

**City of Kodiak**  
**AGREEMENT FOR PROFESSIONAL SERVICES**

This agreement is between the City of Kodiak and CH2M HILL Engineers, Inc. for a PROJECT known as the Monashka Reservoir Pump House Final Design.

**PART I**  
**SPECIAL PROVISIONS**

**SECTION 1 DEFFINITIONS**

In this AGREEMENT:

- A. AGREEMENT means this document with all attachments
- B. CITY means the City of Kodiak
- C. CITY MANAGER means the City Manager of the City of Kodiak or his/her designee who is responsible for approving and signing this AGREEMENT and any amendments.
- D. CITY ENGINEER means the City Engineer of the City of Kodiak who is responsible for the day-to-day coordination and communication with the ENGINEER. The CITY ENGINEER does not have authority to execute a change of this AGREEMENT or to otherwise bind the City of Kodiak for purposes of this AGREEMENT.
- E. ENGINEER means CH2M HILL Engineers, Inc.
- F. PROJECT means the object of the design or study that the ENGINEER is to perform under this AGREEMENT.

**SECTION 2 SCOPE OF SERVICES**

- A. The ENGINEER is responsible for the professional quality, technical accuracy, timely completion, and the coordination of all designs, drawings, specifications, reports and other services furnished by the ENGINEER under this AGREEMENT. The ENGINEER shall perform its services in a manner consistent with the level of care and skill normally exercised by professional engineers or consultants performing the same or similar services during the time of this AGREEMENT. The ENGINEER shall, without additional compensation, correct or revise any errors or deficiencies in his design drawings, specifications, reports and other services.
- B. Approval by the CITY of drawings, designs, specifications, reports, and incidental engineering work or materials furnished hereunder shall not in any way relieve the ENGINEER of responsibility for the technical adequacy of the work. Neither the CITY's review, approval or acceptance of, nor payment for, any of the services shall be construed to operate as a waiver of any rights under this AGREEMENT, and the ENGINEER shall be and

remain liable in accordance with applicable law and the language herein for the damages to the CITY caused by the ENGINEER's errors, omissions, or negligent performance of any of the services furnished under this AGREEMENT.

- C. The ENGINEER shall perform the scope of services set forth in Appendix A, which includes the ENGINEER's proposal letter dated October 14, 2013.
- D. The CITY may make or approve changes to the scope of services in this AGREEMENT. If such changes affect the ENGINEER's cost or time required for performance of the services, an equitable adjustment to the ENGINEER's contract price and schedule will be made through an amendment to this AGREEMENT.
- E. The ENGINEER may not subcontract or assign any portion of the scope of services to any party not identified in this AGREEMENT without prior written approval of the CITY.
- F. The CITY shall not allow any claim for services other than those described in this section.
- G. In the performance of this AGREEMENT, the ENGINEER shall, to the extent practicable, provide for maximum use of structures, machines, products, materials, construction methods, and equipment which are readily available through competitive procurement, or through standard or proven production techniques, methods and processes.
- H. The ENGINEER shall not, in the performance of the work called for by this AGREEMENT, produce a design or specification that requires the use of structures, machines, products, materials, construction methods, equipment or processes which are known by the ENGINEER to be available only from a sole source, unless such use has been adequately justified in writing by the ENGINEER as necessary for the minimum needs of the PROJECT.

### **SECTION 3 TIME FOR PERFORMANCE**

- A. This AGREEMENT becomes effective when signed on behalf of the CITY.
- B. The ENGINEER shall promptly commence performance of the work described in Section 2 and shall complete that performance on or before July 31, 2014.
- C. The CITY may suspend, delay, or interrupt the services of the ENGINEER for the convenience of the CITY. In such an event, the ENGINEER's contract price and schedule shall be equitably adjusted.
- D. The CITY will examine the ENGINEER's studies, reports, sketches, drawings, specifications, proposals, and other documents, obtain the advice of other professionals and consultants as the CITY deems appropriate, and render in writing decisions required of the CITY in a timely manner.
- E. The CITY will give prompt written notice to the ENGINEER whenever the CITY observes or becomes aware of any development that affects the scope or timing of the ENGINEER's services or of any defect in the work of the ENGINEER.

## **SECTION 4 COMPENSATION**

- A. Subject to the ENGINEER's performance, the CITY shall pay the ENGINEER no more than \$399,500.00, Lump Sum Amount in accordance with this section.
- B. The actual costs for all services requested and rendered shall be in accordance with the information set forth in Appendix A, which includes the ENGINEER's letter dated October 14, 2013. The compensation shall be a fixed fee (lump sum) of \$399,500.00 for Monashka Reservoir Pump House Final Design, as set forth in Appendix A.
- C. The ENGINEER may submit invoices for services under this AGREEMENT no more frequently than monthly. The CITY will review each invoice for accuracy and compliance with this AGREEMENT and uncontested charges will be due and payable within 30 days of receipt. If any payment is withheld because the charges are not approved or the ENGINEER's performance is unsatisfactory, the CITY ENGINEER must, within 30 days after the payment denial, notify the ENGINEER in writing of the payment denial and set forth, with reasonable specificity, what charges are not being paid and why. No interest will accrue on any disputed charges until mutually resolved.
- D. The ENGINEER is not entitled to any compensation under this AGREEMENT, other than is expressly provided for in this section.

## **SECTION 5 TERMINATION**

The ENGINEER's services under Section 2 may be terminated:

- A. By mutual consent of the parties.
- B. For the convenience of the CITY, provided that the CITY notifies the ENGINEER in writing of its intent to terminate under this paragraph at least ten (10) days prior to the effective date of the termination.
- C. For cause, by either party where the other party fails in any material way to perform its obligations under this AGREEMENT. Termination under this subsection is subject to the condition that the terminating party notifies the other party of its intent to terminate, stating with reasonable specificity the grounds therefore, and the other party fails to cure the default within thirty (30) days after receiving the notice.
- D. On termination, the ENGINEER shall deliver all work products, completed or not, to the CITY ENGINEER and the ENGINEER will be paid for all authorized services performed up to the termination date.
- E. If the ENGINEER's services are terminated, for whatever reason, the ENGINEER shall not claim any compensation under this AGREEMENT, other than that allowed herein.
- F. If a final audit has not been performed before the ENGINEER's services are terminated, the CITY may recover any payments for costs disallowed as a result of the final audit.

- G. Except as provided in this section, termination of the ENGINEER's services does not affect any other right or obligation of a party under this AGREEMENT.
- H. If, after the CITY terminates this AGREEMENT for cause, and it is determined that such cause did not exist, the termination shall be deemed to have been effected for the convenience of the CITY.
- I. The ENGINEER warrants that no person or selling agency has been employed or retained to solicit or secure this AGREEMENT upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee. For breach or violation of this warranty, the CITY shall terminate this AGREEMENT without liability and shall deduct from the contract price, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.
- J. The CITY shall terminate this AGREEMENT if it is found by the CITY that gratuities (in the form of entertainment, gifts or otherwise) were offered or given by the ENGINEER, or any agent or representative of the ENGINEER, to any official or employee of the CITY, or any citizen serving on an advisory board to the CITY, with a view toward securing a contract, or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performance of this AGREEMENT.

## **SECTION 6 INSURANCE**

- A. The ENGINEER shall maintain the following insurance throughout the term of ENGINEER's performance under this AGREEMENT:
  - 1. Worker's compensation and employer's liability insurance as required by the State of Alaska.
  - 2. Comprehensive automobile and vehicle liability insurance covering claims for injuries to members of the public and/or damages to property of the others arising from use of motor vehicles, including on-site and off-site operations, and owned, non-owned, or hired vehicles, with \$1,000,000 combined single limits.
  - 3. Commercial general liability insurance covering claims for injuries to members of the public or damage to property of others arising out of any covered negligent act or omission of the ENGINEER or of any of its employees, agents, or subcontractors with \$1,000,000 per occurrence and in the aggregate.
  - 4. Professional liability insurance of \$1,000,000 per occurrence and in the aggregate. If written on a "Claims Made" basis, engineer shall keep policy in force for three years after project completion
- B. The CITY shall be named as an additional insured with respect to the ENGINEER's liabilities hereunder in insurance coverages identified in items 2 and 3 and the ENGINEER's insurer shall waive subrogation against the CITY under all policies required by this section. The ENGINEER shall provide the CITY with certificates of insurance.

- C. Each policy of insurance required by this section shall provide for no less than sixty (60) days written notice to the CITY prior to cancellation.

## **SECTION 7 ASSIGNMENT**

- A. This is a bilateral AGREEMENT. Neither party shall have the power to, or will, assign any of the duties or rights or any claim arising out of or related to this AGREEMENT, whether arising in tort, contract or otherwise, without the written consent of the other party. Any unauthorized assignment is void and unenforceable. These conditions and the entire AGREEMENT are binding in the heirs, successors, and assigns of the parties hereto.

## **SECTION 8 OWNERSHIP; PUBLICATION, REPRODUCTION & USE OF MATERIAL**

- A. Except as otherwise provided herein, all data, reports, drawings, specifications, documents, and other deliverables of the ENGINEER, whether in hard copy or electronic form, prepared as a part of the scope of work are the property of the CITY, which shall retain the exclusive right to publish, disclose, distribute and otherwise use, in whole or in part, any such data, reports, drawings, specifications, documents or other materials. Exclusive rights shall not be attributed to portions of such materials presently in the public domain or which are not subject to copyright.
- B. Equipment purchased by the ENGINEER with contract funds shall be the sole property of the CITY and shall be marked and inventoried as such with a copy of the inventory forwarded to the CITY.
- C. The ENGINEER's work products are for the PROJECT identified in this AGREEMENT, whether completed or not. The CITY agrees to indemnify the ENGINEER from all claims, damages, losses, and costs, including, but not limited to, litigation expenses and attorney's fees arising out of or related to the unauthorized reuse, change or alteration of these work products.

## **SECTION 9 NOTICES**

- A. Any notice required pertaining to the subject matter of this AGREEMENT shall be either sent via facsimile (FAX) or mailed by prepaid first class registered or certified mail, return receipt requested to the following addresses:

CITY: Glenn Melvin, P.E.  
2410 Mill Bay Road  
Kodiak, Alaska 99615  
Tel: (907) 486-8065 Fax: (907) 486-8066

ENGINEER: Floyd Damron, P.E.  
CH2M HILL Engineers, Inc.  
949 E 36th Avenue Ste 500  
Anchorage AK 99508  
Tel: (907) 762-1359 Fax: (907) 257-2017

- B. Notices are effective upon the earlier of receipt, proof of good transmission (facsimiles only), or five (5) days after proof of proper posting.

#### **SECTION 10 FORCE MAJEURE**

- A. Any failure to perform by either party due to force majeure shall not be deemed a violation or breach hereof.
- B. As used in this AGREEMENT, force majeure is an act or event of substantial magnitude beyond the control of the affected party, which delays the completion of this AGREEMENT, including without limitation:
1. Any interruption, suspension or interference resulting solely from the act of the CITY or neglect by the CITY not otherwise governed by the terms of this AGREEMENT.
  2. Strikes or work stoppages.
  3. Any interruptions, suspensions or interference with the PROJECT caused by act of GOD, or acts of a public enemy, wars, blockades, insurrections, riots, arrests or restraints or government and people, civil disturbances or similar occurrences.
  4. Order of court, administrative agencies or governmental officers other than the CITY.

## **PART II**

### **GENERAL PROVISIONS**

#### **SECTION 1 RELATIONSHIPS OF PARTIES**

- A. The ENGINEER shall perform its obligations hereunder as an independent contractor of the CITY, and nothing herein shall be construed to create a partnership, joint venture, or agency relationship between ENGINEER and CITY. Neither party shall have any authority to enter into agreements of any kind on behalf of the other or have any power or authority to bind or obligate the other in any manner to any third party. The employees or agents of one party shall not be deemed or construed to be the employees or agents of the other party for any purpose whatsoever. The CITY may administer the AGREEMENT and monitor the ENGINEER's compliance with its obligations hereunder. The CITY shall not supervise or direct the ENGINEER other than as provided in this AGREEMENT.

#### **SECTION 2 NONDISCRIMINATION**

- A. The ENGINEER shall not discriminate against any employee or applicant for employment because of race, color, religion, national origin, ancestry, age, sex, or marital status or who is a "qualified individual with a disability" (as that phrase is defined in the Americans With Disabilities Act of 1990). The ENGINEER shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, national origin, ancestry, age, sex, marital status or mental or physical impairment/disability. Such action shall include, without limitation, employment, upgrading, demotion or transfer, recruitment or recruiting advertising, layoff or termination, rate of pay or other forms of compensation, and selection for training including apprenticeship. The ENGINEER agrees to post, in conspicuous places available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.
- B. The ENGINEER shall state, in all solicitations or advertisements for employees to work on contract jobs, that all qualified applicants will receive equal consideration for employment with regard to race, color, religion, national origin, ancestry, age, sex, marital status, or mental or physical impairment/disability.
- C. The ENGINEER shall include the provisions of subsections A and B of this section in every subcontract or purchase order under this AGREEMENT, so as to be binding upon every such subcontractor or vendor of the ENGINEER under this AGREEMENT.

#### **SECTION 3 PERMITS, LAWS, AND TAXES**

- A. The ENGINEER shall acquire and maintain in good standing all permits, licenses and other entitlements necessary to its performance under this AGREEMENT. All actions taken by the ENGINEER under this AGREEMENT shall comply with all applicable statutes, ordinances, rules and regulations. The ENGINEER shall pay all taxes pertaining to its performance under this AGREEMENT.

**SECTION 4 NONWAIVER**

- A. The failure of either party at any time to enforce a provision of this AGREEMENT shall in no way constitute a waiver of the provision, nor in any way affect the validity of this AGREEMENT or any part hereof, or the right of such party thereafter to enforce each and every provision hereof.

**SECTION 5 AMENDMENT**

- A. This AGREEMENT shall only be amended, modified or changed in writing, executed by authorized representatives of the parties, with the same formality as this AGREEMENT was executed.
- B. For the purposes of any amendment modification or change to the terms and conditions of this AGREEMENT, the only authorized representatives of the parties are:

CITY: Aimée Kniaziowski  
City Manager  
PO Box 1397  
Kodiak, Alaska 99615  
Tel: (907) 486-8640 Fax: (907) 486-8600

ENGINEER: Floyd Damron, P.E.  
CH2M HILL Engineers, Inc.  
949 E 36th Avenue Ste 500  
Anchorage AK 99508  
Tel: (907) 762-1359 Fax: (907) 257-2017

- C. Any attempt to amend, modify, or change this AGREEMENT by either an unauthorized representative or unauthorized means shall be void.

**SECTION 6 JURISDICTION**

- A. The Substantive law of the State of Alaska shall govern the validity of this AGREEMENT, its interpretation and performance, and any other claims related to it. Any civil action rising from This AGREEMENT shall be brought in the trial courts of the State of Alaska for the Third Judicial District at Kodiak.

**SECTION 7 SEVERABILITY AND SURVIVAL**

- A. If any of the provisions contained in this AGREEMENT are held for any reason to be invalid, illegal, or unenforceable, the enforceability of the remaining provisions shall not be impaired thereby.
- B. Limitations of liability, indemnities, and other express representations shall survive termination of this AGREEMENT for any cause.

## **SECTION 8 INDEMNIFICATION**

- A. The ENGINEER shall indemnify, defend, save and hold the CITY harmless from any claims, damages, losses, and costs, including, but not limited to, litigation expenses and attorney's fees, arising out of claims by third parties for property damage or bodily injury, including death, to the proportionate extent caused by the errors, omissions, negligence, or willful misconduct of the ENGINEER, the ENGINEER's employees, affiliated corporations, and subcontractors in connection with this PROJECT.
- B. The ENGINEER shall not indemnify, defend, save and hold the CITY harmless from claims, lawsuits, liability, or attorney's fees and costs arising from wrongful or negligent acts, errors or omissions solely of the CITY occurring during the course of or as a result of the performance of this AGREEMENT.
- C. Where claims, lawsuits or liability, including attorneys' fees and costs arise from wrongful or negligent acts of both the CITY and the ENGINEER, the ENGINEER shall indemnify, defend, save, and hold the CITY harmless from only that portion of claims, lawsuits, liability, including attorneys' fees and costs, which result from the ENGINEER's or any subcontractor's wrongful or negligent acts.

## **SECTION 9 ACCESS AND RETENTION OF RECORDS**

- A. The ENGINEER shall maintain accounting records regarding its performance under this AGREEMENT in accordance with generally accepted accounting principles.
- B. The ENGINEER shall, at any time during normal business hours and as often as the CITY may deem necessary, make available to the CITY, for examination, all of its records with respect to all matters covered by this AGREEMENT for a period ending three (3) years after the date the ENGINEER completes performance in accordance with Section 2 of the Special Provisions. Upon request, and within a reasonable time, the ENGINEER shall submit such other information and reports relating to its activities under this AGREEMENT to the CITY, in such form and at such times as the CITY may reasonably require. The ENGINEER shall permit the CITY to audit, examine and make copies of such records, and to make audits of all invoices, materials, payrolls, records of personnel and other data relating to all matters covered by this AGREEMENT. The CITY may, at its option, permit the ENGINEER to submit its records to the CITY in lieu of the retention requirements of this section.

## **SECTION 10 DISPUTE RESOLUTION**

- A. The CITY and the ENGINEER shall use their best efforts to resolve amicably any dispute, including use of alternative dispute resolution options.

**SECTION 11 APPENDICES, SCHEDULES, AND SIGNATURES**

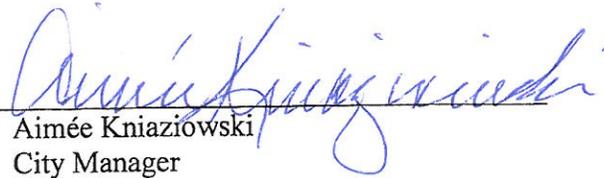
A. This AGREEMENT, including its attachments and schedules, constitutes the entire AGREEMENT, supersedes all prior written or oral understandings, and may only be changed by a written amendment executed by both parties. The following appendices and schedules are hereby made a part of this AGREEMENT.

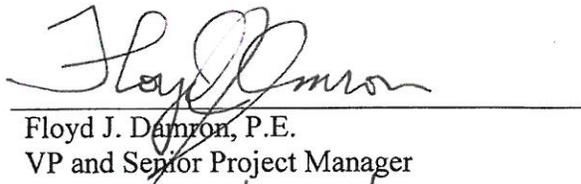
Appendix A, Scope of Services

IN WITNESS WHEREOF, the parties have executed this AGREEMENT on the date shown below.

CITY OF KODIAK

CH2M HILL Engineers, Inc.

  
Aimée Kniaziowski  
City Manager

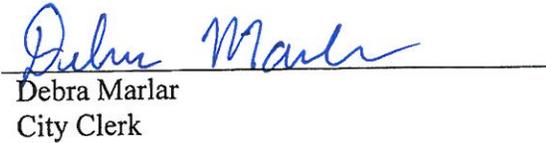
  
Floyd J. Damron, P.E.  
VP and Senior Project Manager

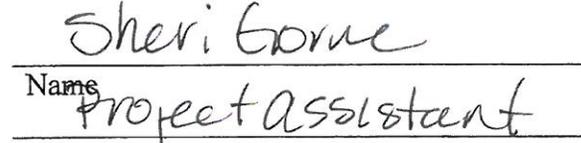
10/29/13  
Date

10/23/13  
Date

ATTEST

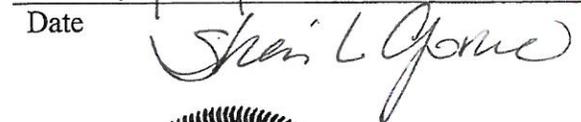
ATTEST

  
Debra Marlar  
City Clerk

  
Name  
Project Assistant

11/7/13  
Date

10/23/13  
Date





My Commission Expires:  
8/17/2016

**City of Kodiak**  
**AGREEMENT FOR PROFESSIONAL SERVICES**  
**with**  
**CH2M HILL Engineers, Inc.**  
**for**  
**Monashka Pump House Feasibility Study PN 11-05/7029**

**APPENDIX A**  
**SCOPE OF SERVICES**

Appendix A consists of the following:

Attachment A – CH2M HILL proposal letter dated October 14, 2013, Subject: Engineering Services Proposal for City of Kodiak Monashka Reservoir Pump House Final Design



CH2M HILL  
301 W. Northern Lights Blvd Suite 601  
Anchorage, AK 99503  
Tel 907-278-2551  
Fax 907-257-2000

October 14, 2013

Mark Kozak  
Public Works Director  
**CITY OF KODIAK**  
2410 Mill Bay Road  
Kodiak, AK 99615

**Subject: Engineering Services Proposal for City of Kodiak Monashka Reservoir Pump House Final Design with Special Permitting Task**

Dear Mark:

CH2M HILL appreciates this opportunity to submit our engineering services proposal to the City of Kodiak (City) for designing a new pumping facility for the City's Monashka Creek water supply. The new pumping facility will replace the existing aging pumping facility to provide a reliable water supply source to the City for the next 30-50 years.

## **Project Background**

The City currently receives its untreated water from two unfiltered surface water sources: Monashka Creek (primary) and Pillar Creek (secondary). The water from the Monashka Creek source has been pumped from the Monashka Creek pump house to the upper reservoir in the City for 40 years. CH2M HILL's assessment of the existing pumping facility in 2011-2012 determined that the existing facility would not maintain structural integrity during a design seismic event. Upgrades to the facility required to bring it to a condition that would reliably serve the city for the next 30-50 years would potentially cost more than design and construction of a new facility.

Based upon this premise, CH2M HILL conducted a feasibility study to develop a design concept and construction cost estimate for a new pumping facility at the Monashka site. This work was recently completed and prompted the City to request this cost proposal for the new pumping facility's final design. The goal is construct the new pump house in 2014.

## **Key Final Design Features**

CH2M HILL will conduct the necessary architectural, civil, mechanical, electrical, structural, and control system engineering to prepare design drawings and prepare construction specifications for the new Monashka pumping facility. The major features included in the design will be:

- A pumping system and piping design to provide up to 14 MGD of water from the Monashka reservoir to the upper reservoir through the use of three equally sized electrically driven pumps. The system will include a fourth diesel engine driven pump that will be the same size and capacity as the electrically driven pumps. The diesel engine driven pump will supply water to the upper reservoir during electrical power outages.

- New electrical motor control center, panel boards, power and controls for the new pumping facility will be provided. Major electrical components include an electrical transformer, small stand-by generator, controls, and main control panel.
- A new two story building consisting of a ground floor to house the pumps, valves, and associated piping and a second floor containing an electrical room, bathroom, and office/emergency living space.
- Lighting, heating and ventilation for the new building will be included. Lighting is assumed to be industrial, chemically resistant fluorescent lighting. Heating is assumed to be oil fired wall mounted units supplemented by electrical resistance heating. Ventilation will be provided by wall and ceiling vents.
- On-site grading, erosion control, and yard piping improvements needed for the new facility will be included in the design.

## Scope of Work – Final Design Phase

Contract document deliverables in accordance with those describe in the following sections will be submitted to the City for review and approval at 50% and 95% completion. The drawings and specifications will be sent for permitting and approval as required by each agency and described below. An engineer's opinion of probable cost will be submitted with the 50%, 95%, and 100% design documents. It is assumed that the City will require two weeks for review of each of the submittals. We will travel to Kodiak after the 50% and 95% submittals for a review workshop. The CAD drawings will be prepared in Microstation and the specifications will be Engineer's Joint Council format as modified by CH2M HILL and will employ the new 49 Divisions. The Engineer fees are based on the following proposed design drawing list:

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Drawing No.	Drawing Title
<b>General</b>	
G-1	Cover
G-2	Index to Drawings
G-3	Abbreviations and General Notes
G-4	Special Inspection
G-5	Hydraulic Profile
<b>Civil</b>	
C-1	General, Civil, and Architectural Legend
C-2	Overall Site and Survey Control Plan
C-3	Foundation Plan
C-4	Grading Plan
C-5	Yard Piping Plan
C-6	Temporary Erosion and Sedimentation Control Plan
C-7	Site Details
C-8	Civil Standard Details

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**Architectural**

A-1	Architectural Legend, General & Code Notes
A-2	Floor Plan
A-3	Second Story Floor Plan
A-4	Elevations
A-5	Building Sections
A-6	Wall Sections and Details
A-7	Roof & Wall Details
A-8	Interior Wall Elevations & Details
A-9	Architectural Standard Details

**Structural**

S-1	Structural Legend
S-2	Foundation & Ground Floor Plan
S-3	Second Story Floor Plan
S-4	Roof Plan
S-5	Wall Sections
S-6	Sections
S-7	Details
S-8	Structural Standard Details

**Process Mechanical**

M-1	Process Mechanical Legend
M-2	Process Flow Diagram
M-3	Floor Plan
M-4	Sections
M-5	Details
M-6	Mechanical Standard Details
M-7	Standard Details

**Building Mechanical**

H-1	Legend and Schedules
H-2	Ground Floor Plan
H-3	Second Floor Plan
H-4	Generator Plan/Diagram
H-5	Plumbing Diagrams and Details
H-6	Heating Diagrams and Details
H-7	HVAC Standard Details

**Electrical**

E-1	Electrical Legend
E-2	Overall One Line Diagram
E-3	MCC One Line Diagram
E-4	Process (Power) Plan
E-5	Facility (Lighting) Plan
E-6	Control Diagrams
E-7	Conduit Schedules
E-8	Luminaire Schedules
E-9	Electrical Standard Details

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**Instrumentation and Control**

I-1	Instrumentation and Control Legend
I-2	P&ID
I-3	Block Diagram
I-4	Typical Wiring Diagrams
I-5	Telemetry System Diagram
I-6	Instrumentation and Control Standard Details
Total Drawings	59

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Engineering Services to complete the Monashka Pump House design will consist of the following tasks:

**Task 1- Design Team Kick-off Meeting**

CH2M HILL will lead a half-day meeting in Kodiak for project definition and design criteria development. The meeting will be conducted with the City and CH2M HILL staff to kick-off the project and confirm the desired project elements including pumping capacity, access requirements, building features, and monitoring and control systems. CH2M HILL's Project Manager, Civil Engineer, and Design Manager will attend the meeting. A site visit will be made at this time to confirm the exact location of the new building.

During the project kick-off meeting, CH2M HILL and the City will define the City's objectives and success factors for the project and document the City's standards as they pertain to this work. We will use CH2M HILL's design standards in most cases, with clarifications and exceptions, if any, noted in a summary memo following the meeting.

The following areas will be considered during the kickoff meeting:

- Project objectives: Discussion of the overall purpose for this project to ensure that all participants have the same understanding. The City will define for the project team what will make this a successful project from their perspective.
- Construction Funding: City will provide updated construction funding information to the design team and impacts to bid date and start of construction.
- Communications procedures: Joint definition of the verbal and written communications practices and procedures.
- Owner design criteria standards and preferences: Identify any standards for design criteria or standard products by the City. Discuss any preferred equipment types, suppliers and vendors by the City.
- Specification format: CH2M HILL master specifications will be used as the basis for all specifications, including CH2M HILL standard Division 0 and Division 1 documents.
- Procurement policies: Bidding/procurement requirements, sole source restrictions.

*Task 1 Deliverable*

Kick-off Meeting Summary Notes

## **Task 2 - 50% Design Documents**

The purpose of this task is to utilize the decisions of the project that were made in the feasibility study and to complete and finalize the calculations, develop the project design to achieve a working design concept that can be fully reviewed by the City staff. Structures, equipment, major plant piping, process, site plan are all established during this phase to allow detailing of the same in the next phase of design. Specific activities, and work products from this phase are described in the following subtasks:

### *Civil and Site Development:*

- Fully Develop civil design concept. Structures, access road, and major site element horizontal locations are determined. Structure floor and finished grades are established.
- Define demolition requirements and limits. Define contractor staging, storage, access, and off-site access corridors.
- Prepare site grading drawings.
- Set final building and structure elevations.
- Develop yard piping and plant drain layouts. Identify corridors for smaller piping and other utilities.
- Show storm water and facility flood control concepts on site plan drawings.
- Finalize traffic flow, parking, and lay out road access to all buildings and structures.
- Prepare first draft of technical specifications.

### *Architectural:*

- Coordinate with I&C and electrical disciplines to size and locate electrical and control spaces.
- Coordinate with the mechanical discipline to select the type of HVAC equipment, locate HVAC equipment, determine space requirements and routing for ductwork if required, and establish design R-values for all exterior walls.
- Coordinate with structural engineer to define the structural design concepts for the facilities.
- Establish applicable codes for all buildings/structures with local code officials and fire marshal. Complete building and fire code analysis.
- Prepare building floor and roof plans and elevations
- Prepare first draft of technical specifications.

### *Structural:*

- Coordinate with geotechnical data to establish foundation design criteria for proposed facilities.

- Document structural design concept for each and structure. Finalize materials of construction.
- Preliminary foundation and framing plans for buildings and other structures.
- Prepare first draft of technical specifications.

*Process Mechanical:*

- Conduct major equipment sizing calculations.
- Coordinate with I&C on completion of P&IDs.
- Calculate the hydraulic profile for all-major process pipelines and hydraulic structures. Assume system will operate with gravity head from existing pipeline.
- Create equipment data sheets or equipment list on all major equipment items.
- Establish ancillary equipment sizing and line sizing calculations.
- Establish equipment selection (type, size, weight, arrangement).
- Select piping materials.
- Prepare first draft of technical specifications.

*HVAC/Plumbing:*

- Prepare sizing calculations for HVAC equipment based on energy code requirements and selected building construction materials. Prepare HVAC equipment data sheets and cut sheets.
- Create ventilation concept drawing (louver locations, fan locations, type of equipment, air flows). Assumes wall mounted ventilation unit heaters will be used.
- Coordinate with civil engineer for plant drain system.
- Prepare first draft of technical specifications including performance specifications for HVAC and plumbing design by the contractor.

*Electrical:*

- Determine location of the motor control center (MCC) and equipment to be powered out of the MCC. The equipment is assumed to be the pumping system, HVAC and monitoring/control equipment. Prepare one-line diagrams for proposed facilities. Coordinate with lead process engineers to determine power requirements.
- Layout the major electrical equipment located in the electrical room. Assumes those items listed in the basis of design. Determine equipment requiring short term battery backup and emergency egress rating.

- Coordinate with lead I&C engineer to determine space requirements and locations for control equipment. Locate major control terminal boxes and control panels.
- Identify rights-of-way and routing methods for electrical conduit and tray. Lay out duct bank system (major runs/manholes). Coordinate with civil yard piping. Locate manholes and hand holes.
- Provide a new self-contained generator and integral fuel storage system for stand-by power for the new facilities, systems and components. Coordinate with Mechanical Engineer for sizing and specification.
- Prepare first draft of technical specifications including performance specifications for interior lighting design by the contractor.

#### *Instrumentation and Control*

- Update P&IDs.
- Work with Process Engineer to prepare written operational description of each major process.
- Prepare preliminary I/O count. Size and locate I/O locations for distributed control systems (DCS). Coordinate I/O rack room sizing with electrical and architectural disciplines.
- Coordinate with HVAC engineer regarding control system requirements.
- Define control interfaces for all package systems with local controls.
- Prepare first draft of technical specifications.

#### *Engineer's Opinion of Probable Cost*

CH2M HILL will prepare an engineer's opinion of probable cost based on the 50% design drawings and specifications. The engineer's opinion of probable cost will be itemized by technical specification section. The City will have the opportunity to review the costs and provide comments. Any cost opinions or project economic evaluations provided by CH2M HILL will be on a basis of experience and judgment, but, since CH2M HILL has no control over market conditions or bidding procedures, CH2M HILL cannot warrant that bids, ultimate construction cost, or project economics will not vary from these opinions.

#### *50% Design Review:*

The 50% design documents and supporting information will be reviewed by CH2M HILL Quality Control reviewers. A 50% design will be concurrently submitted to the City for review. These comments will be incorporated into the construction documents.

CH2M HILL will conduct a workshop with the City to review the work products from the 50% design submittal. The workshop will be held in the City Public Works office. An action/task list from the workshop will be compiled and submitted to the City.

### **Task 3 - 95% Design Documents**

The purpose of this task is to utilize the decisions of the project that were made in the previous phase to complete the design. Structures, equipment, major plant piping, process, site plan are all finalized during this phase. Drawings and other bidding documents that are required for permitting review will be available at the conclusion of this phase. The majority of the quality control review and approval will occur prior to the finalization of the work products from design development phase. Specific activities, and work products from this phase are described in the following subtasks:

#### *Civil and Site Development:*

- Freeze civil design concept. Structures, road, and major site element horizontal locations are finalized. Structure floor and finished grades are finalized.
- Finalize demolition requirements and limits. Define contractor staging, storage, access, and off-site access corridors.
- Finalize site grading drawings.
- Set final building and structure elevations.
- Finalize yard piping and plant drain layouts. Identify corridors for smaller piping and other utilities.
- Finalize traffic flow, parking, and lay out road access to all buildings and structures.
- Finalize technical specifications.

#### *Architectural:*

- Finalized Architectural layout, building details, and materials selection.
- Finalize technical specifications.

#### *Structural:*

- Document structural design concept for each and structure. Finalize materials of construction.
- Finalize all structural details.
- Finalize framing plan for building.
- Finalize technical specifications.

#### *Process Mechanical:*

- Finalize major equipment sizing calculations.
- Coordinate with I&C on development of process control narratives.

- Finalize the hydraulic profile for all-major gravity process pipelines and hydraulic structures
- Complete equipment data sheets or equipment list on all major equipment items.
- Finalize ancillary equipment sizing and line sizing calculations.
- Final equipment selection (type, size, weight, arrangement).
- Finalize technical specifications.

*HVAC/Plumbing:*

- Prepare HVAC equipment data sheets and cut sheets.
- Finalize ventilation drawings (louver locations, fan locations, type of equipment, air flows).
- Prepare HVAC system block diagrams. Define HVAC system control philosophy.
- Finalize technical specifications including performance specifications for HVAC and plumbing design by the contractor.

*Electrical:*

- Prepare detailed electrical load calculations.
- Finalize electrical room and layout of the major electrical equipment located in the electrical room. Finalize equipment requiring short term battery backup and emergency egress rating.
- Submit load calculations and one-lines to electric utility for review. Identify rights-of-way and routing methods for electrical conduit and tray. Finalized duct bank system layout (major runs/manholes). Finalize location of manholes and hand holes.
- Finalize design of the new self-contained generator and integral diesel fuel storage system for backup power for the new facilities, systems and components.
- Finalize technical specifications

*Instrumentation and Controls*

- Work with Process Engineer to prepare written operational description of each major process.
- Summarize I&C system design philosophy for each major process in a process control narrative. Include a description of the field elements to be used for each application and preliminary set points for major I&C elements.
- Update/finalize control system block diagram.
- Finalize typical control diagrams/loop diagrams for each type of control scheme to be used.

- Finalize design drawings
- Finalize Specifications

*Engineer's Opinion of Probable Cost*

CH2M HILL will update the engineer's opinion of probable cost based on the 95% design drawings and specifications. Modifications per the City's review of the engineer's opinion of probable cost prepared as part of the 50% package will be incorporated into the 95% cost opinion. The engineer's opinion of probable cost will be itemized by technical specification section. The City will have the opportunity to review the costs and provide comments.

*95% Design Submittal:*

The 95% design documents and supporting information will be reviewed by CH2M HILL Quality Control reviewers. 95% design documents will be concurrently submitted to the City for review. The comments will be incorporated into the 100% Contract Documents.

Following review by the City, CH2M HILL will submit the 95% design documents to the Alaska Department of Environmental Conservation and Kodiak Building Department. The City will coordinate reviews for Building Permit approval by fire marshal and others as needed. The City will pay all permit and agency fees.

*95% Design Deliverables*

The 95% submittal to the City will include 5 paper copies and up to 5 additional paper copies for submittal to permitting agencies which will include the following items:

- 95% Design Drawings
- 95% Technical Specifications
- Updated Engineer's Opinion of Probable Cost

**Task 4 - 100% Contract (Bid) Document Preparation**

The purpose of this task is to develop the final contract drawings, specifications, and schedules for competitive bidding. Key activities during this phase will include:

- Contract Document Completion based on comments from permitting agencies and the City.
- Finalize specification front-end documents, including General Conditions, General Requirements, bidding documents, bonds, and Instruction to Bidders. Owner input is required at this point to determine construction contract requirements and insurance requirements.
- Coordinate with Owner on advertising and bidding process.
- Prepare final construction drawings.
- Prepare final technical specifications.
- Prepare final calculations.

- Complete final checking and coordination review.

*Incorporation of Final Review Comments:*

CH2M HILL will modify the contract documents to reflect all agreed upon final review comments from the City, applicable regulatory agencies and CH2M HILL's quality control review team. The final documents will then be submitted to the City and prepared for bidding.

*100% Design Deliverables*

- 100% Contract Drawings
- 100% Technical Specifications
- 100% Engineer's Opinion of Probable Cost (It is assumed that little to no update will be required from the 95% Cost Opinion).

**Task 5 - Bidding Phase Services**

CH2M HILL will provide bidding services including preparing bid packages, providing bidding assistance, attending the pre-bid conference, reproducing up to 10 copies of the Contract Documents and 10 copies of full size drawings, review of contractors questions, preparing addenda, and providing a recommendation for the construction contractor selection.

It is assumed that CH2M HILL will provide the complete bid documents to the City as a part of the bid package for distribution to the bidders. It is assumed that the City will be responsible for all bid advertising costs during the bidding process and that the City will be the primary point of contact for bidders during the bid phase.

CH2M HILL will assist the City in arranging and conducting one pre-bid conference. CH2M HILL will assist the City in developing the agenda and content of the pre-bid conference. CH2M HILL will take minutes or make other provision for documenting the results of the pre-bid conference. CH2M HILL will also record all questions and requests for additional information, and shall coordinate with the City for issuing responses and additional information.

CH2M HILL will provide technical interpretation of the contract bid documents and will prepare proposed responses to bidders' questions and requests, which may be in the form of addenda. CH2M HILL shall assist the City in issuing Addenda to the Bid Documents. The City will distribute the addenda to the bidders. It is assumed that up to two addenda will be prepared and issued by CH2M HILL as part of bidding services. All Addenda shall be approved by the City.

CH2M HILL shall assist the City in review and evaluation of the bidders. CH2M HILL shall prepare a summary memorandum of its review and evaluation and include recommendations for award of the contract for construction, or other action as may be appropriate. The City shall make the final decision on the award of the contract for construction and the acceptance or rejection of all bids. CH2M HILL will provide technical (but not legal) advice in bid protest situations.

### **Task 6 - Final Design Project Management and Administration**

Project management includes time required to set up the tasks, regularly communicate and update City staff, coordinate activities, assure QA/QC of deliverables, direct project personnel, prepare invoices, attend project meetings not specifically covered in a separate task, closeout the project, archive records, and address any general project management issues that arise during execution of the project. Monthly invoices will be prepared along with a brief status report.

#### *Task 6 Deliverables*

Monthly Invoices and Project Status Reports

### **Task 7 - Project Review Meetings and pre-bid Conference**

CH2M HILL assumes a total of four trips to Kodiak for kickoff and review meetings during the course of this project, as well as one trip for the pre-bid conference. The review meetings will occur following the submittal of the 50% and 95% design documents. The pre-bid conference is assumed to include the CH2M HILL design manager, and the review meetings are assumed to include the project manager and design manager.

#### *Task 7 Deliverables*

Meeting and presentation materials

### **Task 8 - Special Permitting Requirements**

Regulatory reviews will be completed for a Categorical Exclusion and funding at the state level. These reviews will include solicitation of comments from federal, state, local, and tribal agencies to determine potential impacts of the project.

#### *Task 8 Deliverables*

Categorical Exclusion request and full documentation of agency comments and concerns regarding project impact and needed mitigation measures, if any.

## Key Project Team Members

Our proposed Pump House Facility Design team:

Discipline	Lead
Project Manager	Floyd Damron, P.E.
Design Manager/ Process Engineer	Bud Alto, P.E.
Architect	Mark Sharp, AIA
Structural Engineer	Mark Parent, P.E.
Mechanical Engineer	Adam Boyd, P.E.
Electrical Engineer	Don Wagner, P.E.
Instrumentation and Control	Steve Bakken
Civil Engineer	Zachary Brown, P.E.
Process	Darren Edwards, P.E.

## Budget

The budget is based on CH2M HILL completing components Tasks 1-7 of the project identified in this proposal. The total fee will be a lump sum amount of \$399,500 based on the tasks described in the scope of work and table below:

PUMP HOUSE FACILITY FINAL DESIGN PHASE		
Task 1	Pre-Design Phase Kick-Off Meeting	\$5,000
Task 2	50% Design Documents	\$133,000
Task 3	95% Design Documents	\$124,000
Task 4	100% Contract Documents	\$35,000
Task 5	Bidding Phase Services	\$14,000
Task 6	Final Design Project Management and Administration	\$37,000
Task 7	Project Review Meetings and pre-bid Conference	\$39,000
Task 8	Special Permitting Requirements	\$12,500
<b>TOTAL</b>	<b>Final Design</b>	<b>*\$399,500</b>

\* The lump sum amount is based on all design work being completed no later than March 4, 2014 and bid opening

## Schedule

Our CH2M HILL team is available to begin work upon Notice to Proceed (NTP). The design work is assumed to require 18 weeks from NTP to bid ready documents. We propose the following schedule for completion of this project.

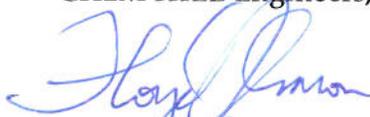
Milestone	Target Completion Date based on time from NTP
Notice to Proceed	To be Determined based on contract execution
Final Design Project Kick-off Meeting	10 days
50% Submittal Package	10 weeks
95% Submittal Package/Permitting Package	16 weeks
Bid Document and Advertise for Bid	18 weeks

We appreciate the opportunity to submit this final design proposal and look forward to working with you and your staff.

Please contact me if you have any questions.

Sincerely,

**CH2M HILL Engineers, Inc.**



Floyd J. Damron, P.E.  
VP & Senior Project Manager

cc: Bud Alto/CH2M HILL Design Manager