WATER COMPONENTS							
	PRIVATE SEWER LINE, BUILDING SEWER	COMMUNITY SEWER LINE OR CLEANOUT, SEWER MAIN	SEPTIC TANK, WASTEWATER HOLDING TANK	SOIL ABSORPTION SYSTEM	FUEL TANK** AND LINES	DRINKING WATER TREATMENT WASTE DISPOSAL SYSTEM	OTHER SOURCES OF CONTAMINATION*
WATER LINE	18" RECOMMENDED	18"	CANNOT CROSS	CANNOT CROSS	NO CROSSING RECOMMENDED	10'	CONTACT DWP
PRIVATE WATER LINE	12"	12"	CANNOT CROSS	CANNOT CROSS	NO CROSSING RECOMMENDED	5'	--
WELL CLASSIFICATION AND SELECT ABBREVIATED DEFINITIONS (SEE 18 AAC 80.1990 OR 18 AAC 72.990 FOR COMPLETE DEFINITIONS)							
PUBLIC WATER SYSTEM: A POTABLE WATER SYSTEM SERVING 25 OR MORE PEOPLE AT LEAST 60 DAYS PER YEAR OR A SYSTEM THAT HAS AT LEAST 15 SERVICE CONNECTIONS.							
WATER LINE: IS A PIPE OR CONDUIT USED TO CARRY WATER AS PART OF A PUBLIC WATER SYSTEM BUT DOES NOT INCLUDE A WATER SERVICE LINE OR PRIVATE WATER LINE.							
PRIVATE WATER SYSTEM: A POTABLE WATER SYSTEM THAT IS NOT A PUBLIC WATER SYSTEM.							
PRIVATE WATER LINE: IS A LINE, PIPE, OR CONDUIT USED TO CARRY WATER AS PART OF A PRIVATE WATER SYSTEM. THE DEPARTMENT INTERPRETS REGULATIONS TO NOT INCLUDE A WATER SERVICE LINE THAT IS CONNECTED TO A PUBLIC WATER SYSTEM IN THE DEFINITION OF PRIVATE WATER LINE.							

MINIMUM HORIZONTAL SEPARATION DISTANCES FROM SEWER COMPONENTS					
	RIVER, LAKE, STREAM, SPRING, SLOUGH ^C	SLOPES > 25%	SOIL ABSORPTION SYSTEM	LOT LINE ^A	FOUNDATION ^A
SEPTIC TANK, HOLDING TANK, LIFT STATION	100'	NEED TO BE STABLE	5'	10'	10'
SOIL ABSORPTION SYSTEM	100'	50 ^D	SEE B. BELOW	10'	10'
PIT PRIVY	100'	50' RECOMMENDED	SEE B. BELOW	10'	10'
A. RECOMMENDED MINIMUM HORIZONTAL SEPARATION DISTANCE. ALL PARTS, INCLUDING GROUND COVER FOR FREEZE PROTECTION MUST BE WHOLLY LOCATED ON THE PROPERTY WITH THE FACILITY BEING SERVED. LOCATING A SEPTIC TANK OR SOIL ABSORPTION SYSTEM TOO CLOSE TO A BUILDING FOUNDATION MAY HAVE NEGATIVE IMPACTS. THE SEPTIC TANK CLEANOUTS OR MANHOLE RISER MUST BE ACCESSIBLE FOR MAINTENANCE PURPOSES. B. SIX FEET OR 2 TIMES THE DISTRIBUTION MEDIA DEPTH, WHICHEVER IS GREATER. C. SETBACKS IS FROM THE MEAN ANNUAL HIGH WATER LEVEL OR SURFACE WATER OR THE MEAN HIGHER HIGH WATER LEVEL OF TIDALLY INFLUENCED WATER. D. SEPARATION DISTANCE APPLIES TO THE DOWNHILL SLOPE; DOES NOT APPLY TO MOUND TYPE SOIL ABSORPTION SYSTEMS.					
MINIMUM VERTICAL SEPARATION DISTANCES FROM SEWER COMPONENTS					
	SEASONAL HIGH WATER TABLE		IMPERMEABLE SOIL, PERMAFROST, BEDROCK		
SEPTIC TANK, WASTEWATER HOLDING TANK	NEED BUOYANCY PROTECTION		--		
SUBSURFACE SOIL ABSORPTION SYSTEM	4'		6'		
PIT PRIVY	4'		--		

SEWER LINES APPROVED PIPE MATERIALS					
PIPE TYPE	ASTM DESIGNATION	BUILDING SEWER	DISPOSAL SEWER	LEACH FIELD PIPE	CLEANOUT AND MONITOR
SCHEDULE 40 ABS	F628	YES	YES	NO	YES
SCHEDULE 40 PVC	D1785	NO	YES	YES	YES
SCHEDULE 40 PVC	D2665	NO	YES	YES	YES
SDR 35	D3034	NO	YES	YES	YES

COARSE GRADE SEWER ROCK CRITERIA	
SIEVE SIZE	% PASSING BY WEIGHT
3"	100
2"	0 - 100
1 ½"	0 - 71
1"	0 - 30
¾"	0 - 10
½"	0 - 5
No. 200	0 - 1

FINE GRADE SEWER ROCK CRITERIA	
SIEVE SIZE	% PASSING BY WEIGHT
2"	100
1 ½"	90 - 100
1"	0 - 100
¾"	0 - 10
½"	0 - 5
No. 200	0 - 1

CLASSIFIED FILL CRITERIA	
SIEVE SIZE	% PASSING BY WEIGHT
3"	100
1 ½"	85 - 100
¾"	55 - 100
No. 4	45 - 100
No. 10	12 - 60
No. 40	4 - 30
No. 200	< 10

SAND LINER STANDARD 1 - SPECIFIC SIEVE CRITERIA	
SIEVE SIZE	% PASSING BY WEIGHT
No. 10	85 - 100
No. 20	60 - 90
No. 40	25 - 50
No. 60	≤ 15
No. 200	≤ 5
*THE SAND MAY NOT HAVE MORE THAN 45% (OF THE TOTAL) PASSING ANY ONE SIEVE AND RETAINED ON THE NEXT CONSECUTIVE SIEVE OF THOSE SHOWN ABOVE.	
SAND LINER STANDARD 2 - Cc AND Cu CRITERIA	
PROPERTY	CRITERIA
COEFFICIENT OF UNIFORMITY (Cu)	< 4
COEFFICIENT OF CURVATURE (Cc)	≤ 1
AMOUNT PASSING No. 10 SIEVE	≥ 85%
AMOUNT PASSING No. 200 SIEVE	≤ 5%
*THE SAND MUST NOT HAVE MORE THAN 45% OF THE TOTAL PASSING ANY ONE SIEVE AND RETAINED ON THE NEXT CONSECUTIVE SIEVE, OF THOSE LISTED IN STANDARD 1.	

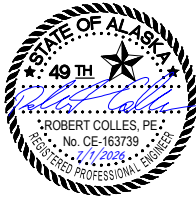


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TAZLINA HILL SUBDIVISION TRACT D
PROJECT NO: WO 06-26
AK BUILT PROJECT NO: 0029.02



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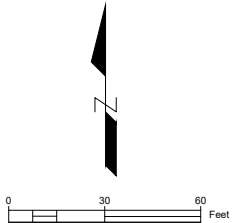
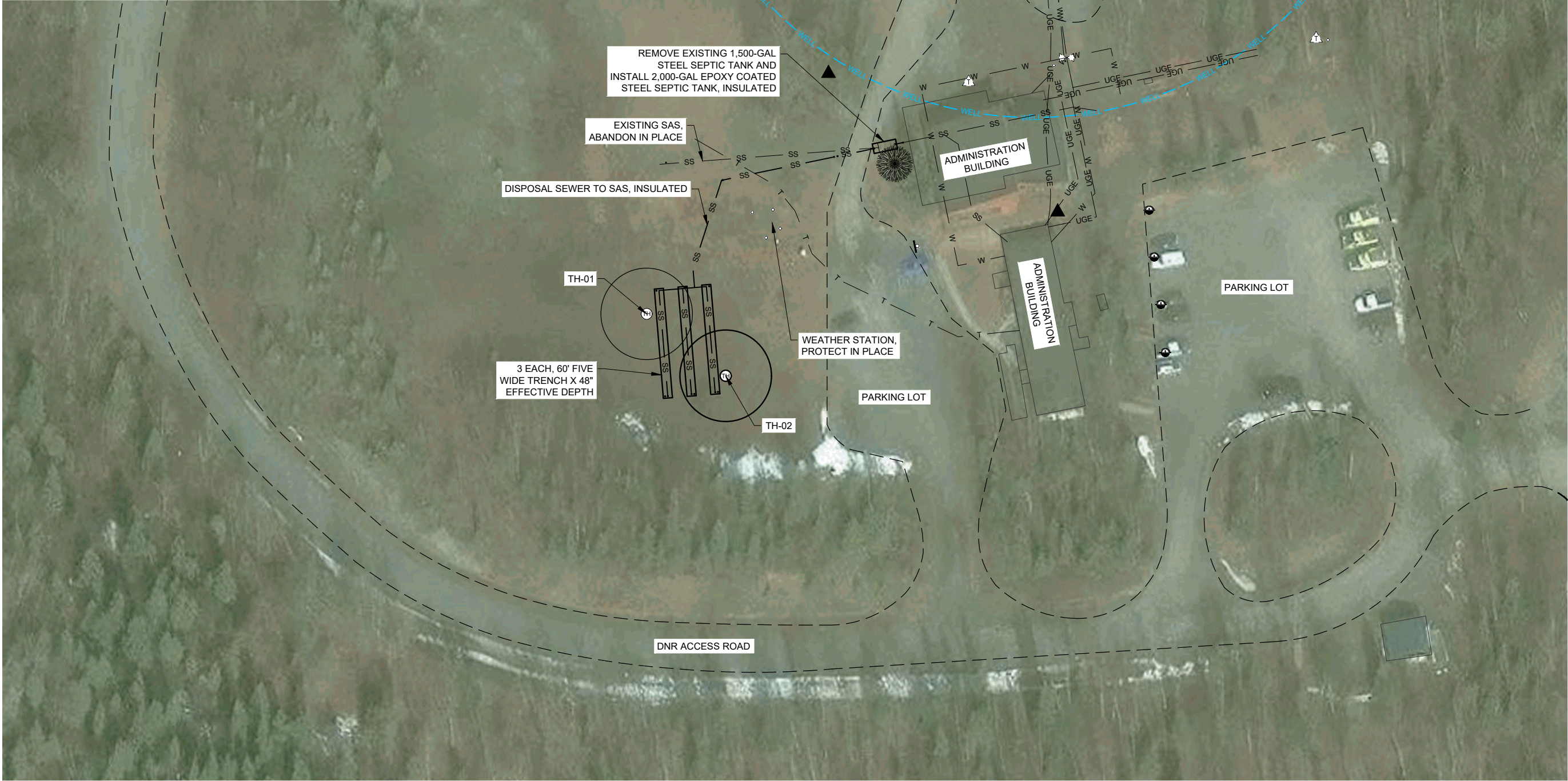
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SAFETY IS IN YOUR HANDS.
EVERY DIG. EVERY TIME.

NOTES:

1. CONTRACTOR TO LAYOUT SITE ELEMENTS AND NOTIFY ENGINEER IF CONFLICTS EXIST.
2. TH-01 SOIL LOG PROVIDED IN ENGINEER'S NARRATIVE. TH-02 SHALL BE EXCAVATED AT THE TIME OF CONSTRUCTION TO CONFIRM SOIL HORIZONS ARE UNIFORM ACROSS THE SAS.
3. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING TEMPORARY CONSTRUCTION SURVEY CONTROL.
4. UNDERGROUND ELECTRIC AND TELEPHONE EXIST IN THE WORK AREA. UTILITY INFORMATION SHOWN IS BASED ON LIMITED RECORDS AND FIELD OBSERVED UTILITY MARKINGS. MORE UTILITIES MAY BE PRESENT AND SHOULD BE EXPECTED. PROTECT EXISTING UTILITIES IN PLACE.

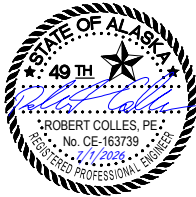


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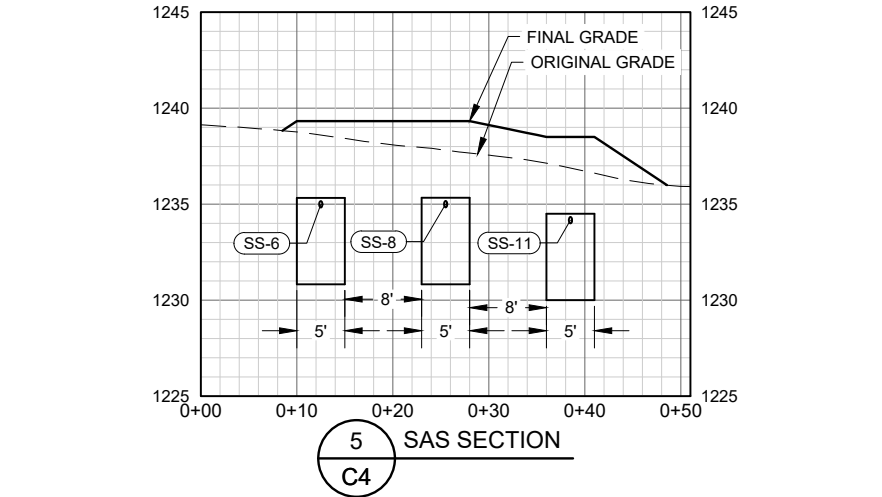
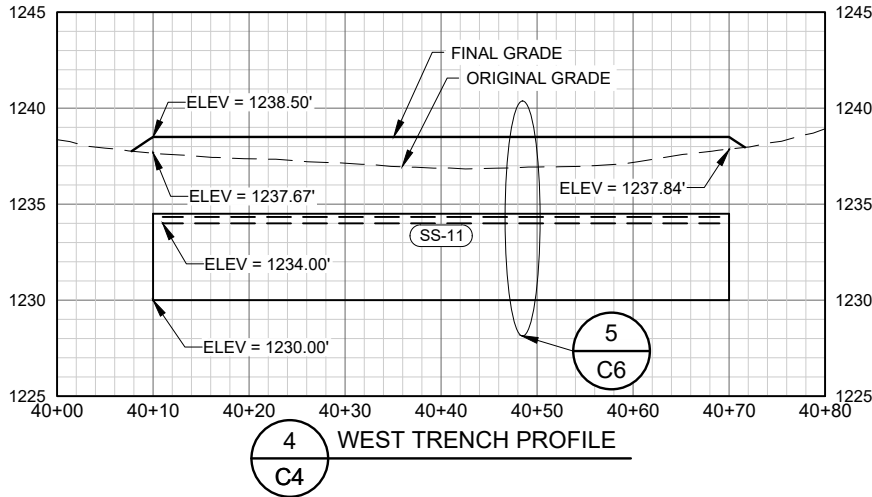
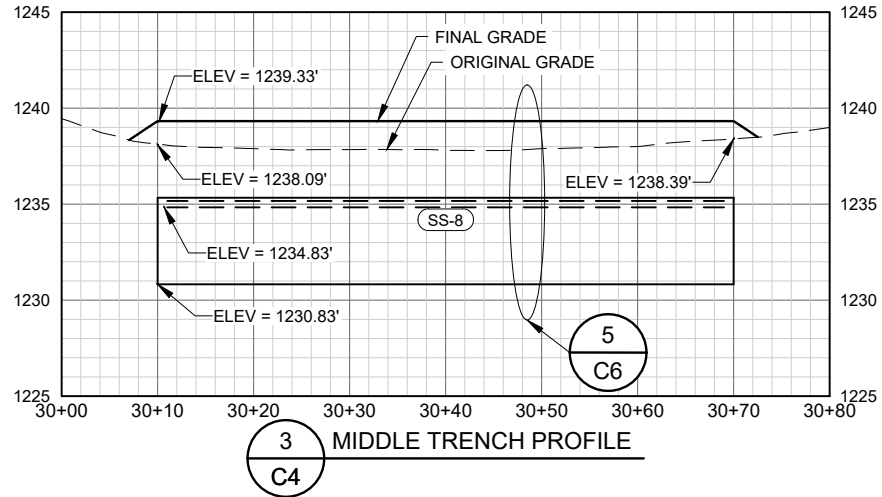
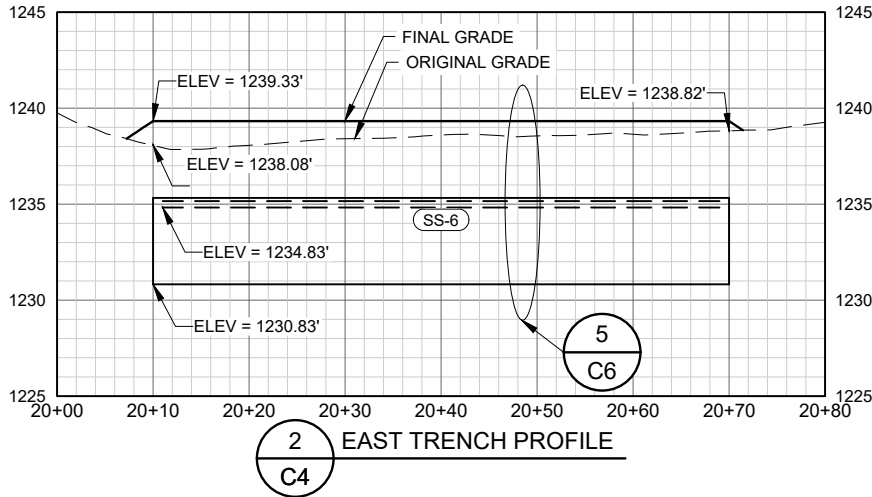
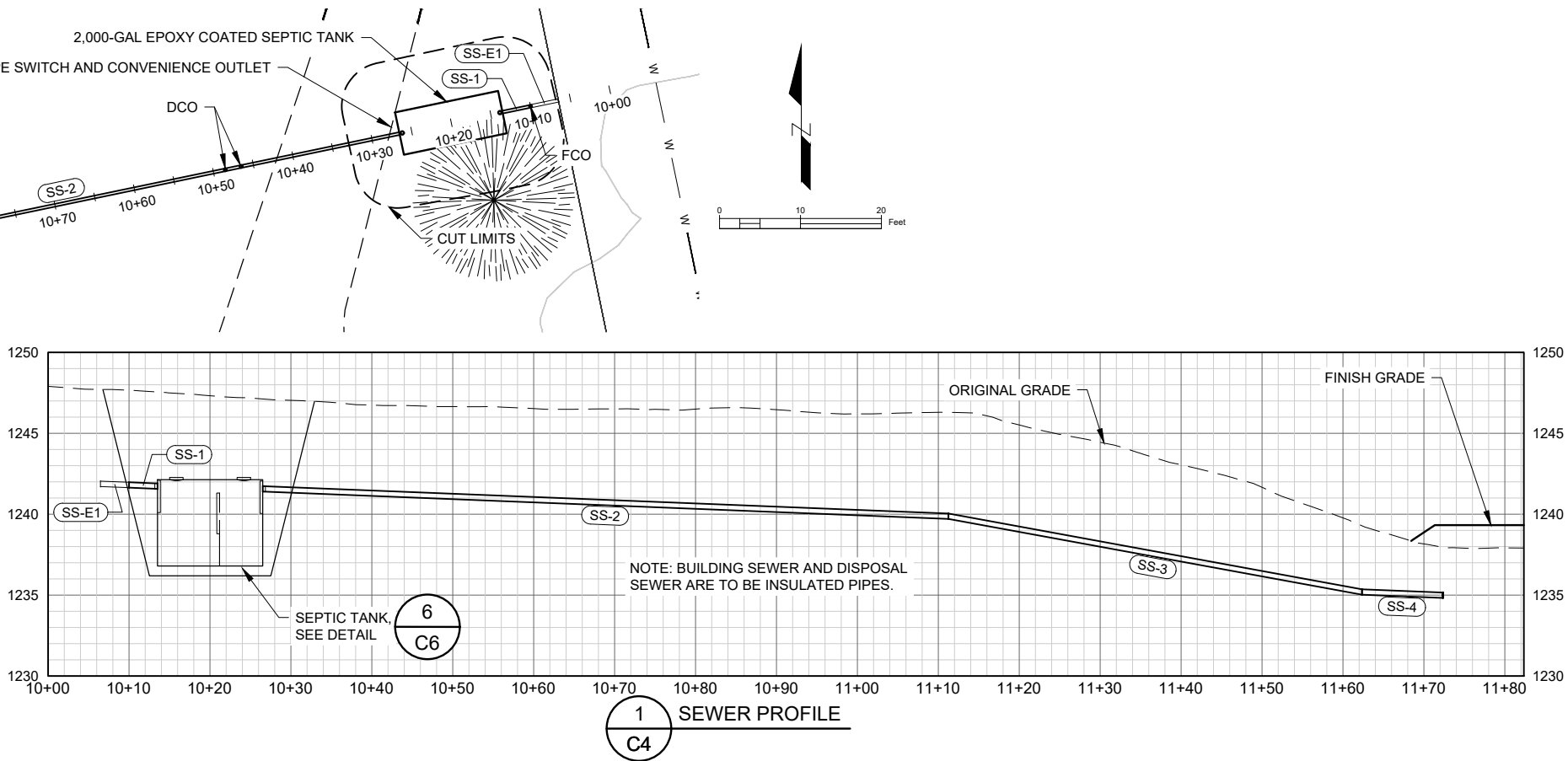
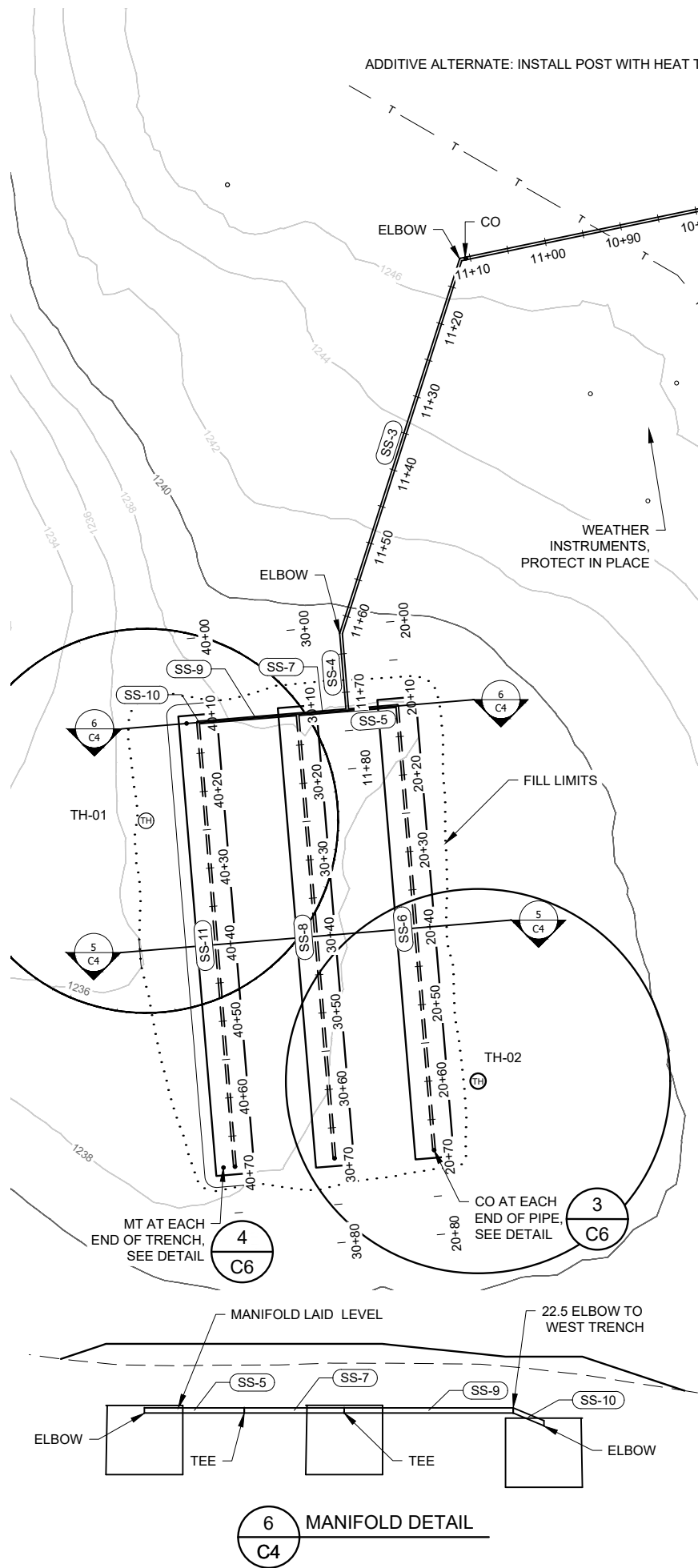
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SHEET TITLE:
SITE PLAN

DATE:
7/1/2026

C3 OF C6



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SHEET TITLE:
SEPTIC SYSTEM

DATE:
7/1/2026

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SEWER PIPE TABLE								
NAME	SIZE	LENGTH	SLOPE	MATERIAL	INLET LOCATION	INLET ELEV	OUTLET LOCATION	OUTLET ELEV
SS-E1	4"	3.53'	2.00%	DUCTILE IRON	N:2938960.8217 E:1738166.8340	1241.71'	N:2938960.1025 E:1738163.3796	1241.64'
SS-1	4"	3.53'	2.00%	PVC	N:2938960.1025 E:1738163.3796	1241.64'	N:2938959.3833 E:1738159.9252	1241.57'
SS-2	4"	84.71'	2.00%	PVC	N:2938956.7335 E:1738147.1981	1241.40'	N:2938939.4668 E:1738064.2646	1239.71'
SS-3	4"	51.11'	9.15%	PVC	N:2938939.4668 E:1738064.2646	1239.71'	N:2938890.7909 E:1738048.6795	1235.03'
SS-4	4"	10.00'	2.00%	PVC	N:2938890.7909 E:1738048.6795	1235.03'	N:2938880.8252 E:1738049.5068	1234.83'
SS-5	4"	6.50'	0.00%	PVC	N:2938880.8252 E:1738049.5068	1234.83'	N:2938881.3630 E:1738055.9846	1234.83'
SS-6	4"	58.00'	0.00%	PVC	N:2938881.3630 E:1738055.9846	1234.83'	N:2938823.5619 E:1738060.7833	1234.83'
SS-7	4"	6.50'	0.00%	PVC	N:2938880.8252 E:1738049.5068	1234.83'	N:2938880.2874 E:1738043.0291	1234.83'
SS-8	4"	58.00'	0.00%	PVC	N:2938880.2874 E:1738043.0291	1234.83'	N:2938822.4863 E:1738047.8278	1234.83'
SS-9	4"	11.00'	0.00%	PVC	N:2938880.2874 E:1738043.0291	1234.83'	N:2938879.3775 E:1738032.0694	1234.83'
SS-11	4"	58.00'	0.00%	PVC	N:2938879.2119 E:1738030.0737	1234.00'	N:2938821.4107 E:1738034.8724	1234.00'
SS-10	4"	2.00'	41.45%	PVC	N:2938879.3775 E:1738032.0694	1234.83'	N:2938879.2119 E:1738030.0737	1234.00'

ESTIMATE OF QUANTITIES		
ITEM DESCRIPTION	UNIT	QUANTITY
TEST PIT EXCAVATION - 14' DEPTH MIN	EA	1
SEPTIC TANK - 2,000 GALLONS	EA	1
4" DIA PVC SCHED 40 INSULATED PIPE WITH HEAT TRACE CHANEL	LF	150
4" DIA PVC SCHED 40 PIPE	LF	30
4" DIA SDR35 SEWER PIPE - SOLID	LF	90
4" SDR35 SEWER PIPE - PERFORATED	LF	174
UNCLASSIFIED EXCAVATION	CY	543
COARSE GRADE SEWER ROCK	CY	150
BEDDING	CY	36
SEPARATION FABRIC	SY	100

NOTE:
1. QUANTITIES ARE PROVIDED FOR CONTRACTOR'S CONVENIENCE
CONTRACTOR IS RESPONSIBLE FOR FINAL QUANTITIES

SUBMITTAL SCHEDULE		
ITEM	PRODUCT DATA	SHOP DRAWING
SEPTIC TANK	X	X
PERFORATED SEWER PIPE	X	
DISPOSAL SEWER PIPE	X	
PIPE FITTINGS	X	
SEWER ROCK	X	
BEDDING	X	
SEPARATION FABRIC	X	
HEAT TAPE	X	

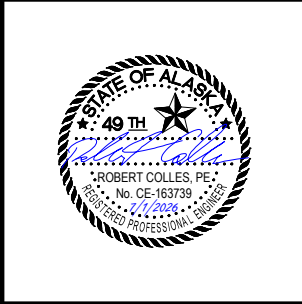


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AND FIRE PROTECTION
COPPER RIVER SEPTIC SYSTEM
TAZLINA HILL SUBDIVISION TRACT D
PROJECT NO: WO 06-26
AK BUILT PROJECT NO: 0029.02

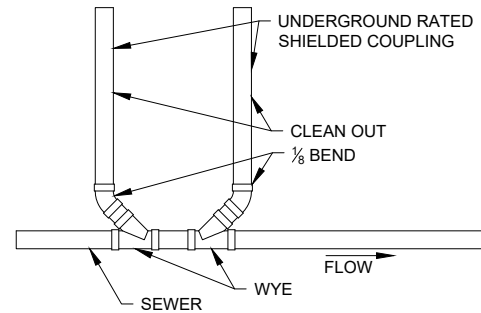


SHEET TITLE:
SUMMARY TABLES

DATE:
7/1/2026

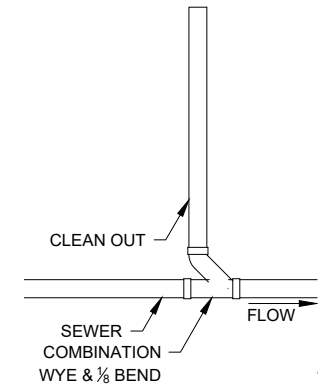
C5 OF C6

NOTE: DCO VERTICAL RISERS ARE CAST IRON PIPE
NOTE: PIPE AND COMPONENTS ARE PVC SCHEDULE 40

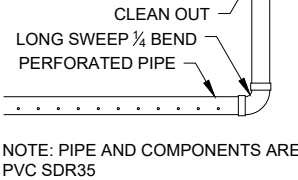


1 TYP DOUBLE CLEAN OUT
C6

NOTE: PIPE AND COMPONENTS ARE PVC SCHEDULE 40

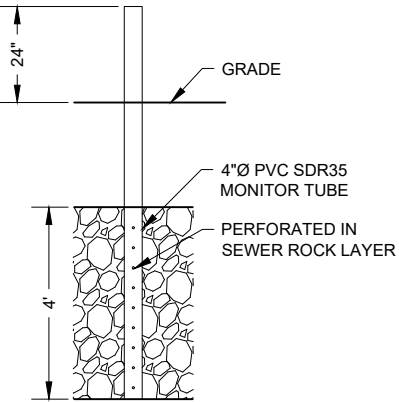


2 TYP CLEAN OUT
C6

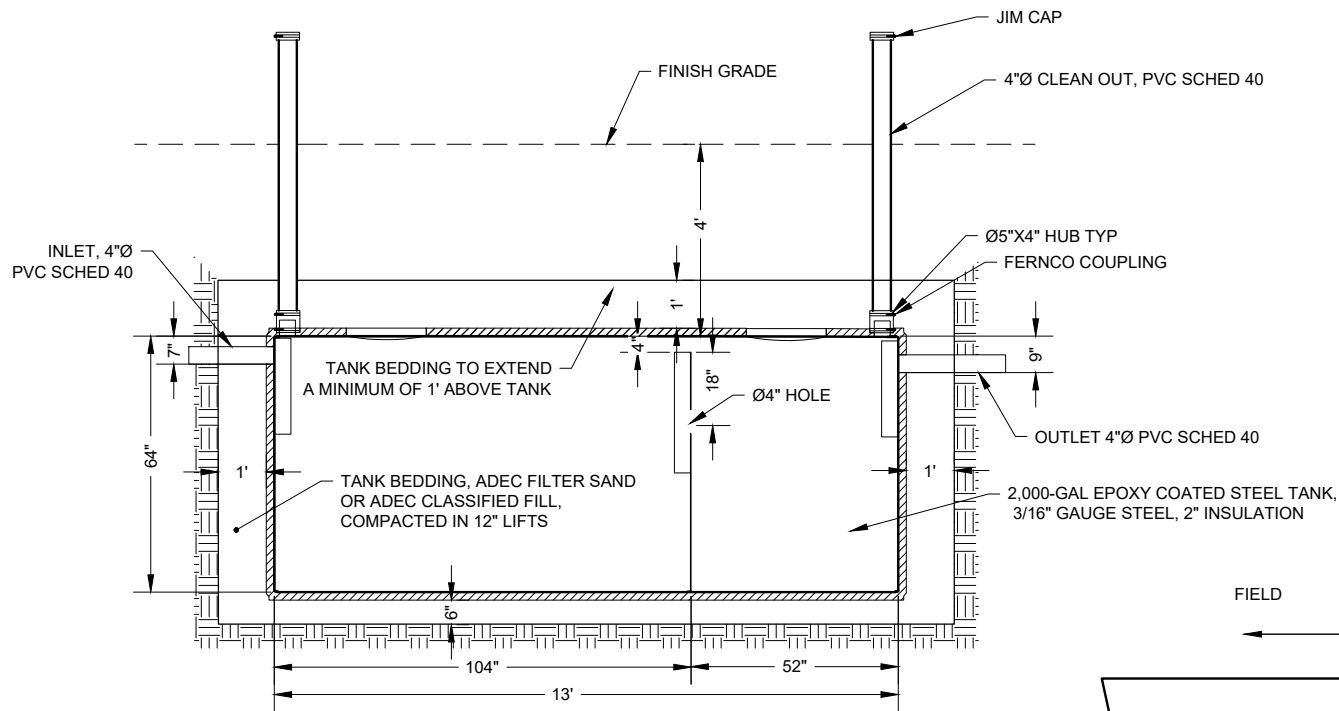


NOTE: PIPE AND COMPONENTS ARE PVC SDR35

3 FIELD LATERAL CLEAN OUT
C6

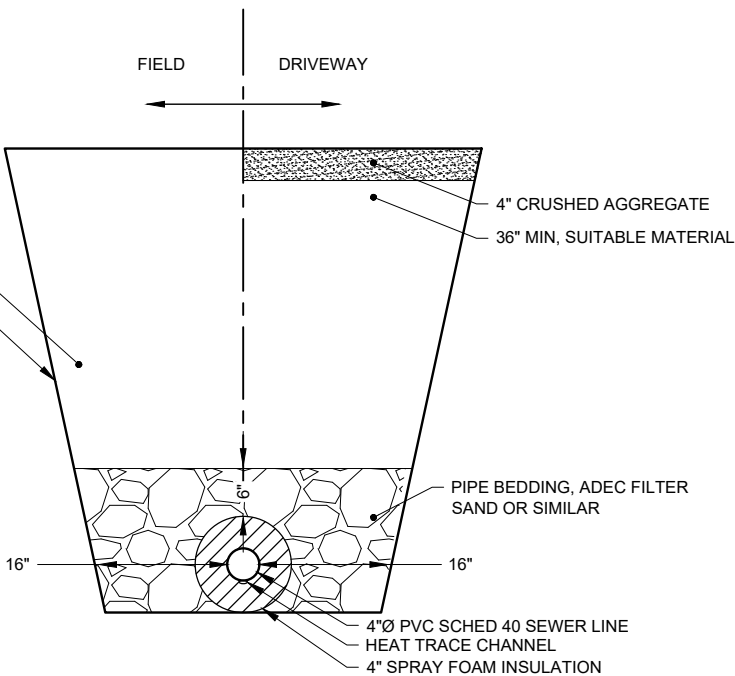


4 TYP MONITORING TUBE
C6

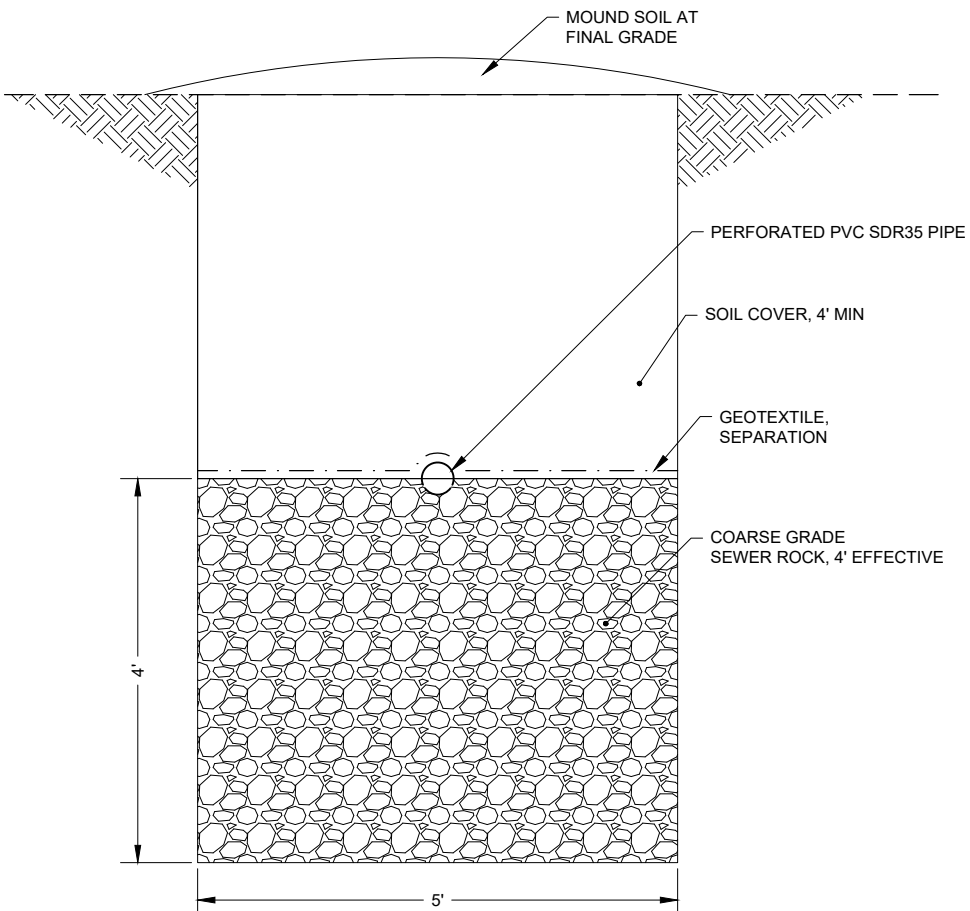


6 2,000-GAL STEEL TANK
C6

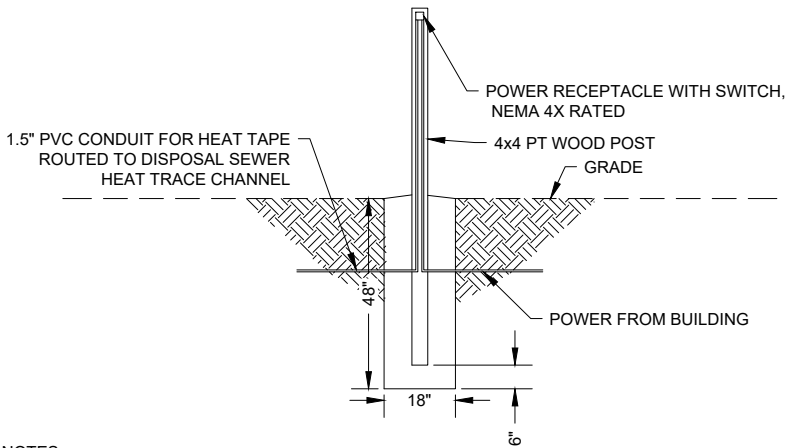
42\"/>



7 SEWER TRENCH
C6



5 FIVE-WIDE TRENCH PROFILE
C6



- NOTES:
1. HEAT TAPE SYSTEM IS AN ADDITIVE ALTERNATE.
 2. HEAT TAPE TO BE CONTROLLED BY SWITCH ON POST, POWER TO BE COORDINATED WITH OWNER.
 3. ROUTE HEAT TAPE THROUGH 1.5\"/>
 4. HEAT TAPE SHALL BE RATED FOR 7 WATTS PER FOOT, 120 VAC SUPPLY.

8 DISPOSAL SEWER HEAT TAPE - ADDITIVE ALTERNATE
C6



AK BUILT
CONSTRUCTION & DESIGN, LLC

PO BOX 771203
EAGLE RIVER, AK 99577
(907)854-9115

CERTIFICATE OF AUTHORIZATION
#204451

ADNR, DIVISION OF FORESTRY
AND FIRE PROTECTION
COPPER RIVER SEPTIC SYSTEM
TAZLINA HILL SUBDIVISION TRACT D
PROJECT NO: WO 06-26
AK BUILT PROJECT NO: 0029.02



SHEET TITLE:
DETAILS

DATE:
7/1/2026

C6 OF C6

GENERAL CONTRACTING - ENGINEERING - PROJECT ADMINISTRATION
AK BUILT CONSTRUCTION & DESIGN, LLC

June 22nd, 2026

State of Alaska

Department of Natural Resources

Division of Forestry and Fire Protection

ADNR DFFP Copper River Septic System Design

AK Built Construction & Design, LLC (AK Built) is working with the Alaska Department of Natural Resources (ADNR) Division of Forestry and Fire Protection (DFFP) to provide professional engineering services for the replacement of an existing septic system at DFFP's Copper River operations facility. The project is in Copper Valley, Mile Marker 110 of Richardson Highway, Tazlina, AK 99588. The DOF operates a wildland fire fighting base of operations and is experiencing backflow from the septic field and into the septic tank. This is an indication that the septic field has reached the end of its useable life. The existing septic system was installed in 1981 and consists of a 1,500-gallon steel septic tank and a 100-foot-long deep trench soil absorption system. Only one tank access could be located and is comprised of a 24-inch diameter corrugated metal pipe extending to grade and covered with a 3/8-inch plate lid. The operating fluid level in the septic tank is above the top of tank and is extended up the tank riser. The soil absorption system is a deep trench, and the monitor tube was measured to be 10-feet 9-inches deep with 5-feet 9-inches of water depth. Based upon the measured field fluid depth and overflowing tank condition, this septic system is ready to be replaced. This design proposes replacing the septic tank and the soil absorption system.

Estimated Wastewater Design Flows, 18 AAC 72.515.(b)(1)(A)

The design flow calculation is based upon the number of planned facility users and in accordance with the Alaska Department of Environmental Conservation's (ADEC) Onsite Wastewater Systems Installation Manual (OWSIM) section 2.4.2. Two buildings are connected to the wastewater system. The nature of facilities on site includes a laundry machine, general office use and shower access. DFFP is moving forward with resourcing the Copper River facility at a Preparedness Level 3 management level. The associated staffing level and summer season use pattern influenced the design flow computation, as presented in Table 1. A laundry machine is available to facility users, administrative staff is estimated to be 15 employees, and additional personnel use and physical training (PT) users is estimated to be 25 users. During peak response activities, there are additional restroom facilities made available via portable toilets and response personnel lodging and meals are provided off-site. The selected design flow for this facility is 1,000 gallons per day.

Table 1 - Wastewater Minimum Daily Flows

Source	Unit	Flow (gpd/unit)	Quantity (unit)	Daily Flow (gpd)
Laundry	Machine	550	1	550
Office	Employee	15	5	75
Office with Shower (Post PT)	Personnel	25	15	375
Total				1000

Estimated Waste Loads and Waste Strength, 18 AAC 72.515.(b)(1)(B)

This septic system will not serve a residential dwelling; therefore, an estimated waste load and waste strength is provided. Appendix B includes the test results for a wastewater sample taken directly from the septic tank. Wastewater in the existing septic tank was tested for total nitrogen, total suspended solids (TSS), and five-day biochemical oxygen demand (BOD5). Table 2 below shows the TSS, BOD5, and total nitrogen ranges for a typical residential wastewater stream and the wastewater results of the sampled system. The existing waste stream has typical results for an administrative facility. Treatment above and beyond what is identified in 18 AAC 72 is not warranted. A conventional septic tank and conventional soil absorption system is sufficient to protect public health and the environment.

Table 2 - Estimated Waste Loads and Waste Strengths

Residential Wastewater Characteristics, per EPA Onsite Wastewater Treatment Systems Manual Table 3-7		
Constituent	Mass Loading (grams/person/day)	Concentration (mg/L)
TSS	35 - 75	155 - 330
BOD5	35 - 65	155 - 286
Total Nitrogen	<1	<1
DFFP Copper River Facility Septic Tank Test Results		
Constituent	Mass Loading (grams/person/day)	Concentration (mg/L)
TSS	17.4	92.0
BOD5	39.5	209
Total Nitrogen	0.038	0.205

Septic Tank Design, 18 AAC 72.515.(b)(1)(C)

The minimum septic tank size is determined in accordance with ADEC OWSIM section 4.2.1 Minimum Size for commercial facilities. Commercial facilities with daily design flows from 751 to 1,000 gallons/day shall have a minimum septic tank size equal to 1,500-gallons and commercial facilities with daily design flows from 1,001 to 1,250 gallons/day shall have a minimum septic tank size equal to 2,000-gallons.

The minimum septic tank size for the proposed septic system is 1,500-gallons. AK Built proposes a 2,000-gallon septic tank to accommodate minor changes in facility use with time. Selecting a 2,000-gallon tank adequately meets the minimum design calculations and increases the existing tank size by 33%. This not only provides additional primary treatment capacity but also provides capacity for future facility growth.

The septic tank specified for this project is a 2000-gallon, two compartment epoxy coated steel septic tank. The septic tank is to be constructed out of 3/16" A-36 domestic steel, and interior and exterior painted with a two-part epoxy acceptable for use in sewer applications. The first and second compartments will be serviceable for pumping out via four-inch diameter riser pipes. The septic tank risers will be capped with a four-inch Jim cap.

Septic Tank Servicing, 18 AAC 72.515.(b)(1)(D)

The proposed septic tank is located adjacent to the public parking lot for the DFFP facility. A standard septic pumper truck will be able to pull up next to the proposed septic tank and pump out the tank. The septage can then be transported to a facility that accepts septage waste.

Soil Absorption System Design, 18 AAC 72.515.(b)(1)(E)

One test hole was excavated on 5/1/26 to characterize soil conditions, determine percolation rates, and groundwater presence. A soil log is provided for test hole TH-01. The receiving soil for the designed soil absorption system is classified as a silty sand (SM), with gravel. No groundwater was encountered within the test hole. A ground water monitor tube was left in place for inspection prior to construction. Percolation testing was conducted in TH-01 at a depth of 6.0 - 6.5 feet below ground surface. The test resulted in percolation rate of 17.8 minutes per inch. The wastewater application rate for soils classified as SM is 0.6 gpd/sf for design flows less than 2,500 gpd per ADEC OWSIM section 4.3.1 Minimum Application Rates. For this soil absorption system, a wastewater application rate of 0.6 gpd/sf is utilized. The minimum effective absorptions area is as follows.

$$\text{Absorption Area} = \frac{\text{Wastewater Design Flow}}{\text{Wastewater Application Rate}}$$

$$\text{Absorption Area} = \frac{1,000\text{gpd}}{0.6\text{gpdpsf}}$$

$$\text{Absorption Area} = 1,667\text{ sf}$$

The designed soil absorption system shall be a five wide trench. Trench width is five feet, and effective depth shall be four feet. The system sizing factor for four feet of effective depth is 0.5.

$$\text{Minimum Trench Length} = \frac{\text{Minimum Absorption Area}}{5\text{ft}} \times \text{Sizing Factor}$$

$$\text{Minimum Trench Length} = \frac{1,667\text{sf}}{5\text{ft}} \times 0.5$$

$$\text{Minimum Trench Length} = 166.7\text{ft}$$

The minimum required trench length is 166.7 feet. AK Built specifies three five wide trenches constructed at 60-foot in length. The specified absorption area is 1,800 square feet.

Sewer Lines Design, 18 AAC 72.515.(b)(1)(F)

The proposed septic system consists of a four-inch diameter sewer pipe to the septic tank. Record drawings indicate the existing building sewer is cast iron pipe. The proposed building sewer will utilize a banded rubber coupling to connect the existing cast iron pipe to ABS pipe. Effluent leaves the septic tank via a four-inch diameter SDR35 disposal sewer pipe to the soil absorption system. As designed, sewer slopes maintain a minimum pipe slope of two percent and do not exceed a pipe slope of 20 percent. The soil absorption system piping is laid level in the sewer rock. Pipe materials approved for use are as specified in the plans, see Sewer Lines Approved Pipe Materials table.

Pump Station Design, 18 AAC 72.515.(b)(1)(G)

No pumping stations are a part of this proposed septic system. The requirements of 18 AAC 72.515.(b)(1)(G) are not applicable to this septic system.

Thermal Protection, 18 AAC 72.515.(b)(1)(H)

The soil absorption system is designed to have a minimum soil cover of four feet per 18 AAC 72.530.(c). The septic tank is designed with a minimum soil cover of four feet per 18 AAC 72.530.(c). Additional thermal protection of the septic tank and sewer pipes have been specified in the plans with the septic tank receiving two inches of spray foam insulation and sewer pipes receiving four inches of spray foam insulation. Should any septic system component, including sewer lines, not maintain four feet of soil cover, then insulation shall be used with one inch of insulation substituting for one foot of soil cover. At no time shall soil cover be reduced to less than two feet.

Septic System Siting – Topography, 18 AAC 72.515.(b)(1)(I)

The proposed septic tank will be installed in the same location as the existing septic tank. The existing septic tank will be pumped out, removed, and disposed of in accordance with applicable regulations. The topography surrounding the septic tank site gently slopes from east to west. The leach field will be placed down slope of the septic tank and to the southwest of the facility. The soil absorption system site slopes east to west and is less than ten percent. Slopes greater than 25 percent don't exist within 50 feet down-slope of the proposed site. The orientation of the septic trenches will be parallel to the ground contours.

Septic System Siting – Water, 18 AAC 72.515.(b)(1)(J)

This DFFP facility has a water well on site. This well is located over 200 feet from the proposed improvements and upgradient of the designed septic system. The ADNR well log number is unknown and the facility manager does not have a well record.

Ground water was not encountered in test pit excavations and is not anticipated to be encountered during construction. A groundwater monitor tube was left in the test pit excavation for inspection at the time of construction. There is no surface water in proximity to this system. The separation distances are maintained and the absence of groundwater will aid in the protection of public health, drinking water sources and systems, and the environment.

Nitrate Analysis, 18 AAC 72.515.(b)(4)(B)

The septic system design flow for the designed septic system is less than 2,500 gallons per day, therefore, nitrate analysis is not required for this design.

The designed septic system will be protective of public health, public and private water systems, and the environment.

If you have any questions, please contact me.

Sincerely,

Robert Colles, PE
AK Built Construction & Design, LLC
Project Manager/Managing Member
907-854-9115
rlcolles@akbuilt.net



Appendix A

Soil Logs

TP-01

TEST PIT LOG



PROJECT: ADNR DOF COPPER RIVER SEPTIC DESIGN
JOB No.: 0029.01
LOCATION: ADDRESS/CITY
COORDINATES: LAT: N62.042286° LONG: W145.43137°
DATUM: NAD83/WGS84

SURFACE ELEVATION: 1236'
DRILLING METHOD: EXCAVATION
SAMPLING METHOD: GRAB
COMPLETION DEPTH: 14'

ELEVATION (FEET)	DEPTH (FEET)	MATERIAL DESCRIPTION	GRAPHIC LOG	SAMPLES	SAMPLE No.
	0.0	SURFACE ELEVATION: 1236 FT			
1233.5	2.5	GP-GM: POORLY GRADED GRAVEL WITH SILT AND SAND. BOULDERS AND COBBLES PRESENT. 74% GRAVEL, 19% (8.7% C, 10.5% F) SAND, 7% FINES			01-01
1231.0	5.0				
1228.5	7.5	SM: SILTY SAND WITH GRAVEL 17% GRAVEL, 57% (4.7% C, 17.5% M, 35% F) SAND, 26% SILT NON-PLASTIC			01-02
1226.0	10.0				
1223.5	12.5	SM: SILTY SAND 2% GRAVEL, 52% (2.7% C, 17% M, 32.8% F) SAND, 46% SILT NON-PLASTIC			01-03
1221.0	15.0				
1218.5	17.5				
1216.0	20.0				

UNIFIED SOIL CLASSIFICATION LEGEND	
GROUP SYMBOL	SOIL GROUP NAMES & LEGEND
GW	WELL-GRADED GRAVEL
GP	POORLY GRADED GRAVEL
GM	SILTY GRAVEL
GC	CLAYEY GRAVEL
SW	WELL-GRADED SAND
SP	POORLY GRADED SAND
SM	SILTY SAND
SC	CLAYEY SAND
CL	LEAN CLAY
ML	SILT
OL	ORGANIC CLAY/ORGANIC SILT
CH	FAT CLAY
MH	ELASTIC SILT
OH	ORGANIC CLAY/ORGANIC SILT
PT	PEAT

PERCOLATION TEST				
READING	TIME	NET TIME	DEPTH	NET DROP
1	2:58 PM	00:30	17 13/16	
2	3:28:00 PM	00:30	17 12/16	1/16
3	3:58 PM	00:30	17 11/16	1/16
4				
5				
6				
7				
8				

PERCOLATION RATE: 17.8 MPI
TEST RUN BETWEEN: 6.0 FT AND 6.5 FT

DATE TEST PIT STARTED: 05/01/2026 11:56AM
DATE TEST PIT COMPLETED: 05/01/2026 2:34PM
LOGGED BY: RLC
DRILLING CONTRACTOR: AK BUILT CONSTRUCTION & DESIGN, LLC
DRILL RIG: HITACHI ZX50U-5N

REMARKS:
GROUND WATER MONITORING TUBE INSTALLED.

WEATHER: 42°F, CLOUDY



R&M Consultants, Inc.
9101 Vanguard Drive
Anchorage, AK 99507
907.522.1707

Material Test Report

This report shall not be reproduced, except in full, without the prior written approval of the agency. The results within this report are in compliance with approved project plans and specifications. The results within this report relate only to the items inspected or tested.

Project Details

Client: AK Built Construction & Design, LLC
CC:
Project: AK BUILT 2026 General Materials Testing
3344.01.TSK 01

Report Details

Report ID: MAT:26-00065-02
Issue No: 1
Report Date: 5/13/2026
Submitted By: Michael K. Wariner, PE

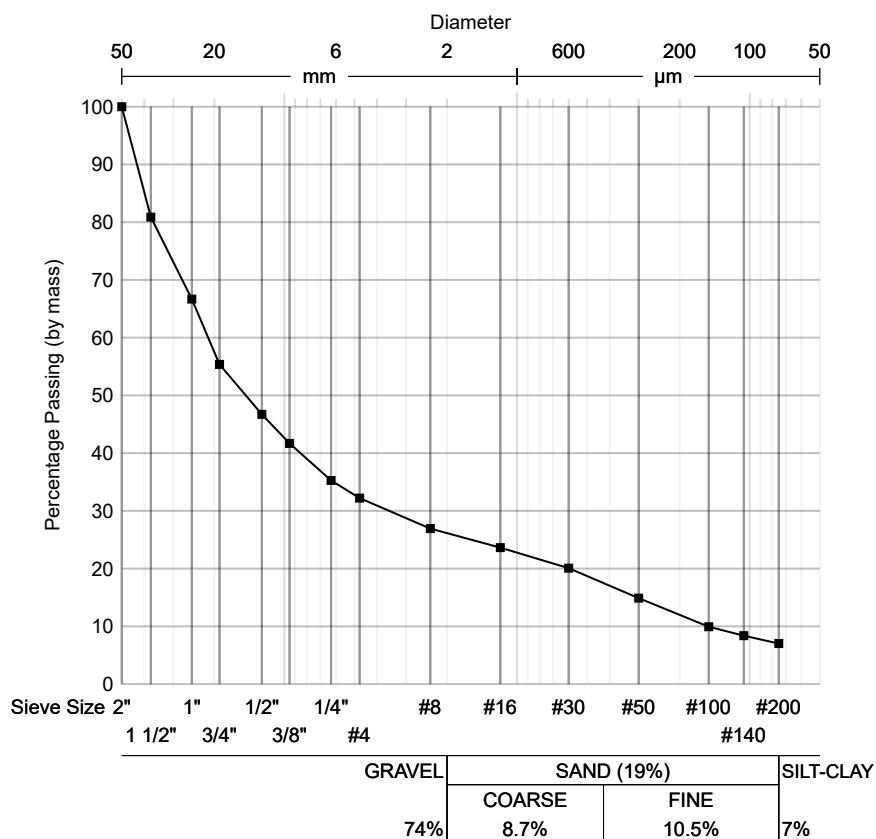
Sample Details

Sample ID 26-00065-02
Field Sample ID TH-01-01
Date Sampled 5/1/2026
Source On-Site Insitu / Native Material
Material In-Site / Native
Specification General Agg/Soil
Sampling Method Test Pit
General Location ADNOR DOF Septic Replacement
Location TH-01-01
Test Elev/Depth 5' below surface

Sample Description:

Poorly graded gravel with silt and sand

Particle Size Distribution



Grading: AASHTO T 27

Drying By: Oven
Date Tested: 5/11/2026
Tested By: Emery Schramm

Sieve Size	% Passing	Limits
2in	100	
1 1/2in	81	
1in	67	
3/4in	55	
1/2in	47	
3/8in	42	
1/4in	35	
No.4	32	
No.8	27	
No.16	24	
No.30	20	
No.50	15	
No.100	10	
No.140	8	
No.200	7.0	

D85: 39.8992 **D60:** 21.2600 **D50:** 14.6547
D30: 3.5431 **D15:** 0.3047 **D10:** 0.1515
Cu: 140.36 **Cc:** 3.90



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9101 Vanguard Drive
Anchorage, AK 99507
907.522.1707

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Project Details

Client: AK Built Construction & Design, LLC **cc:**

Project: AK BUILT 2026 General Materials Testing

3344.01.TSK 01

Report Details

Report ID: MAT:26-00065-02 **Issue No:** 1

Report Date: 5/13/2026

Submitted By: Michael K. Wariner, PE

Sample Details

Sample ID 26-00065-02
Field Sample ID TH-01-01
Date Sampled 5/1/2026
Source On-Site Insitu / Native Material
Material In-Site / Native
Specification General Agg/Soil
Sampling Method Test Pit
General Location ADNOR DOF Septic Replacement
Location TH-01-01
Test Elev/Depth 5' below surface

Other Test Results

Description	Method	Result	Limits
Cu	AASHTO T 27	140.36	
Cc		3.90	
Procedure	AASHTO T 11	A	
Remarks	AASHTO T 27	Entire sample was tested.	
Cu	ASTM D2487	140.36	
Cc		3.90	
Procedure	ASTM C117	A	
Group Code	ASTM D2487	GP-GM	
Group Name		Poorly graded gravel with silt and sand	
Atterberg Limits Estimated		Yes	
Remarks		Material was assumed to be non-plastic for classification purposes.	
Date Tested		5/11/2026	

Comments

N/A



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9101 Vanguard Drive
Anchorage, AK 99507
907.522.1707

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Project Details

Client: AK Built Construction & Design, LLC **cc:**

Project: AK BUILT 2026 General Materials Testing

3344.01.TSK 01

Report Details

Report ID: MAT:26-00065-03 **Issue No:** 1

Report Date: 5/13/2026

Submitted By: Michael K. Wariner, PE

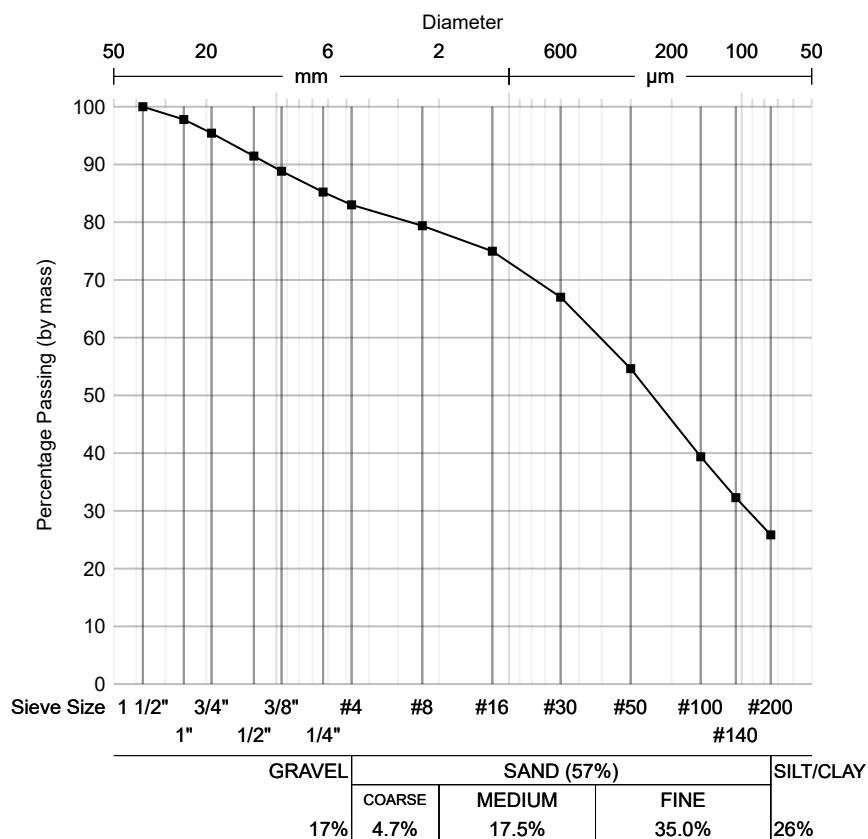
Sample Details

Sample ID 26-00065-03
Field Sample ID TH-01-02
Date Sampled 5/1/2026
Source On-Site Insitu / Native Material
Material In-Site / Native
Specification General Agg/Soil
Sampling Method Test Pit
General Location ADNOR DOF Septic Replacement
Location TH-01-02
Test Elev/Depth 12' below surface

Sample Description:

In-Site / Native

Particle Size Distribution



Grading: ASTM C136

Drying By: Oven
Date Tested: 5/11/2026
Tested By: Emery Schramm

Sieve Size	% Passing	Limits
1 1/2in	100	
1in	98	
3/4in	95	
1/2in	91	
3/8in	89	
1/4in	85	
No.4	83	
No.8	79	
No.16	75	
No.30	67	
No.50	55	
No.100	39	
No.140	32	
No.200	26	

D85: 6.1237 **D60:** 0.4053 **D50:** 0.2431
D30: 0.0916 **D15:** N/A **D10:** N/A
Cu: N/A **Cc:** N/A



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9101 Vanguard Drive
Anchorage, AK 99507
907.522.1707

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Project Details

Client: AK Built Construction & Design, LLC
cc:
Project: AK BUILT 2026 General Materials Testing
3344.01.TSK 01

Report Details

Report ID: MAT:26-00065-03
Report Date: 5/13/2026
Issue No: 1
Submitted By: Michael K. Wariner, PE

Sample Details

Sample ID 26-00065-03
Field Sample ID TH-01-02
Date Sampled 5/1/2026
Source On-Site Insitu / Native Material
Material In-Site / Native
Specification General Agg/Soil
Sampling Method Test Pit
General Location ADNOR DOF Septic Replacement
Location TH-01-02
Test Elev/Depth 12' below surface

Other Test Results

Description	Method	Result	Limits
Cu	ASTM D2487		
Cc			
Procedure	ASTM C117	A	
Group Code	ASTM D2487		
Group Name			
Atterberg Limits Estimated		Yes	
Remarks	Material was assumed to be non-plastic for classification purposes.		
Date Tested		5/13/2026	

Comments

USCS Classification cannot be determined according to procedure due to high amount of fines. However, if fines are assumed to be non-plastic, the classification would be SM.



R&M Consultants, Inc.
9101 Vanguard Drive
Anchorage, AK 99507
907.522.1707

Material Test Report

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Project Details

Client: AK Built Construction & Design, LLC **cc:**

Project: AK BUILT 2026 General Materials Testing

3344.01.TSK 01

Report Details

Report ID: MAT:26-00065-04 **Issue No:** 1

Report Date: 5/13/2026

Submitted By: Michael K. Wariner, PE

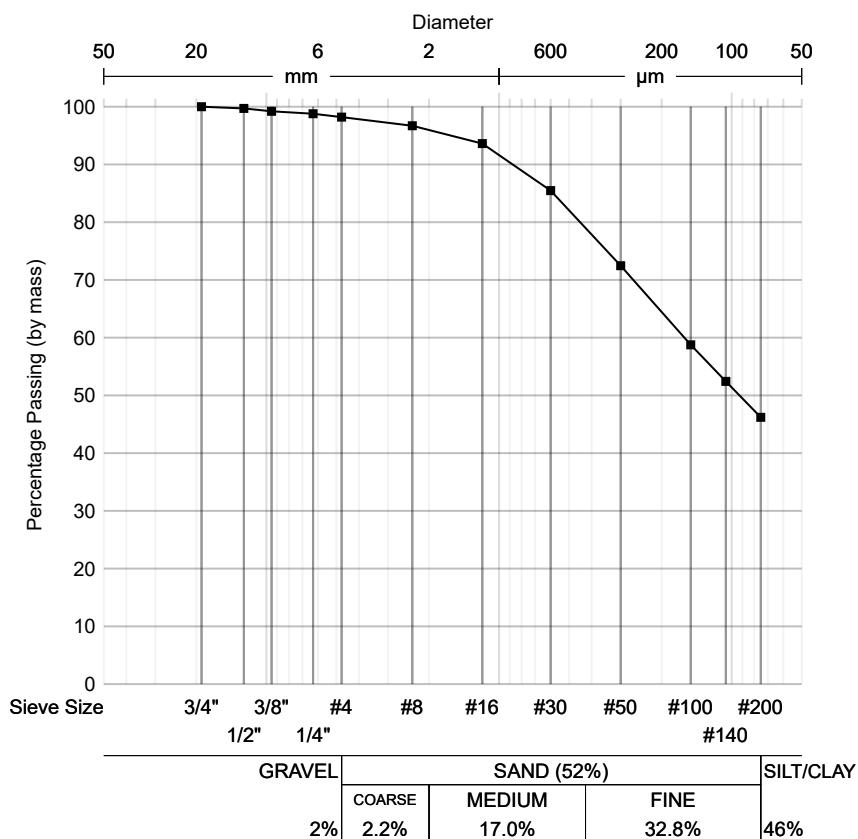
Sample Details

Sample ID 26-00065-04
Field Sample ID TH-01-03
Date Sampled 5/1/2026
Source On-Site Insitu / Native Material
Material In-Site / Native
Specification General Agg/Soil
Sampling Method Test Pit
General Location ADNOR DOF Septic Replacement
Location TH-01-03
Test Elev/Depth 14' below surface

Sample Description:

Silty sand

Particle Size Distribution



Grading: ASTM C136

Drying By: Oven
Date Tested: 5/11/2026
Tested By: Emery Schramm

Sieve Size	% Passing	Limits
3/4in	100	
1/2in	100	
3/8in	99	
1/4in	99	
No.4	98	
No.8	97	
No.16	94	
No.30	85	
No.50	72	
No.100	59	
No.140	52	
No.200	46	

D85: 0.5852 **D60:** 0.1597 **D50:** 0.0926
D30: N/A **D15:** N/A **D10:** N/A
Cu: N/A **Cc:** N/A



R&M Consultants, Inc.
9101 Vanguard Drive
Anchorage, AK 99507
907.522.1707

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Project Details

Client: AK Built Construction & Design, LLC
cc:
Project: AK BUILT 2026 General Materials Testing
3344.01.TSK 01

Report Details

Report ID: MAT:26-00065-04
Report Date: 5/13/2026
Issue No: 1
Submitted By: Michael K. Wariner, PE

Sample Details

Sample ID 26-00065-04
Field Sample ID TH-01-03
Date Sampled 5/1/2026
Source On-Site Insitu / Native Material
Material In-Site / Native
Specification General Agg/Soil
Sampling Method Test Pit
General Location ADNOR DOF Septic Replacement
Location TH-01-03
Test Elev/Depth 14' below surface

Other Test Results

Description	Method	Result	Limits
Cu	ASTM D2487		
Cc			
Procedure	ASTM C117	A	
Group Code	ASTM D2487		
Group Name			
Atterberg Limits Estimated		Yes	
Remarks	Material was assumed to be non-plastic for classification purposes.		
Date Tested		5/13/2026	

Comments

USCS Classification cannot be determined according to procedure due to high amount of fines. However, if fines are assumed to be non-plastic, the classification would be SM.

Appendix B

Wastewater Characteristics

Robert Colles
AK Built Construction & Design
PO Box 771203
Eagle River, Anchorage AK 99577

Work Order:	1261616
	Rober Colles 29.02
Client:	AK Built Construction & Design
Report Date:	May 29, 2026

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. If you have any questions regarding this report, or if we can be of any other assistance, please contact your SGS Project Manager at 907-562-2343. This document is issued by the Company under its General Conditions of Service accessible at <<http://www.sgs.com/en/Terms-and-Conditions.aspx>>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology, Provisional for HPC as of 3/4/2026) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO 17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270E, 8270E-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B (Provisional as of 12/29/25), 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance.

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
B	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 3/4 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.

Note: Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content.



SGS Ref.# 1261616001
Client Name AK Built Construction & Design
Project Name/# Rober Colles 29.02
Client Sample ID Pre Treatment
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 05/29/2026 18:08
Collected Date/Time 05/01/2026 11:41
Received Date/Time 05/01/2026 15:25
Technical Director Stephen C. Ede

Sample Remarks:
5210B-Unable to read chlorine prior to BOD analysis due to sample matrix.

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
<u>Waters Department</u>									
Total Suspended Solids	92.0	20.0	mg/L	SM21 2540D	A			05/07/26	DAT
Total Nitrate/Nitrite-N	0.205	0.200	mg/L	SM21 4500NO3-F	B			05/13/26	AJP
<u>Microbiology Laboratory</u>									
Biochemical Oxygen Demand	209	2.00	mg/L	SM21 5210B	A			05/01/26	M.A



SAMPLE RECEIPT FORM

1261616



Project Manager Completion			
Was all necessary information recorded on the COC upon receipt? (Temperature, COC seals, etc.?)	☒ Yes	☐ No	☐ N/A
Was temperature between 0-6° C?	☒ Yes	☐ No	☐ N/A If "No", are the samples either exempt* or sampled <8 hours prior to receipt?
Were all analyses received within holding time*?	☒ Yes	☐ No	☐ N/A
Was a method specified for each analysis, where applicable? If no, please note correct methods.	☒ Yes	☐ No	☐ N/A
Are compound lists specified, where applicable? For project specific or special compound lists please note correct analysis code.	☐ Yes	☐ No	☒ N/A
If rush was requested by the client, was the requested TAT approved?	☐ Yes	☐ No	☒ N/A If "NO", what is the approved TAT?
If SEDD Deliverables are required, were Location ID's and an NPDL Number provided?	☐ Yes	☐ No	☒ N/A If "NO", contact client for information.
Sample Login Completion			
Do ID's on sample containers match COC?	☒ Yes	☐ No	☐ N/A
If provided on containers, do dates/times collected match COC?	☐ Yes	☐ No	☒ N/A Note: If times differ <1 hr., record details below and login per COC.
Were all sample containers received in good condition?	☒ Yes	☐ No	☐ N/A
Were proper containers (type/mass/volume/preservative) received for all samples? *See form F-083 "Sample Guide"	☒ Yes	☐ No	☐ N/A Note: If 200.8/6020 Total Metals are received unpreserved, preserve, and note HNO3 lot here: If 200.8/6020 Dissolved Metals are received unpreserved, log in for LABFILTER and do not preserve. For all non-metals methods, inform Project Manager.
Were Trip Blanks (VOC, GRO, Low-Level Hg, etc.) received with samples, where applicable*?	☐ Yes	☐ No	☒ N/A
Were all VOA vials free of headspace >6mm?	☐ Yes	☐ No	☒ N/A
Were all soil VOA samples received field extracted with Methanol?	☐ Yes	☐ No	☒ N/A
Did all soil VOA samples have an accompanying unpreserved container for % solids?	☐ Yes	☐ No	☒ N/A
If special handling is required, were containers labelled appropriately? e.g. MI/ISM, foreign soils, lab filter, Ref Lab, limited volume	☐ Yes	☐ No	☒ N/A
For Rush/Short Holding time, was the lab notified?	☒ Yes	☐ No	☒ N/A Short-hold
For any question answered "NO", was the Project Manager notified?	☐ Yes	☐ No	☒ N/A PM Initials:
Was Peer Review of sample numbering/labelling completed?	☐ Yes	☐ No	☒ N/A Reviewer Initials:
Additional Notes/Clarification where Applicable, including resolution of "No" answers when a change order is not attached:			
Review 1 IL for TSD & BOP Protocol due to sample method			

200 W. Potter Dr., Anchorage, AK 99518 (ph) 907-562-2343, (fax) 907-561-5301

AM

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F083_KitRequest_20190102

Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1261616001-A	No Preservative Required	OK			
1261616001-B	H2SO4 to pH < 2	OK			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted. Due to the nature of VOAs they are not checked prior to analysis. VOA vials for water are by default preserved with HCl and should be pH <2. It will be noted during analysis if pH is not <2.

OK - The container was received at an acceptable pH for the analysis requested.

BU - The container was received with headspace greater than 6mm.

DM - The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis



STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

PAYMENT BOND

Bond No. _____

For

Copper River Septic Construction – IFQ # 10-003-27

Project Name and Number

KNOW ALL WHO SHALL SEE THESE PRESENTS:

That _____
of _____ as Principal,
and _____
of _____ as Surety,
firmly bound and held unto the State of Alaska in the penal sum of _____ Dollars

(\$ _____) good and lawful money of the United States of America for the payment whereof,
well and truly to be paid to the State of Alaska, we bind ourselves, our heirs, successors, executors, administrators, and assigns,
jointly and severally, firmly by these presents.

WHEREAS, the said Principal has entered into a written contract with said State of Alaska, on the _____ of _____
A.D., 20____, for construction of the above-referenced project, said work to be done according to the terms of said contract.

Now, THEREFORE, the conditions of the foregoing obligation are such that if the said Principal shall comply with all requirements
of law and pay, as they become due, all just claims for labor performed and materials and supplies furnished upon or for the work
under said contract, whether said labor be performed and said materials and supplies be furnished under the original contract, any
subcontract, or any and all duly authorized modifications thereto, then these presents shall become null and void; otherwise they
shall remain in full force and effect.

IN WITNESS WHEREOF, we have hereunto set our hands and seals at _____,
_____ this _____ day of _____ A.D., 20____.

Principal: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

Surety: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

The offered bond has been checked for adequacy under the applicable statutes and regulations:

Alaska Department of Natural Resources Authorized Representative

Date

INSTRUCTIONS

1. This form, for the protection of persons supplying labor and material, shall be used whenever a payment bond is required. There shall be no deviation from this form without approval from the Contracting Officer.
2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be typed on the face of the form. Where more than a single surety is involved, a separate form shall be executed for each surety.
3. The penal amount of the bond, or in the case of more than one surety the amount of obligation, shall be typed in words and in figures.
4. Where individual sureties are involved, a completed Affidavit of Individual Surety shall accompany the bond. Such forms are available upon request from the Contracting Officer.
5. The bond shall be signed by authorized persons. Where such persons are signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of authority must be furnished.



STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

PERFORMANCE BOND

Bond No. _____

For

Copper River Septic Construction – IFQ # 10-003-27

Project Name and Number

KNOW ALL WHO SHALL SEE THESE PRESENTS:

That _____
of _____ as Principal,
and _____
of _____ as Surety,
firmly bound and held unto the State of Alaska in the penal sum of _____ Dollars

(\$ _____) good and lawful money of the United States of America for the payment whereof,
well and truly to be paid to the State of Alaska, we bind ourselves, our heirs, successors, executors, administrators, and assigns,
jointly and severally, firmly by these presents.

WHEREAS, the said Principal has entered into a written contract with said State of Alaska, on the _____ of _____
A.D., 20____, for construction of the above-named project, said work to be done according to the terms of said contract.

Now, THEREFORE, the conditions of the foregoing obligation are such that if the said Principal shall well and truly perform and
complete all obligations and work under said contract and if the Principal shall reimburse upon demand of the Department of Natural
Resources any sums paid him which exceed the final payment determined to be due upon completion of the project, then these
presents shall become null and void; otherwise they shall remain in full force and effect.

IN WITNESS WHEREOF, we have hereunto set our hands and seals at _____,
_____ this _____ day of _____ A.D., 20____.

Principal: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

Surety: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

The offered bond has been checked for adequacy under the applicable statutes and regulations:

Alaska Department of Natural Resources Authorized Representative

Date

INSTRUCTIONS

1. This form shall be used whenever a performance bond is required. There shall be no deviation from this form without approval from the Contracting Officer.
2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be typed on the face of the form. Where more than a single surety is involved, a separate form shall be executed for each surety.
3. The penal amount of the bond, or in the case of more than one surety the amount of obligation, shall be typed in words and in figures.
4. Where individual sureties are involved, a completed Affidavit of Individual Surety shall accompany the bond. Such forms are available upon request from the Contracting Officer.
5. The bond shall be signed by authorized persons. Where such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of authority must be furnished.



STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

BID BOND

For

Copper River Septic Construction – IFQ # 10-003-27

Project Name and Number

DATE BOND EXECUTED: _____

PRINCIPAL (Legal name and business address):

TYPE OF ORGANIZATION:

	☐ Individual	☐ Partnership
	☐ Joint Venture	☐ Corporation
STATE OF INCORPORATION:		

SURETY(IES) (Name and business address):

A.	B.	C.
PENAL SUM OF BOND:		DATE OF BID:

We, the PRINCIPAL and SURETY above named, are held and firmly bound to the State (State of Alaska), in the penal sum of the amount stated above, for the payment of which sum will be made, we bind ourselves and our legal representatives and successors, jointly and severally, by this instrument.

THE CONDITION OF THE FOREGOING OBLIGATION is that the Principal has submitted the accompanying bid in writing, date as shown above, on the above-referenced Project in accordance with contract documents filed in the office of the Contracting Officer, and under the Invitation for Bids therefor, and is required to furnish a bond in the amount stated above.

If the Principal's bid is accepted and he is offered the proposed contract for award, and if the Principal fails to enter into the contract, then the obligation to the State created by this bond shall be in full force and effect.

If the Principal enters into the contract, then the foregoing obligation is null and void.

PRINCIPAL

Signature(s)	1.	2.	3.
Name(s) & Title(s) (Typed)	1.	2.	3.

Corporate
Seal

See Instructions on Reverse

CORPORATE SURETY(IES)

Surety A	Name of Corporation	State of Incorporation	Liability Limit \$
Signature(s)	1.	2.	Corporate Seal
Name(s) & Titles (Typed)	1.	2.	

Surety B	Name of Corporation	State of Incorporation	Liability Limit \$
Signature(s)	1.	2.	Corporate Seal
Name(s) & Titles (Typed)	1.	2.	

Surety C	Name of Corporation	State of Incorporation	Liability Limit \$
Signature(s)	1.	2.	Corporate Seal
Name(s) & Titles (Typed)	1.	2.	

INSTRUCTIONS

1. This form shall be used whenever a bid bond is submitted.
2. Insert the full legal name and business address of the Principal in the space designated. If the Principal is a partnership or joint venture, the names of all principal parties must be included (e.g., "Smith Construction, Inc. and Jones Contracting, Inc. DBA Smith/Jones Builders, a joint venture"). If the Principal is a corporation, the name of the state in which incorporated shall be inserted in the space provided.
3. Insert the full legal name and business address of the Surety in the space designated. The Surety on the bond may be any corporation or partnership authorized to do business in Alaska as an insurer under AS 21.09. Individual sureties will not be accepted.
4. The penal amount of the bond may be shown either as an amount (in words and figures) or as a percent of the contract bid price (a not-to-exceed amount may be included).
5. The scheduled bid opening date shall be entered in the space marked Date of Bid.
6. The bond shall be executed by authorized representatives of the Principal and Surety. Corporations executing the bond shall also affix their corporate seal.
7. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.
8. The states of incorporation and the limits of liability of each surety shall be indicated in the spaces provided.
9. The date that bond is executed must not be later than the bid opening date.



STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

ALASKA BIDDER PREFERENCE CERTIFICATION

In response to the advertised procurement for:

Project Name and Number: Copper River Septic Construction - IFQ # 10-003-27

Bidder/Proposer (company name): _____

Operation of Alaska Bidder Preference

Procurement preferences under the Alaska Procurement Code are benefits that the State grants only to qualified bidders. Under AS 36.30.990(2), if a bidder is an eligible "Alaska Bidder", the Department will apply a five percent preference to the price of the bidder's proposal.

Instructions regarding Alaska Bidder Preference

A bidder that claims the Alaska Bidder Preference must review and then certify that each statement appearing under the heading "Alaska Bidder Certification" is true. The individual that signs the certification shall include his/her printed name and position within bidder's organization, *e.g.*, sole proprietor, partner, etc. If a bidder fails to submit a signed certification, the Department will not apply the claimed preference.

Alaska Bidder Certification

The bidding entity for which I am the duly authorized representative:

- (A) Holds a current Alaska business license;
- (B) Is submitting a bid or proposal for goods, services, or construction under the name appearing on the bidder's current Alaska business license;
- (C) Has maintained a place of business in the State staffed by the bidder or an employee of the bidder for a period of six months immediately preceding the date of the proposal;
- (D) Is incorporated or qualified to do business under the laws of the State, is a sole proprietorship and the proprietor is a resident of the State, is a limited liability company organized under AS 10.50 and all members are residents of the State, or is a partnership under former AS 32.05, AS 32.06, or AS 32.11 and all partners are residents of the State; and
- (E) If a joint venture, is composed entirely of ventures that qualify under the four preceding paragraphs of this Alaska Bidder Certification.

By applying my signature below, I certify under penalty of perjury that I am the duly appointed representative of this bidder, which has authorized and empowered me to legally bind it concerning its proposal, and that the foregoing statements are true and correct.

By (signature)

Date

Printed name

Alaska Business License Number

Title:

(See Reverse Side for Instructions)

Bid Phase: _____ Bidder: _____

1. This worksheet accurately reports the type and quantity of product(s) that: (a) qualify for application of the Alaska Product Preference under AS 36.30.321 *et seq.* and (b) this bidder will use in performing the advertised project, if awarded the contract; and
2. All listed product(s) are specified for use on the project and will be permanently incorporated; and
3. I am the duly appointed representative of this bidder, which has authorized and empowered me to legally bind it concerning its proposal.

Date

Page 1 of 2

INSTRUCTIONS FOR ALASKA PRODUCTS PREFERENCE WORKSHEET

Special Notice: All procurements, except those funded from Federal sources, shall contain Contract provisions for the preference of Alaska products. To be considered for the Alaska Product Preference, each product listed by the Bidder on this worksheet must have current certification from the Alaska Products Preference Program at the time of Bid Opening or the proposal due date. A product with expired certification at the bid opening or proposal due date will not be considered eligible. Products that are not specified for use on the project will not be considered eligible.

The Alaska Product Preference Program List of certified products is available online at:

<https://www.commerce.alaska.gov/web/dcra/AlaskaProductPreferenceProgram.aspx> or may be obtained by contacting Dept. of Commerce & Economic Development Alaska Division of Community and Regional Affairs, Alaska Products Preference Program, 550 W. 7th Ave., Suite 1650, Anchorage AK 99501-3510; Phone: (907) 269- 4501 Fax: (907) 269-4563, E-mail: madeinalaska@alaska.gov

BIDDERS INSTRUCTIONS:

A. General. The contracting Agency may request documentation to support entries made on this form. False presentations may be subject to AS 36.30.687. All Bidder's entries must conform to the requirements covering bid preparations in general. Discrepancies in price extensions shall be resolved by multiplying the declared total value times the preference percentage and adjusting any resulting computation(s) accordingly.

B. Form Completion – BASIC BIDS.

- (1) Enter project number and name, the words "Basic Bid" and the CONTRACTOR'S name in the heading of each page as provided.
- (2) The Bidder shall compare those candidate products appearing on the preference listing (see Special Notice comments above) against the requirements of the technical specifications appearing in the contract documents. If the Bidder determines that a candidate product can suitably meet the contract requirements, then that product may be included in the worksheet as follows.
- (3) For each suitable product submitted under the "Basic Bid" enter:
 - The product name, generic description and its corresponding technical specification section number under the heading "PRODUCT",
 - The company name of the Alaska producer under the heading "Manufacturer", and
 - The product class (I, II, or III) and preference percentage (3, 5, or 7% respectively) under the "CLASS/% heading.
- (4) For each product appearing on the list and to be utilized by the CONTRACTOR enter:
 - Under the heading "TOTAL DECLARED VALUE" the manufacturer's quoted price of the product, (caution: this value is to be the manufacturer's quoted price at the place of origin and shall not include costs for freight, handling or miscellaneous charges of incorporating the product into the Work,) and
 - The resulting preference – i.e. the preference percentage times the total declared value amount – under the heading "REDUCTION AMOUNT".
- (5) Continue for all "suitable" basic bid products. If the listing exceeds one page enter the words "Page # __ SUB" in front of the word "TOTAL" and on the first line of the following pages enter "SUBTOTAL OF REDUCTION AMOUNT FROM PREVIOUS PAGE".
- (6) On the final page of the listing enter "BASIC BID PREFERENCE GRAND" immediately before the word "TOTAL".
- (7) Total the entries in the "REDUCTION AMOUNT" column for each page by commencing at the first entry for that page. If a continuation page exists, ensure that the subtotal from the previous page is computed into the running total. Number pages as appropriate.
- (8) Compute a Grand Total for the Basic Bid Preference. Enter the amount on the final page of the worksheet. (Note: When solicitations require written bids this amount should also be entered on line "C" of the Basic Bid Schedule.) Submit worksheet(s) with the Bid Schedule.

C. Form Completion – ALTERNATE BIDS.

- (1) Enter project number and name, the words "ALTERNATE BID #__", and CONTRACTOR'S name in the heading of each page as provided.
- (2) On the first entry line enter "ADDITIONAL ALASKA PRODUCTS FOR ALTERNATE BID #__", and repeat procedures 2 through 5 under part B these Bidder's instructions except that references to "Basic Bid" shall be replaced with the words "Alternate Bid #__."
- (3) Following the listing of all additional Alaska products enter the words "ADDITIONAL PRODUCTS PREFERENCE FOR ALTERNATE BID #__ - SUBTOTAL" and enter a subtotal amount for all additional products as listed. Subtotal amount to be determined by adding all additional product entries in the "REDUCTION AMOUNT" column.
- (4) Skip three lines and enter "LESS THE FOLLOWING NON-APPLICABLE ALASKA PRODUCTS:
- (5) Beginning on the next line, enter the product name and manufacturer of each Alaska Product appearing on the "Basic Bid" listing which would be deleted or reduced from the Project should the "Alternate Bid" be selected. Details of entry need only be sufficient to clearly reference the subject product. (i.e. "Pre-hung doors by Alaska Door Co., Anchorage.") Products being reduced shall specify the amount of the reduction. Should no products require deletion enter "None". When a product is listed as a "NON-APPLICABLE ALASKA PRODUCT" for this alternate bid and if under the basic bid the Bidder received a preference on his basic bid as a result of that product, then the applicable entries under the headings "TOTAL DECLARED VALUE" and "REDUCTION AMOUNT" (for each product and from the basic bid listing) shall also be entered into the corresponding headings of this form. Where only a portion of the products has been deleted, the entry (which will differ from those on the basic bid listing) may be "pro-rated" or as otherwise substantiated.
- (6) Following the listing of all non-applicable Alaska products enter the words "NON-APPLICABLE PRODUCTS PREFERENCE FROM BASIC BID __ SUBTOTAL" and enter a subtotal amount for all non-applicable products listed. Subtotal amount to be determined by adding all non-applicable entries in the "REDUCTION AMOUNT" column.
- (7) At the bottom of the final page enter the words "ALTERNATE BID #__ PREFERENCE GRAND" immediately before the word "TOTAL".
- (8) Compute a Grand Total for the Alternate Bid Preference (for Alternate #__) by subtracting the non-applicable product preference subtotal from the additional product preference subtotal. Enter on the final page. (Note: When solicitations require written bids this amount should also be entered on line "C" of the Alternate Bid Schedule.) Submit separate worksheet(s) with each Alternate Bid



STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

**ALASKA VETERAN PREFERENCE
CERTIFICATION**

In response to the advertised procurement for: Copper River Septic Construction - IFQ # 10-003-27

Bidder (Contractor) _____,

Operation of Alaska Veteran Preference

Procurement preferences under the Alaska Procurement Code are benefits that the State grants only to qualified bidders. Under AS 36.30.321, an eligible entity receives a five percent preference to the price of in the bidder's proposal if the bidder meets three requirements.

The bidder must be:

1. an "Alaska Veteran";
2. a "Qualifying Entity"; and
3. an "Alaska Bidder".

Unless a bidder satisfies all three requirements and furnishes corresponding certifications, it is not eligible for the Alaska Veteran Preference. This preference may not exceed \$5,000.

Instructions regarding Alaska Veteran Preference

A bidder that claims the Alaska Veteran Preference must review and complete the "Alaska Veteran Certification", the "Qualifying Entity Certification", and the "Alaska Bidder Certification". The individual that signs a certification shall include his/her printed name and position within bidder's organization, *e.g.*, sole proprietor, partner, etc. If a bidder fails to submit properly completed certifications, the Department will not apply the claimed preference.

Alaska Veteran Certification

(To be completed by individual(s) upon whom the bidder relies in claiming the Alaska Veteran status. If bidder is a partnership, limited liability company, or corporation, then a majority of partners, members, or shareholders who are Alaska Veterans must sign this Alaska Veteran Certification for the Bidder to be eligible for this preference.)

I hereby represent to the Department that:

I served in the armed forces of the United States, a reserve unit of the United States armed forces, the Alaska Territorial Guard, the Alaska Army National Guard, the Alaska Air National Guard, or the Alaska Naval Militia; and

I was separated from service under a condition that was not dishonorable; and

I am Alaska resident in that I am physically present in the State of Alaska with the intent to remain in the State indefinitely and to make a home in the State.

I certify under penalty of perjury that the foregoing statements are true and correct as they apply to me.

By (signature)

Date

Printed name

Title

Qualifying Entity Veteran Certification

The bidding entity for which I am the duly authorized representative is a:

(Check the appropriate box)

- ☐ sole proprietorship owned by an Alaska Veteran;
- ☐ partnership under AS 32.06 or AS 32.11 and a majority of the partners are Alaska Veterans;
- ☐ limited liability company organized under AS 10.50 and a majority of the members are Alaska Veterans;
or
- ☐ corporation that is wholly owned by individuals and a majority of the individuals are Alaska Veterans.

By applying my signature below, I certify under penalty of perjury that I am the duly appointed representative of this bidder, which has authorized and empowered me to legally bind it concerning the proposal and that the statement I have acknowledged above by checking the appropriate box is true and correct.

By (signature)

Date

Printed name

Title

Alaska Bidder Certification

(To complete your claim for the Alaska Veteran Preference, you must also submit an Alaska Bidder Certification).



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
**ALASKA MILITARY SKILLS PREFERENCE
CERTIFICATION**

In response to the advertised procurement for:

Project Name and Number Copper River Septic Construction - IFQ # 10-003-27

Bidder (Contractor) _____

Operation of Alaska Military Skills Preference

Procurement preferences under the Alaska Procurement Code are benefits that the State grants only to qualified bidders. Under AS 36.30.321, an eligible entity receives a two percent preference to the price in the bidder's proposal if the bidder meets three requirements.

The bidder must be:

1. a "Qualifying Entity"; and
2. an "Alaska Bidder"

Unless a bidder satisfies all these requirements and furnishes corresponding certifications, it is not eligible for the Alaska Military Skills Preference. This preference may not exceed \$5,000.

Instructions regarding Alaska Military Skills Preference

A bidder that claims the Alaska Military Skills Preference must review and complete the "Alaska Military Skills Certification", the "Qualifying Entity Certification", and the "Alaska Bidder Certification". The individual that signs a certification shall include their printed name and position within bidder's organization, e.g., sole proprietor, partner, etc. If a bidder fails to submit properly completed certifications, the Department will not apply the claimed preference.

Alaska Military Skills Certification

(To be completed by individual(s) upon whom the bidder relies in claiming the Alaska Military Skills status. If bidder is a partnership, limited liability company, or corporation, then employee(s) who are claiming Alaska Military Skills must sign this Alaska Military Skills Certification for the Bidder to be eligible for this preference and provide proof of graduation of the qualifying employee(s) from an eligible program as described in AS 36.30.321).

I hereby represent to the Department that:

I have one or more employees who are currently enrolled in, or have graduated within the past two years from, a United States Department of Defense SkillBridge or United States Army Career Skills Program. These programs provide service members or their spouses with civilian work experience, industry training, pre-apprenticeships, registered apprenticeships, or internships during the final 180 days before separation or retirement from the military.

Alternatively, I maintain an active partnership with an entity that employs apprentices through a program as outlined in AS 36.30.321.

Additionally, I am a resident of Alaska, meaning I am physically present in the state with the intent to remain indefinitely and establish a permanent home here.

I certify under penalty of perjury that the foregoing statements are true and correct as they apply to me.

By (signature)

Date

Printed name

Title

Qualifying Entity Military Skills Certification

The bidding entity for which I am the duly authorized representative is a:

(Check the appropriate box)

- ☐ employs at least one person who is currently enrolled in, or within the previous two years graduated from, a United States Department of Defense SkillBridge or United States Army Career Skills Program for service members or spouses of service members that offers civilian work experience through specific industry training, pre-apprenticeships, registered apprenticeships, or internships during the last 180 days before a service member separates or retires from the service; or
- ☐ has an active partnership with an entity that employs an apprentice through a program described in AS 36.30.321.
- ☐ proof of graduation of the qualifying employee(s) from an eligible program as described in AS 36.30.321.

By applying my signature below, I certify under penalty of perjury that I am the duly appointed representative of this bidder, which has authorized and empowered me to legally bind it concerning the proposal and that the statement I have acknowledged above by checking the appropriate box is true and correct.

By (signature)

Date

Printed name

Title

Alaska Bidder Certification

(To complete your claim for the Alaska Military Skills Preference, you must also submit an Alaska Bidder Certification).

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY,
AND VOLUNTARY EXCLUSION
LOWER TIER COVERED TRANSACTIONS**

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 29 CFR Part 98, Section 98.510, Participant's responsibilities. The regulations were published as Part VII of the May 26, 1988, Federal Register (pages 19160-19211).

**(BEFORE COMPLETING CERTIFICATION, READ THE INSTRUCTIONS ON THE FOLLOWING PAGE
WHICH ARE AN INTEGRAL PART OF THE CERTIFICATION)**

The prospective recipient of federal assistance funds certifies, by submission of this bid, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

Where the prospective recipient of federal assistance funds is unable to certify to any of the Statements in this certification, such prospective participant shall attach an explanation to this Proposal.

Name of Representative: _____.

Title of Representative: _____.

Signature: _____.

Date: _____.

1. Is this company enrolled in the Federal System for Awards Management (SAM)? YES NO
2. If Yes, please provide either the DUNS Number _____ or the Cage Code _____.
3. If No, the company must be enrolled in SAM before a contract can be signed or payment made on a contract involving federal funds. Failure to do so will result in cancellation of the contract.

INSTRUCTIONS FOR CERTIFICATION

1. By signing and submitting this Proposal, the prospective recipient of federal assistance funds is providing the certification as set out below.
2. The certification in this class is a material representation of the fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective recipient of federal assistance funds knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the Department of Labor (DOL) may pursue available remedies, including suspension and/or debarment.
3. The prospective recipient of federal assistance funds shall provide immediate written notice to the person to whom this Proposal is submitted if at any time the prospective recipient of federal assistance funds learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "Proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this Proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective recipient of federal assistance funds agrees by submitting this Proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the DOL.
6. The prospective recipient of federal assistance funds further agrees by submitting this Proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may but is not required to check the List of Parties Excluded from Procurement or Non-procurement Programs.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the DOL may pursue available remedies, including suspension and/or debarment.

CERTIFICATION REGARDING DRUG-FREE WORKPLACE REQUIREMENTS

The grantee certifies that it will provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing a drug-free awareness program to inform employees about—
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation and employee assistance programs, and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace.
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will—
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after each conviction;
- (e) Notifying the agency within ten days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction;
- (f) Taking one of the following actions, within 30 days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted—
 - (1) Taking appropriate personnel action against such an employee, up to and including termination; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e) and (f).

Typed Name and Title of Certification Official

Signature

Date