

October 5, 2016

City of Valdez
P.O. Box 307
Valdez, AK 99686

ATTENTION: Jennifer Patton

Dear Jennifer,

**REFERENCE: Valdez Elementary School and Administration Building
Fuel Tank Replacement**

RSA Engineering is pleased to offer a fee proposal for the referenced project. We have based our scope of work on the following assumptions:

- We will provide design for removal of the existing underground storage tanks and installation of new above ground storage tanks at the Valdez Elementary School and Valdez School Administration Building. The new above ground tanks will have canopies and fencing around the tanks.
- We will provide design for connections between the new above ground fuel tanks and the existing mechanical systems in the buildings. The design at the elementary school will include a new fuel pump package and day tanks for connection to the existing boiler system and generator at the school. The design at the administration building will include a new day tank for connection to the existing boiler system at the school.
- We will provide two design submittals 65% Design Development and 100% Construction Document submittals.
- We will perform a site visit to coordinate fuel tank locations and verify field conditions for installation of new day tanks and fuel piping.
- We have included Estimations to provide cost estimates with the 65% and 100% submittals.
- We have included BBFM Engineers, Inc. to provide design for new concrete pad, seismic restraint and steel canopies for the two new above ground fuel tanks.
- We have included Shannon & Wilson, Inc. to provide specifications for demolition of the underground storage tanks, environmental consultation associated with the contractor during the tank replacement and to conduct an UST closure assessment including coordination with the ADEC.
- Bid phase services include preparation of addenda material and attendance at the prebid meeting by teleconference from Anchorage.
- Construction phase services include submittal review, DCVR review/response, one mechanical construction inspection, review of operation and maintenance manuals and preparation of record drawings based upon contractor generated redline mark-ups.

Exclusions:

- Travel delays are not included in our fee for site visits outside of Anchorage (neither during the design or construction phase). Travel delays will be billed up to 8 hours per day of actual time including reimbursable expenses incurred.

October 5, 2016

RSA proposes the following lump sum fees for this project:

	<u>Mechanical</u>	<u>Electrical</u>	<u>Cost</u> <u>Estimating</u>	<u>Structural</u>	<u>Environmental</u>
Pre-design Site Visit	\$ 2,886	\$ -	\$ -	\$ -	\$ -
65% Design	\$ 7,505	\$ 3,265	\$ 2,310	\$ 5,506	\$ 5,599
100% Design	\$ 7,690	\$ 2,950	\$ 2,310	\$ 2,965	\$ 3,014
In-Office C/A	\$ 6,570	\$ 2,530	\$ -	\$ 1,837	\$ 1,232
Closure Assesment	\$ -	\$ -	\$ -	\$ -	\$ 13,878
Site Inspections	\$ 2,886	\$ -	\$ -	\$ -	\$ -
	<u>\$ 27,537</u>	<u>\$ 8,745</u>	<u>\$ 4,620</u>	<u>\$ 10,307</u>	<u>\$ 23,723</u>
Grand Total	\$	\$	\$	\$	\$
		74,932			

Please review and advise if this proposal is acceptable by signing below and returning a copy to our office as our notice to proceed. We have attached a copy of our Standard Terms and Conditions to provide guidelines for contractual issues in the absence of a formal contract for this project. We look forward to working with you on this project.

Sincerely,



Brian Pekar, P.E.
Associate Principal Engineer

bpp/hhm
16-0612/P16-331
Attachment

Accepted for City of Valdez

RSA Engineering, Inc – Standard Terms and Conditions

This document is intended to provide guidelines for contractual issues in the absence of a contract supplied by our client.

Performance:

RSA Engineering, Inc., herein known as RSA and its employees will exercise the degree of skill and care expected by customarily accepted practices and procedures. No warranties, expressed or implied, are made with respect to RSA's performance, unless agreed in writing. RSA is not a guarantor of the project to which its services are directed, and responsibility is limited to work performed for the client. RSA is not responsible for acts and omissions of the client, nor for third parties not under its direct control. RSA shall not be liable for any reason for any special, indirect or consequential damages including loss of use and/or loss of profit. RSA may rely upon information supplied by the client engaging RSA and its contractors or its consultants without independent verifications.

Ownership of Documents:

Documents prepared under this agreement are Instruments of Service for the sole use and benefit of the Owner. RSA retains a property interest in the work products including rights to copy and reuse. RSA grants the Owner a perpetual and non-transferrable license to reproduce the Instruments of Service for their intended use, including the right to reproduce for construction, upkeep, operation and maintenance. RSA will incur no liability from the unauthorized use or modification of the Instruments of Service for other than their original purpose without RSA's written permission. RSA's signatures, professional seals and dates shall be removed from the Instruments of Service when these documents are used for other than their intended purposes.

Governing Law:

This contract shall be governed by the laws of the State of Alaska, and any lawsuits brought thereon shall be filed at the Judicial District Court in Anchorage, Alaska.

Insurance:

RSA maintains errors and omission insurance (claims made basis), commercial general liability insurance, automobile liability insurance and workers compensation and employer's liability insurance for employees performing work under this contract.

Indemnity:

RSA shall indemnify, defend and hold the client, agents and employees harmless from and against any and all claims, demands, suits, liability of any nature under this agreement resulting from negligent acts, errors or omissions of RSA, RSA's officers, agents, and subconsultants who are directly responsible to RSA. RSA is not required to indemnify, defend or hold harmless the client for a claim of, or liability for, independent negligent acts, errors, or omissions of the client. If there is a claim of, or liability for, a joint negligent act, error or omission of RSA and the Client, the indemnification, defense and hold harmless obligation of this agreement shall be apportioned on a comparative fault basis.

Dispute Resolution:

Prior to initiating court action, RSA and the client shall in good faith seek to settle or resolve the controversy by submitting the matter to mediation in Anchorage, Alaska. Such notice shall be within the statutory time limit for commencing a legal action involving the controversy. The independent third party Mediator will be selected by mutual consent of both Parties from a list of available members of the American Arbitration Association.

Arbitration:

At the election of either party, any dispute arising between the parties herein relating to the subject matter of this agreement shall be resolved by arbitration. The results of said arbitration shall be conclusive, final and binding upon all parties and may be entered into any initial Court of Records as a final judgment. Arbitration proceedings shall be conducted pursuant to the administrative procedural rules promulgated by the American Arbitration Association. Any final arbitration award shall include an award for all-reasonable costs and reasonable attorney fees.

Proposals:

Proposals expire 90 days after submission to a client unless a different expiration limit is included in the proposal. RSA may withdraw or modify a proposal at any time prior to acceptance by the client.

Payments:

Payments for RSA Services shall be made after client's approval of RSA submission and invoice. Client shall review and approve each submission and invoice and shall pay the invoice amount within 30 days (or other agreed upon timetable) of approval. If the owner does not approve a submission it shall be returned to RSA for revision.

Invoicing:

RSA will invoice on a monthly basis. All invoices shall be due and payable upon receipt. Interest charges of 1.5% per month may be assessed for unpaid balances beyond 120 days past due unless other arrangements are made. In the event billing is on a pay when paid basis, RSA and the client agree to six months past due prior to assessing interest charges unless other arrangements are made. It is agreed that in the event of failure of the client to make payments in compliance with this agreement, RSA, at its option, may terminate all services in connection with this agreement.

Termination:

This contract may be terminated by either party upon 30 days written notice, should the other party fail to substantially perform in accordance with the terms and conditions herein. In the event of termination the consultant shall be paid compensation for services actually performed and for reimbursable expenses actually incurred. RSA reserves the right to complete analysis and records as are necessary to put files in order, and were considered by us necessary to protect our professional reputation.

RSA ENGINEERING COST WORKSHEET

client: **City of Valdez**
 project: **Fuel Tank Replacement**
 date: 10/4/2016

CLASS	RATE	task 1: Site Visit		task 2: 65% Design		task 3: 100% CD		TOTALS
		QUANT.	FEE	QUANT.	FEE	QUANT.	FEE	
Principal Mech.Engr.	\$210.00					4	\$840	\$840
Principal Elec.Engr.	\$210.00					2	\$420	\$420
Associate Principal-M	\$180.00	12	\$2,160	16	\$2,880	16	\$2,880	\$7,920
Associate Principal-E	\$180.00			8	\$1,440	6	\$1,080	\$2,520
Senior Engineer - M	\$150.00							
Senior Engineer - E	\$150.00							
Project Engineer - M	\$130.00							
Project Engineer - E	\$130.00							
Staff Engineer II - M	\$110.00							
Staff Engineer II - E	\$110.00			16	\$1,760	12	\$1,320	\$3,080
Staff Engineer I - M	\$100.00			24	\$2,400	24	\$2,400	\$4,800
Staff Engineer I - E	\$100.00							
Senior Designer - M	\$125.00							
Senior Designer - E	\$125.00							
Designer - M	\$90.00			24	\$2,160	16	\$1,440	\$3,600
Designer - E	\$90.00							
CAD Technician - M	\$75.00							
CAD Technician - E	\$75.00							
Clerical/Admin - M	\$65.00	1	\$65	1	\$65	2	\$130	\$260
Clerical/Admin - E	\$65.00			1	\$65	2	\$130	\$195
Labor Total			\$2,225		\$10,770		\$10,640	\$23,635
		Mech.	\$2,225	Mech.	\$7,505	Mech.	\$7,690	\$17,420
		Elec.		Elec.	\$3,265	Elec.	\$2,950	\$6,215
Estimations					\$2,100		\$2,100	\$4,200
BBFM Engineers, Inc.					\$5,005		\$2,695	\$7,700
Shannon & Wilson, Inc					\$5,090		\$2,740	\$7,830
Travel Expenses								
airfare RT	\$480.00	1	\$480					\$480
rental Car	\$100.00	1	\$100					\$100
overnight lodging	\$1.00							
per diem	\$65.00	1	\$65					\$65
taxicab/parking	\$16.00	1	\$16					\$16
Reimbursables Subtotal			\$661		\$12,195		\$7,535	\$20,391
10% Subconsultant Mark-Up					\$1,220		\$754	\$1,973
Reimbursables Total			\$661		\$13,415		\$8,289	\$22,364
TASK TOTALS			\$2,886		\$24,185		\$18,929	
						SHEET TOTAL		\$45,999

RSA ENGINEERING COST WORKSHEET

client: **City of Valdez**
 project: **Fuel Tank Replacement**
 date: 10/4/2016

task 4:
In-office CA

task 5:
Closure Assement
Subconsultant
Coordination

task 6:
Site Inspection

CLASS	RATE	QUANT.	FEE	QUANT.	FEE	QUANT.	FEE	TOTAL
Principal Mech.Engr.	\$210.00							
Principal Elec.Engr.	\$210.00							
Associate Principal-M	\$180.00	16	\$2,880			12	\$2,160	\$5,040
Associate Principal-E	\$180.00	6	\$1,080					\$1,080
Senior Engineer - M	\$150.00							
Senior Engineer - E	\$150.00							
Project Engineer - M	\$130.00							
Project Engineer - E	\$130.00							
Staff Engineer II - M	\$110.00							
Staff Engineer II - E	\$110.00	12	\$1,320					\$1,320
Staff Engineer I - M	\$100.00	32	\$3,200					\$3,200
Staff Engineer I - E	\$100.00							
Senior Designer - M	\$125.00							
Senior Designer - E	\$125.00							
Designer - M	\$90.00	4	\$360					\$360
Designer - E	\$90.00							
CAD Technician - M	\$75.00							
CAD Technician - E	\$75.00							
Clerical/Admin - M	\$65.00	2	\$130			1	\$65	\$195
Clerical/Admin - E	\$65.00	2	\$130					\$130
Labor Total			\$9,100				\$2,225	\$11,325
		Mech.	\$6,570	Mech.		Mech.	\$2,225	\$8,795
		Elec.	\$2,530	Elec.		Elec.		\$2,530
Estimations								
BBFM Engineers, Inc.			\$1,670					\$1,670
Shannon & Wilson, Inc			\$1,120		\$12,616			\$13,736
Travel Expenses								
airfare RT	\$480.00					1	\$480	\$480
rental Car	\$100.00					1	\$100	\$100
overnight lodging	\$1.00							
per diem	\$65.00					1	\$65	\$65
taxicab/parking	\$16.00					1	\$16	\$16
Reimbursables Subtotal			\$2,790		\$12,616		\$661	\$16,067
10% Subconsultant Mark-Up			\$279		\$1,262			\$1,541
Reimbursables Total			\$3,069		\$13,878		\$661	\$17,608
TASK TOTALS			\$12,169		\$13,878		\$2,886	
						SHEET TOTAL		\$28,933
						GRAND TOTAL		\$74,932



Fee Proposal

September 20, 2016

Brian Pekar
RSA Engineering
670 West Fireweek Lane, Suite 200
Anchorage, AK 99503

Re: Stepping Stones Expansion Project

Brian

We can provided you with cost estimating services for this project for the fees, outlined below. We have based our proposal on scope provided in your email of 16Sep15.

Please Allow 2 week for us to develop each submittal.

Item	Rate	Admin \$100.00	Estimator \$88.00	Sr Estimator \$162.00	Totals
65% Estimate	1	\$100	8 \$704	8 \$1,296	17 \$2,100
95% Estimate	1	\$100	8 \$704	8 \$1,296	17 \$2,100
Total Fees	2	\$200	16 \$1,408	16 \$2,592	34 \$4,200

Sincerely,

Jay Lavoie

Valdez Elementary Fuel Tank Replacement

CLIENT: RSA Engineering, Inc.
PREPARED BY: Colin Maynard, PE
DATE: September 27, 2016

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FEES\2016GEN\Valdez Elementary Fuel Tank Replacement

BBFM Engineers, Inc.
Structural Fee Proposal

COMMENTS:

- Design of concrete pad and steel cover for two above ground fuel tanks.
- Seismic design of tank attachment to concrete pad included
- Special Inspection by others
- No requirements for additional named insureds or waivers of subrogation for insurance are included in this Proposal. Any added costs for such and any insurance requirements that exceed our existing coverage will be an additional charge.

FEE SUMMARY	Labor	Expenses	Total
Design	\$7,700	\$0	\$7,700
Construction Administration	\$1,670	\$0	\$1,670
Totals	\$9,370	\$0	\$9,370

Valdez Elementary Fuel Tank Replacement

BBFM Engineers, Inc.
Structural Fee Proposal

TASKS	Senior Principal	Principal	Associate	Sr Project Engineer	Project Engineer	Structural Designer	CAD Tech 2	CAD Tech 1	Office Manager	Clerical
Design										
Design Loads	0	2	0	0	0	0	0	0	0	0
Roof Framing	0	4	0	0	0	0	0	0	0	0
Columns/Walls	0	2	0	0	0	0	0	0	0	0
Foundations	0	2	0	0	0	0	0	0	0	0
Misc Struct	0	0	0	0	0	0	0	0	0	0
Lateral Loads	0	6	0	0	0	0	0	0	0	0
A/M/E Minor Support	0	4	0	0	0	0	0	0	0	0
S1 Gen Notes & Abbrev	0	0	0	0	0	0	2	0	0	0
S2 Plans	0	0	0	0	0	0	8	0	0	0
S3 Details	0	0	0	0	0	0	10	0	0	0
Meetings/Coord	0	2	0	0	0	0	0	0	0	0
Specifications	0	4	0	0	0	0	0	0	0	0
Quality Control	0	2	0	0	0	0	0	0	0	0
Permit/Govt Review	0	2	0	0	0	0	0	0	0	0
TOTAL HOURS	0	30	0	0	0	0	20	0	0	0
RATE	\$225.00	\$180.00	\$160.00	\$140.00	\$120.00	\$100.00	\$115.00	\$95.00	\$135.00	\$60.00
HOURS * RATE	\$0	\$5,400	\$0	\$0	\$0	\$0	\$2,300	\$0	\$0	\$0
TOTAL LABOR	\$7,700									
EXPENSES										
Insurance	\$0									
Travel	\$0									
Food	\$0									
Lodging	\$0									
Auto	\$0									
Parking	\$0									
Reproduction	\$0									
Delivery	\$0									
TOTAL EXPENSES	\$0									
TOTAL FEE	\$7,700									

	Senior Principal	Principal	Associate	Sr Project Engineer	Project Engineer	Structural Designer	CAD Tech 2	CAD Tech 1	Office Manager	Clerical
Office Consultation	0	4	0	0	0	0	2	0	0	0
Shop Drawing Review	0	4	0	0	0	0	0	0	0	0
Site Visits	0	0	0	0	0	0	0	0	0	0
Record Drawings	0	0	0	0	0	0	0	0	0	0
TOTAL HOURS	0	8	0	0	0	0	2	0	0	0
RATE	\$225.00	\$180.00	\$160.00	\$140.00	\$120.00	\$100.00	\$115.00	\$95.00	\$135.00	\$55.00
HOURS * RATE	\$0	\$1,440	\$0	\$0	\$0	\$0	\$230	\$0	\$0	\$0
TOTAL LABOR	\$1,670									
EXPENSES										
Travel	\$0									
Food	\$0									
Lodging	\$0									
Auto	\$0									
Parking	\$0									
Reproduction	\$0									
Delivery	\$0									
TOTAL EXPENSES	\$0									
TOTAL FEE	\$1,670									

September 23, 2016

RSA Engineering, Inc.
670 W. Fireweed Lane, Suite 200
Anchorage, Alaska 99503

Attn: Mr. Brian Pekar, P.E.

**RE: ENGINEERING SUPPORT SERVICES FOR HERMON HUTCHENS
ELEMENTARY SCHOOL UNDERGROUND STORAGE TANK REMOVAL,
1009 WEST KLUTINA STREET, VALDEZ, ALASKA**

We are pleased to submit our proposal and estimated costs for providing engineering services for the removal of underground storage tanks (USTs) at the Hermon Hutchens Elementary School (HHES) located at 1009 West Klutina Street in Valdez, Alaska. We understand the engineering services requested include preparing bid specifications; environmental consultation; and UST closure assessment.

Based on our email correspondence with you, two USTs and associated piping on the HHES campus will be removed and replaced. A 15,000-gallon UST services the generator and boilers of the elementary school and a 1,000-gallon UST services the boilers for the Administration Building. According to the City of Valdez (City), neither UST is currently regulated by the Alaska Department of Environmental Conservation (ADEC). We understand approximately 3 to 4 inches of water were recently measured at the bottom of the 15,000-gallon UST. The source of the water in the tank is not known.

SCOPE OF WORK

Shannon & Wilson's responsibilities for this project include preparing 65% and 100% bid specification documents; providing environmental consultation with the tank removal and replacement contractor (Contractor) during the tank replacement project; and conducting UST closure assessment including coordination with the ADEC. We understand the Contractor will be responsible for performing the tank removal operations, including removal of product, inerting of tank and piping, disposal of the tank and piping, and capping and filling of piping left in place under direct contract to the City.

Based on the information you have provided, we believe the following proposed three task work effort is consistent with what is being requested and the local standard of practice.

Task 1 - Preparation of Bid Specifications

The purpose of this task is to develop the appropriate bid specification documents pertaining to removal, disposal, and closure of the two USTs so that the UST removal work can be put out to competitive bid. We understand all other sections of the bid documents will be provided by RSA Engineering with our bid documents incorporated into the bid specification package for the fuel

tank replacement project. We will make the bid documents pertaining to removal, disposal, and closure of the two USTs complete, however, such that they may be used as a separate stand-alone specification section, if needed. The bid documents we develop for this tank removal and replacement project will cover the following items:

- Minimum Contractor qualifications
- Available information regarding existing conditions at the tank such as tank size and location, piping details, existing utilities, tank anchorage, existing pavements, products stored in the tank, etc.
- Emptying, cleaning, and disposal of tank contents
- Tank purging
- Pavement and walkway removal, if needed
- Removal and disposal of the tank and associated equipment
- Handling of contaminated soils
- Criteria for excavation limits
- Backfilling
- Pavement and walkway repair, if needed
- Bid sheet with bid items and estimated quantities.

The work described by the bid documents will not include the construction monitoring, confirmation sampling, and documentation aspects of the UST removal process because these services will be provided by Shannon & Wilson as discussed in Task 3. The bid documents will be site specific and will refer to documents such as API Recommended Practice 1604 and the Alaska Department of Environmental Conservation regulations for "boilerplate" requirements, where appropriate. We will work with you to incorporate specific bid requirements of the City and respond to questions during the bidding process.

Task 2 – Environmental Consultation During Construction

Shannon & Wilson will provide environmental consultation to answer questions that may arise during construction of the fuel replacement system. For planning purposes, we have assumed up to 8 hours of a Senior Environmental Engineer's time to respond to questions, participate in teleconference meetings, and/or coordinate with the City, RSA Engineering, the Contractor, and/or the ADEC.

Task 3 – UST Closure Assessment

Shannon & Wilson will provide UST closure assessment for the two USTs, if requested. Although the tanks are not regulated, work for the UST removal assessments will be performed in accordance with the requirements of 18 Alaska Administrative Code (AAC) 78. In addition, Shannon & Wilson will provide an ADEC "Qualified Environmental Professional" to monitor the excavation activities, observe the tank removal activities, and collect field screening and analytical soil samples. A Notice of Tank Closure will, however, not be required.

Task 3a - Excavation Monitoring and Sampling

The Contractor will be responsible for requesting utility locates from the local utility locate center. It is the responsibility of the Contractor to empty and inert the tank prior to removal.

Field screening samples will be collected by Shannon & Wilson from the base and sidewalls of the UST excavation, beneath the associated piping, and the stockpile. If groundwater is encountered, field screening samples will be collected within the first 6 inches of the vadose zone above the water table next to the ends of the tank. Analytical samples will be collected from the UST excavation and the stockpiled soil based on the field screening results. Analytical soil samples will be collected in accordance with the requirements in 18 AAC 78 and the ADEC's UST Procedures Manual. The samples will be submitted to SGS North America Inc. (SGS) using chain-of-custody procedures. Based on the estimated dimensions of the 15,000-gallon tank, four analytical samples from the limits of the tank excavation, four stockpile samples, one piping trench sample, and one duplicate will be collected. We have also included costs to collect one duplicate sample. For the 1,000-gallon tank, two analytical samples from the tank excavation, two stockpile samples, one piping trench sample, and one duplicate will be collected. Additional analytical samples may need to be collected and analyzed depending on site conditions encountered during the closure assessment.

The project samples collected from the excavation, piping trench and stockpile will be analyzed for gasoline range organics (GRO) by AK 101; diesel range organics (DRO) by AK 102; and benzene, toluene, ethylbenzene, and xylenes (BTEX) by Environmental Protection Agency (EPA) Method 8021B. The excavation and stockpile sample with the highest PID screening results from each UST, and the duplicate samples, will also be analyzed for polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270D SIM. For quality control purposes, one field blank and one trip blank will be tested for GRO and BTEX. The samples will be tested on a standard 10 business day turnaround basis.

UST Closure Report

Following the UST removal activities, we will prepare a report documenting the tank closure activities in accordance with the requirements of 18 AAC 78. The report will include a description of field observations and procedures, a scaled site plan, photographs taken during field activities, and laboratory analytical results. Chain-of-custody forms, the laboratory reports, and completed ADEC laboratory data review checklists will be presented as attachments to the summary report. The report and opinions presented will be based solely upon the services described herein and will not be based on tasks or procedures beyond the scope of the described services.

Attn: Mr. Brian Pekar
RSA Engineering, Inc.
September 23, 2016
Page 4

SHANNON & WILSON, INC.

The information produced during this UST assessment project may by itself be sufficient to clean up the site to conform to the ADEC cleanup guidelines. Follow-up services may be necessary to refine the boundaries of soil or any groundwater contamination.

SCHEDULE

Preparation of the bid specifications and engineer's cost estimate for the UST removal can be completed approximately 3 to 4 weeks following authorization to proceed. We understand the remaining work efforts will be conducted following the planned competitive bidding for construction services. We can provide you with a detailed schedule for these services following selection of the Contractor.

COST ESTIMATE

Based on the assumption that the soils around the tank are "clean" and that the selected Contractor will have no difficulties in digging the excavation and removing the tank from the ground, we are prepared to undertake the work described above on a time and materials basis. The total cost for the above described work, which we agree not to exceed without your prior authorization, is shown on the attached Summary Cost Estimate. These costs include all work through submittal of our UST Closure Report. Our costs do not include the Contractor costs for removal and disposal of the USTs; sampling, testing and disposal costs for contaminated water, product, or sludge removed from the tank or excavation; disposal of contaminated soils; replacement of the fuel systems and other site restoration activities; or any quality control testing for replacement of backfill, asphalt or concrete materials.

Note that the number of characterization samples recommended in the ADEC's March 2016 Sampling Guidance is greater than the number of samples required in 18 AAC 78 and the UST Procedures Manual, especially for the excavation sidewalls. Our cost estimate is based on the sampling requirements in 18 AAC 78 and UST Procedures Manual. Access to and from Valdez can be delayed due to inclement weather conditions such as fog or high winds. Weather contingency costs for additional days and overnight stays in the event adverse weather conditions are encountered will be incurred at standard hourly rates.

We are prepared to discuss our findings with you informally as they are developed and to make adjustments to best accommodate your needs. The terms and conditions for our services are in accordance with the attached Agreement for Professional Services. We are also including "Important Information About Your Environmental Site Evaluation/Assessment Proposal".

Attn: Mr. Brian Pekar
RSA Engineering, Inc.
September 23, 2016
Page 5

SHANNON & WILSON, INC.

Please sign in the space provided and return a copy of this letter, which will serve as our agreement and authorization to proceed. If you have any questions or comments, or wish to revise the scope of our services, please contact the undersigned or Stafford Glashan. We appreciate this opportunity to be of service and look forward to working with you on this project.

Sincerely,

SHANNON & WILSON, INC.

LeeAnne Osgood, P.E.
Associate

Encl: Summary Cost Estimate
Standard General Terms and Conditions
Important Information About Your Geotechnical/Environmental Proposal

ACCEPTANCE

I accept the above conditions and authorize the UST Closure Assessment engineering work to proceed.

By: _____
Signature

Date: _____

Printed Name & Title: _____

SUMMARY COST ESTIMATE**UST CLOSURE ASSESSMENT****COSTS**

Task 1 - Preparation of Bid Specifications

Shannon & Wilson

Vice President	4	hrs.	@	\$210	/hr.	=	\$840
Senior Environmental Engineer	48	hrs.	@	\$140	/hr.	=	\$6,720
Clerical	4	hrs.	@	\$55	/hr.	=	\$220
S&W Expenses (Reproduction/Phone/Fax)					lump sum	=	\$50

\$7,830

Task 2 - Environmental Consultation During Construction

Shannon & Wilson

Senior Environmental Engineer	8	hrs.	@	\$140	/hr.	=	\$1,120
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\$1,120

Task 3 - UST Closure Assessment

\$12,616

*Task 3a - Excavation Monitoring and Sampling**(Assumes UST removal assessment field activities completed in two-10 hour days)***Shannon & Wilson**

Senior Environmental Engineer	2	hrs.	@	\$140	/hr.	=	\$280
Professional IV	30	hrs.	@	\$100	/hr.	=	\$3,000
Mobilization/Coordination	4						
Travel	6						
Field work	20						
Airfare - Anchorage to Valdez	1	RT	@	\$550	ea.	=	\$550
Shipping - Anchorage to Valdez					lump sum	=	\$200
Per Diem	3	days	@	\$60	/day	=	\$180
Lodging	2	nights	@	\$150	/night	=	\$300
Vehicle rental and fuel	3	days	@	\$150	/day	=	\$450
S&W Expenses (Sampling Equipment, etc.)	2	days	@	\$100	/day	=	\$200

SGS North America

GRO/BTEX - AK 101/EPA 8021B	16	samples	@	\$81	ea.	=	\$1,288
DRO - AK 102	16	samples	@	\$75	ea.	=	\$1,196
PAHs - EPA 8270D SIM	6	samples	@	\$219	ea.	=	\$1,311
Field Blank - GRO/BTEX	1	sample	@	\$81	ea.	=	\$81
Trip Blank - GRO/BTEX	1	sample	@	\$40	ea.	=	\$40

*Task 3b - UST Closure Report***Shannon & Wilson**

Vice President	2	hrs.	@	\$210	/hr.	=	\$420
Senior Environmental Engineer	4	hrs.	@	\$140	/hr.	=	\$560
Professional IV	24	hrs.	@	\$100	/hr.	=	\$2,400
Clerical	2	hrs.	@	\$55	/hr.	=	\$110
S&W Expenses (Reproduction/Phone/Fax)					lump sum	=	\$50

TOTAL: \$21,566



Attachment to and part of our Proposal: 32-2-15164
Date: September 2016
To: RSA Engineering, Inc.
Re: Hermon Hutchens Elementary School, Valdez, Alaska

STANDARD GENERAL TERMS AND CONDITIONS

ARTICLE 1 – SERVICES OF SHANNON & WILSON

Shannon & Wilson’s scope of work (“Services”) shall be limited to those Services expressly set forth in its Proposal and is subject to the terms and conditions set forth herein.

Shannon & Wilson shall procure and maintain all business and professional licenses and registrations necessary to provide its Services. Upon Client’s request (and for additional Compensation, if not already included in Shannon & Wilson’s Proposal), Shannon & Wilson shall assist Client in attempting to obtain, or on behalf of Client and in Client’s name attempt to obtain, those permits and approvals required for the project for which Shannon & Wilson’s Services are being rendered.

Client acknowledges, depending on field conditions encountered and subsurface conditions discovered, the number and location of borings, the number and type of field and laboratory tests, and other similar items, as deemed necessary by Shannon & Wilson in the exercise of due care, may need to be increased or decreased; if such modifications are approved by Client, Shannon & Wilson’s Compensation and Schedule shall be equitably adjusted.

If conditions actually encountered at the project site differ materially from those represented by Client and/or shown or indicated in the contract documents, or are of an unusual nature which materially differ from those ordinarily encountered and generally recognized as inherent for the locality and character of the Services provided for in Shannon & Wilson’s scope of Services, Shannon & Wilson’s Compensation and Schedule shall be equitably adjusted.

Without increasing the Services, compensation (“Compensation”), or schedule (“Schedule”) contained in Shannon & Wilson’s Proposal, Shannon & Wilson may employ such subcontractors as Shannon & Wilson deems necessary to assist in furnishing its Services.

If Shannon & Wilson’s scope of Services is increased or decreased by Client, Shannon & Wilson’s Compensation and Schedule shall be equitably adjusted.

ARTICLE 2 – TIMES FOR RENDERING SERVICES

Shannon & Wilson shall perform its Services in accordance with the Schedule set forth in its Proposal.

If Shannon & Wilson’s Proposal sets forth specific periods of time for rendering Services, or specific dates by which Services are to be completed, and such periods of time or dates are extended or delayed through no fault of Shannon & Wilson, Shannon & Wilson’s Compensation and Schedule shall be equitably adjusted.

If Shannon & Wilson’s Schedule is accelerated by Client, Shannon & Wilson’s Compensation shall be equitably adjusted.

ARTICLE 3 – PAYMENTS TO SHANNON & WILSON

Invoices shall be prepared in accordance with Shannon & Wilson’s standard invoicing practices and shall be submitted to Client by Shannon & Wilson monthly. The amount billed in each invoice shall be calculated as set forth in Shannon & Wilson’s Proposal.

Unless Shannon & Wilson’s Proposal contains a fixed lump-sum Compensation, Shannon & Wilson’s actual total Compensation may be more or less than the estimate contained in its Proposal. Shannon & Wilson shall not exceed the estimate contained in its Proposal by more than ten percent (10%) without the prior written consent of Client; provided however, unless the Client authorizes additional funds in excess of the estimate contained in Shannon & Wilson’s Proposal, Shannon & Wilson shall have no obligation to continue Services on the project. Unless negotiated separately, Shannon & Wilson will include a fifteen percent (15%) fee on all subcontract and expenses.

Invoices are due and payable within 30 days of receipt. If Client fails to pay Shannon & Wilson’s invoice within 30 days after receipt, the amounts due Shannon & Wilson shall accrue interest at the rate of one and one-half percent (1.5%) per month (or the maximum rate of interest permitted by law, if less) after the 30th day. In addition, Shannon & Wilson may, after giving seven (7) days written notice to Client, suspend all Services under this Agreement until Shannon & Wilson has been paid in full.

If Client disputes Shannon & Wilson’s invoice, only the disputed portion(s) may be withheld from payment, and the undisputed portion(s) shall be paid.

Records of Shannon & Wilson’s direct and indirect costs and expenses pertinent to its Compensation under this Agreement shall be kept in accordance with generally accepted accounting practices and applicable federal, state, or local laws and regulations. Upon request, such records shall be made available to Client for inspection on Shannon & Wilson’s premises and copies provided to Client at cost.

ARTICLE 4 – CLIENT’S RESPONSIBILITIES

Client shall grant or obtain free access to the project site for all equipment and personnel necessary for Shannon & Wilson to perform its Services.

ARTICLE 5 – STANDARD OF CARE / ABSENCE OF WARRANTIES / NO RESPONSIBILITY FOR SITE SAFETY OR CONTRACTOR’S PERFORMANCE

Standard of Care

The standard of care for all professional Services performed or furnished by Shannon & Wilson under this Agreement shall be the skill and care ordinarily exercised by other members of Shannon & Wilson’s profession, providing the same or similar services, under the same or similar circumstances, at the same

time and locality as the Services were provided by Shannon & Wilson. The installation, construction, alteration, or repair of any object or structure by Shannon & Wilson shall be performed in a good and workmanlike manner in accordance with general industry standards, and conform to this Agreement.

Subsurface explorations and testing identify actual subsurface conditions only at those points where samples are taken, at the time they are taken. Actual conditions at other locations of the project site, including those inferred to exist between the sample points, may differ significantly from conditions that exist at the sampling locations. The passage of time or intervening causes may cause the actual conditions at the sampling locations to change as well.

Interpretations and recommendations made by Shannon & Wilson shall be based solely upon information available to Shannon & Wilson at the time the interpretations and recommendations are made.

Shannon & Wilson shall be responsible for the technical accuracy of its Services, data, interpretations, and recommendations resulting therefrom, and Client shall not be responsible for discovering deficiencies therein. Shannon & Wilson shall correct any substandard Services without additional Compensation, except to the extent that such inaccuracies are directly attributable to deficiencies in Client-furnished information.

Warranties

Shannon & Wilson makes no guarantees or warranties, express or implied, under this Agreement or otherwise, about Shannon & Wilson's professional Services.

Shannon & Wilson warrants for one (1) year from substantial completion of the Services, all goods delivered hereunder shall be new and free from defects in material or workmanship, and shall conform to the specifications, drawings, or sample(s) specified or furnished, if any, and shall be merchantable and fit for their intended purpose(s). Shannon & Wilson warrants that Shannon & Wilson has good and marketable title to all goods delivered hereunder, and that all goods delivered hereunder shall be free and clear of all claims of superior title, liens, and encumbrances of any kind.

Client-Furnished Documents

Shannon & Wilson may use requirements, programs, instructions, reports, data, and information furnished by Client to Shannon & Wilson in performing its Services under this Agreement. Shannon & Wilson may rely on the accuracy and completeness of requirements, programs, instructions, reports, data, and other information furnished by Client to Shannon & Wilson. Client shall, only to the fullest extent permitted by law, waive any claims against Shannon & Wilson and its subcontractors, and indemnify and hold Shannon & Wilson and its subcontractors harmless from any claims, liability, or expenses (including reasonable attorneys' fees and costs) arising from Shannon & Wilson's reliance on Client-furnished information, except to the extent of Shannon & Wilson's and its subcontractor's negligent or wrongful acts, errors, omissions, or breach of contract.

Site Damage

Shannon & Wilson shall take reasonable precautions to minimize damage to the project site, but it is understood by Client that, in the normal course of Shannon & Wilson's Services, some project site damage may occur, and the correction of such damage is not part of Shannon & Wilson Services unless so stated in Shannon & Wilson's Proposal. Client shall, only to the fullest extent permitted by law, waive any claims against Shannon & Wilson and its subcontractors, and indemnify and hold Shannon & Wilson and its subcontractors harmless from any claims, liability, or expenses (including reasonable attorneys' fees and costs) arising from any project site damage caused by Shannon & Wilson, except to the extent of Shannon & Wilson's and its subcontractor's negligent or wrongful acts, errors, omissions, or breach of contract.

Buried Structures

If there are any buried structures and/or utilities on the project site where subsurface explorations are to take place, Client shall provide Shannon & Wilson with a plan showing their existing locations. Shannon & Wilson shall contact the one-number utility locator service to request that they identify any utilities. Shannon & Wilson shall use reasonable care and diligence to avoid contact with buried structures and/or utilities as shown. Shannon & Wilson shall not be liable for any loss or damage to buried structures and/or utilities resulting from inaccuracy of the plans, or lack of plans, or errors by the locator service relating to the location of buried structures and/or utilities. Client shall, only to the fullest extent permitted by law, waive any claims against Shannon & Wilson and its subcontractors, and indemnify, and hold Shannon & Wilson and its subcontractors harmless from any claims, liability, or expenses (including reasonable attorneys' fees and costs) arising from damage to buried structures and/or utilities caused by Shannon & Wilson's sampling, except to the extent of Shannon & Wilson's and its subcontractor's negligent or wrongful acts, errors, omissions, or breach of contract.

Aquifer Cross-Contamination

Despite the use of due care, unavoidable contamination of soil or groundwater may occur during subsurface exploration when drilling or sampling tools are advanced through a contaminated area, linking it to an aquifer, underground stream, or other hydrous body not previously contaminated and capable of spreading contaminants off the project site. Because Shannon & Wilson is powerless to totally eliminate this risk despite use of due care, and because sampling is an essential element of Shannon & Wilson's Services, Client shall, only to the fullest extent permitted by law, waive any claims against Shannon & Wilson and its subcontractors, and indemnify and hold Shannon & Wilson and its subcontractors harmless from any claims, liability, or expenses (including reasonable attorneys' fees and costs) arising from cross-contamination caused by Shannon & Wilson's sampling, except to the extent of Shannon & Wilson's and its subcontractor's negligent or wrongful acts, errors, omissions, or breach of contract.

Opinions of Probable Construction Costs

If opinions of probable construction costs are included in Shannon & Wilson's Proposal, Shannon & Wilson's opinions of probable construction costs shall be made on the basis of its experience and qualifications and represent its judgment as a professional generally familiar with the industry. Opinions of probable construction costs are based, in part, on approximate quantity evaluations that are not accurate enough to permit contractors to prepare bids. Further, since Shannon & Wilson has no control over: the cost of labor, materials, equipment, or work furnished by others; the contractor's actual or proposed construction methods or methods of determining prices; competitive bidding; or market conditions, Shannon & Wilson cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of the components of probable construction cost prepared by Shannon & Wilson. If Client or any contractor wishes greater assurance as to probable construction cost, Client or contractor shall employ an independent cost estimator.

Review of Contractor's Shop Drawings and Submittals

If review of a contractor's shop drawings and submittals are included in Shannon & Wilson's Proposal, Shannon & Wilson shall review and take appropriate action on the contractor's submittals, such as shop drawings, product data, samples, and other data, which the contractor is required to submit, but solely for the limited purpose of checking for general overall conformance with Shannon & Wilson's design concept. This review shall not include a review of the accuracy or completeness of details, such as quantities; dimensions; weights or gauges; fabrication processes; construction means, methods, sequences or procedures; coordination of the work with other trades; or construction safety precautions, all of which are the sole responsibility of the contractor. Shannon & Wilson's review shall be conducted with reasonable promptness while allowing sufficient time, in Shannon & Wilson's judgment, to permit adequate review. Review of a specific item shall not be construed to mean that Shannon & Wilson has reviewed the entire assembly of which the item is a component. Shannon & Wilson shall not be responsible for any deviations by the contractor in the shop drawings and submittals from the construction documents, which are not brought to the attention of Shannon & Wilson by the contractor in writing.

Construction Observation

If construction observation is included in Shannon & Wilson's Proposal, Shannon & Wilson shall visit the project site at intervals Shannon & Wilson deems appropriate, or as otherwise agreed to in writing by Client and Shannon & Wilson, in order to observe and keep Client generally informed of the progress and quality of the work. Such visits and observations are not intended to be an exhaustive check or a detailed inspection of any contractor's work, but rather are to allow Shannon & Wilson, as a professional, to become generally familiar with the work in progress in order to determine, in general, whether the work is progressing in a manner indicating that the work, when fully completed, will be in accordance with Shannon & Wilson's general overall design concept. Shannon & Wilson's authority shall be limited to observing, making technical comments regarding general overall compliance with Shannon & Wilson's design concept, and rejecting any work which it becomes aware of that does not comply with Shannon & Wilson's general overall design concept. Shannon & Wilson's acceptance of any non-conforming work containing latent defects or failure to reject any non-conforming Services not inspected by Shannon & Wilson shall not impose any liability on Shannon & Wilson or relieve any contractor from complying with their contract documents. All construction contractors shall be solely responsible for construction site safety, the quality of their work, and adherence to their contract documents. Shannon & Wilson shall have no authority to direct any contractor's actions or stop any contractor's work.

If Shannon & Wilson is not retained to provide construction observation of the implementation of its design recommendations, Client shall, only to the fullest extent permitted by law, waive any claims against Shannon & Wilson, and indemnify and hold Shannon & Wilson harmless from any claims, liability, or expenses (including reasonable attorneys' fees and costs) arising from the implementation of Shannon & Wilson's design recommendations, except to the extent of Shannon & Wilson's and its subcontractor's negligent or wrongful acts, errors, omissions, or breach of contract.

No Responsibility for Site Safety

Except for its own subcontractors and employees, Shannon & Wilson shall not: supervise, direct, have control over, or authority to stop any contractor's work; have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected by any contractor; be responsible for safety precautions and programs incident to any contractor's work; or be responsible for any failure of any contractor to comply with laws and regulations applicable to the contractor, all of which are the sole responsibility of the construction contractors. This requirement shall apply continuously, regardless of time or place, and shall in no way be altered because a representative of Shannon & Wilson is present at the project site performing his/her duties. Notwithstanding anything to the contrary, Shannon & Wilson shall never be deemed to have assumed responsibility for the project's site safety by either contract or conduct. No act or direction by Shannon & Wilson shall be deemed the exercise of supervision or control of any contractor's employees or the direction of any contractor's performance. Any direction provided by Shannon & Wilson shall be deemed solely to ensure the contractor's general overall compliance with Shannon & Wilson's design concept.

No Responsibility for Contractor's Performance

Except for its own subcontractors and employees, Shannon & Wilson shall not be responsible for safety precautions, the quality of any contractor's work, or any contractor's failure to furnish or perform their work in accordance with their contract documents.

Except Shannon & Wilson's own employees and its subcontractors, Shannon & Wilson shall not: be responsible for the acts or omissions of any contractor, subcontractor or supplier, or other persons at the project site, or otherwise furnishing or performing any work; or for any decision based on interpretations or clarifications of Shannon & Wilson's design concept given without the consultation and concurrence of Shannon & Wilson.

Approval of Contractor's Applications for Payment

If approval of a contractor's applications for payment are included in Shannon & Wilson's Proposal, Shannon & Wilson shall review the amounts due the contractor and issue a recommendation about payment to Client. Shannon & Wilson's review and approval shall be limited to an evaluation of the general progress of the work and the information contained in the contractor's application for payment and a representation by Shannon & Wilson that to the best of the Shannon & Wilson's knowledge, the contractor has performed work for which payment has been requested, subject to further testing and inspection upon substantial completion. The issuance of a recommendation for payment shall not be construed as a representation that: Shannon & Wilson has made an exhaustive check or a detailed or continuous inspection check of the quality or quantity of the contractor's work; approved the contractor's means, methods, sequences, procedures, or safety precautions; or that contractor's subcontractors, laborers, and suppliers have been paid.

ARTICLE 6 – CONFIDENTIALITY AND USE OF DOCUMENTS**Confidentiality**

Shannon & Wilson agrees to keep confidential and to not disclose to any person or entity (other than Shannon & Wilson's employees and subcontractors), without the prior consent of Client, all information furnished to Shannon & Wilson by Client or learned by Shannon & Wilson as a result of its Services on the project; provided however, that these provisions shall not apply to information that: is in the public domain through no fault of Shannon & Wilson; was previously known to Shannon & Wilson; or was independently acquired by Shannon & Wilson from third-parties who were under no obligation to Client to keep said information confidential. This paragraph shall not be construed to in any way restrict Shannon & Wilson from making any disclosures required by law. Client agrees that Shannon & Wilson may use and publish Client's name and a general description of Shannon & Wilson's Services with respect to the project in describing Shannon & Wilson's experience and qualifications to others.

Copyrights and Patents – Shannon & Wilson shall indemnify, hold harmless, and defend Client from any and all actions, damages, demands, expenses (including reasonable attorneys' fees and costs), losses, and liabilities arising out of any claims that any goods or Services furnished by Shannon & Wilson infringe any patent, trademark, trade name, or copyright.

Use of Documents

All documents prepared by Shannon & Wilson are instruments of service with respect to the project, and Shannon & Wilson shall retain a copyrighted ownership and property interest therein (including the right of reuse) whether or not the project is completed.

Shannon & Wilson grants to Client a non-exclusive, irrevocable, unlimited, royalty-free license to use any documents prepared by Shannon & Wilson for Client. Client may make and retain copies of such documents for their information and use. Such documents are not intended or represented to be suitable for reuse by Client, or others, after the passage of time, on extensions of the project, or on any other project. Any such reuse without written verification or adaptation by Shannon & Wilson, as appropriate for the specific purpose intended, shall be at Client's sole risk, and Client shall, only to the fullest extent permitted by law, waive any claims against Shannon & Wilson and its subcontractors, and indemnify and hold Shannon & Wilson and its subcontractors harmless from any claims, liability, or expenses (including reasonable attorneys' fees and costs) arising from such reuse, except to the extent of Shannon & Wilson's and its subcontractor's negligent or wrongful acts, errors, omissions, or breach of contract. Any verification or adaptation of the documents for extensions of the project or for any other project by Shannon & Wilson shall entitle Shannon & Wilson to additional Compensation to be agreed upon by Client and Shannon & Wilson.

Copies of documents that may be relied upon by Client are limited to the printed copies (also known as hard copies) that are signed or sealed by Shannon & Wilson. Text, data, or graphics files in electronic media format are furnished solely for the convenience of Client. Any conclusion or information obtained or derived from such electronic files shall be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

Because data stored in electronic media can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving an electronic file agrees that it shall perform acceptance tests or procedures within 60 days after its receipt, after which, unless notice of any errors are given in writing to the delivering party, the receiving party shall be deemed to have accepted the data thus transferred. Any errors reported within the 60-day acceptance period shall be corrected by the party delivering the electronic files at their sole expense. Shannon & Wilson shall not be responsible for maintaining documents stored in electronic media format after acceptance by Client.

When transferring documents in electronic media format, neither Client nor Shannon & Wilson makes any representations as to long-term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used for the document's creation.

ARTICLE 7 - INSURANCE

Shannon & Wilson shall purchase and maintain during the term of this Agreement, the following insurance coverage at its sole expense:

Commercial General Liability - \$1,000,000 each occurrence/\$2,000,000 annual aggregate Bodily Injury/Property Damage Combined Single Limit including Blanket Contractual Liability, Broad Form Products and Completed Operations, Explosion/Collapse/Underground (XCU) Exposures, and Washington Stop Gap coverage.

Auto Liability - \$1,000,000 Bodily Injury/Property Damage Combined Single Limit including Owned, Hired, and Non-Owned Liability coverage.

Umbrella Liability - \$5,000,000 Bodily Injury/Property Damage combined Single Limit in excess of Commercial General Liability, Auto Liability, and Employers' Liability.

Workers' Compensation - Statutory in monopolistic states and \$500,000 per accident/\$500,000 per disease/\$500,000 disease policy aggregate Employers' Liability in non-monopolistic including if applicable, U.S. Longshore & Harbor Workers coverage.

Professional Liability - \$1,000,000 per claims/\$1,000,000 annual aggregate for professional errors and omissions including Pollution Liability coverage.

If requested in writing by Client, Shannon & Wilson shall name Client as an additional insured on its Commercial General Liability policy.

If requested in writing by Client, Shannon & Wilson shall deliver to Client certificates of insurance evidencing such coverage. Such certificates shall be furnished before commencement of Shannon & Wilson's Services.

Client shall cause Shannon & Wilson and its subcontractors to be listed as additional insureds on any Commercial General Liability insurance carried by Client that is applicable to the project.

Client shall require the project owner to require the general contractor on the project to purchase and maintain Commercial General Liability, Builder's Risk, Automobile Liability, Workers compensation, and Employers Liability insurance, with limits no less than set forth above, and to cause Shannon & Wilson and its subcontractors to be listed as additional insureds on the Commercial General Liability insurance. Client shall require the project owner include the substance of this paragraph in the prime construction contract.

All insurance policies required under this Article shall contain a waiver of subrogation.

ARTICLE 8 - HAZARDOUS ENVIRONMENTAL CONDITIONS

Disclosure of the Existence of Hazardous Environmental Conditions

Client has disclosed to Shannon & Wilson all data known to Client concerning known or suspected hazardous environmental conditions, including but not limited to, the existence of all asbestos, PCBs, petroleum, hazardous waste, or radioactive material, if any, located at or near the project site, including its type, quantity, and location, or has represented to Shannon & Wilson that, to the best of Client's knowledge, no hazardous environmental conditions exist at or near the project site.

If any hazardous environmental condition is encountered or believed to exist, Shannon & Wilson shall notify Client and, to the extent required by applicable laws and regulations, the project site owner, and appropriate governmental officials.

Disposal of Non-Hazardous Samples and Hazardous or Toxic Substances

All substances on, in, or under the project site, or obtained from the project site as samples or as byproducts (e.g., drill cuttings and fluids) of the sampling process are the project site owner's property. Shannon & Wilson shall preserve such samples for forty-five (45) calendar days after Shannon & Wilson's issuance to Client of the final instrument of service that relates to the data obtained from them. Shannon & Wilson shall dispose of all non-hazardous samples and sampling process byproducts in accordance with applicable law; provided however, any samples or sampling process byproducts that are, or are believed to be, affected by regulated contaminants shall be packaged by Shannon & Wilson in accordance with applicable law, and turned over to Client or left on the project site. Shannon & Wilson shall not transport, store, treat, dispose of, or arrange for the transportation, storage, treatment, or disposal of, any substances known, believed, or suspected to be affected by regulated contaminants, nor shall Shannon & Wilson subcontract for such activities.

Shannon & Wilson shall, at Client's request (and for additional Compensation, if not already included in Shannon & Wilson's Proposal), help Client or the project site owner identify appropriate alternatives for transportation, storage, treatment, or disposal of such substances, but Shannon & Wilson shall not make any independent determination about the selection of a transportation, storage, treatment, or disposal facility.

Client or the project site owner shall sign all manifests for the transportation, storage, treatment, or disposal of substances affected by regulated contaminants; provided however, notwithstanding any other provisions of this Agreement to the contrary, if Client directs Shannon & Wilson, Shannon & Wilson's employees, or Shannon & Wilson's agents to sign such manifests and/or to hire for Client or the project site owner a contractor to transport, store, treat, or dispose of the contaminated substances, Shannon & Wilson shall do so only as Client's disclosed agent.

Contaminated Equipment and Consumables

Client shall reimburse Shannon & Wilson for the cost of decontaminating field or laboratory equipment that is contaminated by regulated materials encountered at the project site and for the cost of disposal and replacement of contaminated consumables. In some instances, the cost of decontamination may exceed the fair market value of the equipment, were it not contaminated, together with the cost of properly transporting and disposing of the equipment. In

such instances, Shannon & Wilson will notify Client and give Client the option of paying for decontamination or purchasing the equipment at its fair market value immediately prior to contamination. If Client elects to purchase equipment, Client and Shannon & Wilson will enter into a specific agreement for that purpose. Any equipment that cannot be decontaminated shall be considered a consumable.

Client's Liability for Hazardous or Toxic Materials

Except to the extent caused by Shannon & Wilson's and its subcontractor's negligent or wrongful acts, errors, omissions, or breach of contract, and only to the maximum extent permitted by law, Client shall: indemnify and hold harmless Shannon & Wilson, its subcontractors and their partners, officers, directors, employees, and agents; from and against any and all actions (whether sounding in tort, contract (express or implied), warranty (express or implied), statutory liability, strict liability, or otherwise), claims (including, but not limited to, claims for bodily injury, death, property damage (including bodily injury, death, or property damage to Shannon & Wilson's own employees), or arising under CERCLA, MTCA, or similar federal, state, or local environmental laws), costs, damages (including without limitation, economic, non-economic, general, special, incidental, consequential), demands, expenses (including, but not limited to, reasonable attorneys' fees and costs of defense), fines, judgments, liens, liabilities, and penalties of any kind whatsoever; arising from the arrangement for and/or ownership, operation, generation, labeling, transportation, storage, disposal, treatment, release, or threatened release of any hazardous or toxic materials, as defined by CERCLA, MTCA, or similar federal, state, or local environmental laws, on and/or from the project site.

ARTICLE 9 - ALLOCATION OF RISK

Indemnification of Client

To the maximum extent permitted by law, Shannon & Wilson shall: indemnify and hold harmless Client, its appointed and elected officials, partners, officers, directors, employees, and agents; from and against any and all actions (whether sounding in tort, contract (express or implied), warranty (express or implied), statutory liability, strict liability, or otherwise), claims (including, but not limited to, claims for bodily injury, death, property damage, (including bodily injury, death, or property damage to Shannon & Wilson's own employees) or arising under CERCLA, MTCA, or similar federal, state, or local environmental laws), costs, damages (including without limitation, economic, non-economic, general, special, incidental, consequential), demands, expenses (including, but not limited to, reasonable attorneys' fees and costs of defense), fines, judgments, liens, liabilities, and penalties of any kind whatsoever; arising from the negligent or wrongful acts, errors, or omissions, or breach of contract or warranty express or implied, by Shannon & Wilson or any of its subcontractors; but only to the extent of Shannon & Wilson's and its subcontractor's relative degree of fault. In furtherance of these obligations, and only with respect to Client, its appointed and elected officials, partners, officers, directors, employees and agents, Shannon & Wilson waives any immunity it may have or limitation on the amount or type of damages imposed under any industrial insurance, worker's compensation, disability, employee benefit, or similar laws. Shannon & Wilson acknowledges that this waiver of immunity was mutually negotiated.

Limitation on Shannon & Wilson's Liability for Damages

A. Total Liability for Damages Limited to Insurance Proceeds

Notwithstanding any other provisions of this Agreement, and only to the maximum extent permitted by law, the total liability for damages, in the aggregate, under this Agreement of Shannon & Wilson, its subcontractors, and their partners, officers, directors, employees, agents and, or any of them, to Client and/or anyone claiming by, through, or under Client, for any and all actions (whether sounding in tort, contract (express or implied), warranty (express or implied), statutory liability, strict liability, or otherwise), claims (including, but not limited to, claims for bodily injury, death, property damage, (including bodily injury, death, or property damage to Shannon & Wilson's own employees) or arising under CERCLA, MTCA, or similar federal, state, or local environmental laws), costs, damages (including without limitation, economic, non-economic, general, special, incidental, consequential), demands, expenses (including, but not limited to, reasonable attorneys' fees and costs of defense), fines, judgments, liens, liabilities, and penalties of any kind whatsoever, arising out of, resulting from, or in any way related to the project or this Agreement, shall be limited to the insurance proceeds payable on behalf of or to Shannon & Wilson by any insurance policies applicable thereto. If you are unwilling or unable to limit our liability for damages in this manner, we will negotiate this limitation and its associated impact on our approach, Services, Schedule, and Compensation, with you. You must notify us in writing before we commence any of our Services of your intention to negotiate this limitation and its associated impact on our approach, Services, Schedule, and Compensation. Absent your prior written notification to the contrary, we will proceed on the basis that our total liability for damages is limited as set forth above.

B. Professional Liability for Damages Limited to \$50,000 or 10% of Fee

With respect to professional errors or omissions only, notwithstanding any other provisions of this Agreement, and only to the maximum extent permitted by law, the total professional liability for damages, in the aggregate, under this Agreement of Shannon & Wilson, its subcontractors, and their partners, officers, directors, employees, agents, or any of them, to Client and/or anyone claiming by, through, or under Client, for any and all actions (whether sounding in tort, contract (express or implied), warranty (express or implied), statutory liability, strict liability, or otherwise), claims (including, but not limited to, claims for bodily injury, death, property damage (including bodily injury, death, or property damage to Shannon & Wilson's own employees) or arising under CERCLA, MTCA, or similar federal, state, or local environmental laws), costs, damages (including without limitation, economic, non-economic, general, special, incidental, consequential), demands, expenses (including, but not limited to, reasonable attorneys' fees and costs of defense), fines, judgments, liens, liabilities, and penalties of any kind whatsoever, arising out of, resulting from, or in any way related to the professional errors or omissions of Shannon & Wilson, its subcontractors, or their partners, officers, directors, employees, agents or, or any of them, shall be capped in the aggregate total amount of \$50,000.00, or ten percent (10%) of the total Compensation actually paid to Shannon & Wilson under this Agreement, whichever is greater. If you are unwilling or unable to limit our professional liability for damages to these sums, we will negotiate the amount of this limitation and its associated impact on our approach, Services, Schedule, and Compensation, with you. You must notify us in writing before we commence any of our Services of your intention to negotiate the amount of this limitation and its associated impact on our approach, Services, Schedule, and Compensation. Absent your prior written notification to the contrary, we will proceed on the basis that our total professional liability for damages is limited to \$50,000.00 or ten percent (10%) of the total Compensation actually paid to Shannon & Wilson under this Agreement, whichever is greater.

ARTICLE 10 – MISCELLANEOUS

Termination

This Agreement may be terminated without further obligation or liability by either party, with or without cause (for convenience), upon 30 days prior written notice to the other. Shannon & Wilson shall be entitled to Compensation for all Services performed prior to the termination of this Agreement. This Agreement may be terminated by the non-breaching party upon any breach of this Agreement that remains uncured after 10 days notice to the breaching party by the non-breaching party. Upon payment of all amounts due Shannon & Wilson, Client shall be entitled to copies of Shannon & Wilson's files and records pertaining to Services performed prior to the termination of this Agreement.

Successors, Assigns, and Beneficiaries

This Agreement shall be binding upon each party's assigns, successors, executors, administrators, and legal representatives.

Neither Client nor Shannon & Wilson may assign or transfer any rights under or interest in this Agreement without the written consent of the other. No assignment shall release or discharge the assignor from any duty or responsibility under this Agreement.

Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Client or Shannon & Wilson to any third-party. All duties and responsibilities undertaken under this Agreement shall be for the sole and exclusive benefit of Client and Shannon & Wilson. There are no intended third-party beneficiaries. Notwithstanding the foregoing, should a court find a third-party to be a beneficiary of this Agreement, it is the intent of the parties that the judicially created third-party beneficiary be bound by and subject to all of the terms and conditions of this Agreement.

Statutes of Limitation, Notice of Claims, Jurisdiction, Venue, Choice of Law and Alternative Dispute Resolution

Any applicable Statute of Limitation shall be deemed to commence running on the date which the claimant knew, or should have known, of the facts giving rise to their claims, but in no event later than the date of substantial completion of Shannon & Wilson's Services under this Agreement. To the maximum extent permitted by law, as a condition precedent to commencing a judicial proceeding, a party shall give written notice of their claims, including all amounts claimed, and the factual basis for their claims, to the other party within one (1) year of when the claimant knew, or should have known, of the facts giving rise to their claims, but in no event later than one (1) year from the date of substantial completion of Shannon & Wilson's Services under this Agreement. As a condition precedent to commencing a judicial proceeding, a party shall first submit their claims to non-binding mediation through and in accordance with the rules of the American Arbitration Association.

This Agreement shall be construed in accordance with and governed by the laws (except choice and conflict of law provisions) of the state in which the Project is located.

Any judicial action shall be brought in the state in which the Project is located.

Attorneys' Fees

Should any dispute or claims arise out of this Agreement, whether sounding in tort, contract (express or implied), warranty (express or implied), statutory liability, strict liability, or otherwise, the prevailing party shall be entitled to an award of their reasonable attorneys' fees and costs, including upon appeal and in the enforcement of any judgment. Should neither party prevail on all of their claims or receive all of the relief they sought, then the substantially prevailing party shall be awarded their reasonable attorneys' fees and costs, including upon appeal and in the enforcement of any judgment.

Waiver

A waiver of any of the terms and conditions or breaches of this Agreement shall not operate as a subsequent waiver.

Headings

The headings used in this agreement are for general ease of reference only. They have no meaning and are not part of this Agreement.

Integration

This Agreement, together with all attachments hereto, are incorporated by reference into each other, and supercede all prior written and oral discussions, representations, negotiations, and agreements on the subject matter of this Agreement and represent the parties' complete, entire, and final understanding of the subject matter of this Agreement.

Survival

Notwithstanding completion or termination of this Agreement for any reason, all representations, warranties, limitations of liability, and indemnification obligations contained in this Agreement shall survive such completion or termination and remain in full force and effect until fulfilled.

Severability

If any of the terms or conditions of this Agreement are found to be void or unenforceable for any reason, the remainder of this Agreement shall continue in full force and effect, and the court shall attempt to judicially reform the void or unenforceable provisions to the maximum extent possible, consistent with the original intent expressed in the provisions, to render it valid and enforceable. If the court is unable to reform the provisions to render it valid and enforceable, the court shall strike only that portion which is invalid or unenforceable, and this Agreement shall then be construed without reference to the void or unenforceable provisions.



Date: September 2016
To: RSA Engineering, Inc.

IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL/ENVIRONMENTAL PROPOSAL

More construction problems are caused by site subsurface conditions than any other factor. The following suggestions and observations are offered to help you manage your risks.

HAVE REALISTIC EXPECTATIONS.

If you have never before dealt with geotechnical or environmental issues, you should recognize that site exploration identifies actual subsurface conditions at those points where samples are taken, at the time they are taken. The data derived are extrapolated by the consultant, who then applies judgment to render an opinion about overall subsurface conditions; their reaction to construction activity; appropriate design of foundations, slopes, impoundments, recovery wells; and other construction and/or remediation elements. Even under optimal circumstances, actual conditions may differ from those inferred to exist, because no consultant, no matter how qualified, and no subsurface program, no matter how comprehensive, can reveal what is hidden by earth, rock, and time.

DEVELOP THE SUBSURFACE EXPLORATION PLAN WITH CARE.

The nature of subsurface explorations—the types, quantities, and locations of procedures used—in large measure determines the effectiveness of the geotechnical/environmental report and the design based upon it. The more comprehensive a subsurface exploration and testing program, the more information it provides to the consultant, helping to reduce the risk of unanticipated conditions and the attendant risk of costly delays and disputes. Even the cost of subsurface construction may be lowered.

Developing a proper subsurface exploration plan is a basic element of geotechnical/environmental design, which should be accomplished jointly by the consultant and the client (or designated professional representatives). This helps the parties involved recognize mutual concerns and makes the client aware of the technical options available. Clients who develop a subsurface exploration plan without the involvement and concurrence of a consultant may be required to assume responsibility and liability for the plan's adequacy.

READ GENERAL CONDITIONS CAREFULLY.

Most consultants include standard general contract conditions in their proposals. One of the general conditions most commonly employed is to limit the consulting firm's liability. Known as a "risk allocation" or "limitation of liability," this approach helps prevent problems at the beginning and establishes a fair and reasonable framework for handling them, should they arise.

Various other elements of general conditions delineate your consultant's responsibilities. These are used to help eliminate confusion and misunderstandings, thereby helping all parties recognize who is responsible for different tasks. In all cases, read your consultant's general conditions carefully and ask any questions you may have.

HAVE YOUR CONSULTANT WORK WITH OTHER DESIGN PROFESSIONALS.

Costly problems can occur when other design professionals develop their plans based on misinterpretations of a consultant's report. To help avoid misinterpretations, retain your consultant to work with other project design professionals who are affected by the geotechnical/environmental report. This allows a consultant to explain report implications to design professionals affected by them, and to review their plans and specifications so that issues can be dealt with adequately. Although some other design professionals may be familiar with geotechnical/environmental concerns, none knows as much about them as a competent consultant.

OBTAIN CONSTRUCTION MONITORING SERVICES.

Most experienced clients also retain their consultant to serve during the construction phase of their projects. Involvement during the construction phase is particularly important because this permits the consultant to be on hand quickly to evaluate unanticipated conditions, to conduct additional tests if required, and when necessary, to recommend alternative solutions to problems. The consultant can also monitor the geotechnical/environmental work performed by contractors. It is essential to recognize that the construction recommendations included in a report are preliminary, because they must be based on the assumption that conditions revealed through selective exploratory sampling are indicative of actual conditions throughout a site.

Because actual subsurface conditions can be discerned only during earthwork and/or drilling, design consultants need to observe those conditions in order to provide their recommendations. Only the consultant who prepares the report is fully familiar with the background information needed to determine whether or not the report's recommendations are valid. The consultant submitting the report cannot assume responsibility or liability for the adequacy of preliminary recommendations if another party is retained to observe construction.

REALIZE THAT ENVIRONMENTAL ISSUES MAY NOT HAVE BEEN ADDRESSED.

If you have requested only a geotechnical engineering proposal, it will not include services needed to evaluate the likelihood of contamination by hazardous materials or other pollutants. Given the liabilities involved, it is prudent practice to always have a site reviewed from an environmental viewpoint. A consultant cannot be responsible for failing to detect contaminants when the services needed to perform that function are not being provided.

ONE OF THE OBLIGATIONS OF YOUR CONSULTANT IS TO PROTECT THE SAFETY, PROPERTY, AND WELFARE OF THE PUBLIC.

A geotechnical/environmental investigation will sometimes disclose the existence of conditions that may endanger the safety, health, property, or welfare of the public. Your consultant may be obligated under rules of professional conduct, or statutory or common law, to notify you and others of these conditions.

RELY ON YOUR CONSULTANT FOR ADDITIONAL ASSISTANCE.

Your consulting firm is familiar with several techniques and approaches that can be used to help reduce risk exposure for all parties to a construction project, from design through construction. Ask your consultant, not only about geotechnical and environmental issues, but others as well, to learn about approaches that may be of genuine benefit.

The preceding paragraphs are based on information provided by the
ASFE/Association of Engineering Firms Practicing in the Geosciences, Silver Spring, Maryland