

Attachment A

TASK ORDER NO. 380.16.100
TO
MASTER AGREEMENT FOR PROFESSIONAL SERVICES

OWNER: CITY OF MOAB

Effective Date of Master Agreement: April 22, 2014

THIS TASK ORDER NO. 380.16.100 ("this TASK ORDER") to the CITY OF MOAB MASTER AGREEMENT FOR PROFESSIONAL SERVICES (AGREEMENT) is made and entered into as of the 11th day of April, 2022 by and between OWNER and HANSEN, ALLEN & LUCE, INC., a Utah Corporation (herein called ENGINEER) who agree as follows:

1. **PROJECT.** The PROJECT associated with this TASK ORDER is described as follows:
Pack Creek NRCS Emergency Watershed Protection Project
2. **PROJECT SITE.** The PROJECT SITE is located as follows: Moab, Utah.
3. **SCOPE OF SERVICES.** The SCOPE OF SERVICES and deliverables associated with this TASK ORDER are attached hereto as Exhibit A.
4. **FEES.** OWNER shall reimburse for services provided under this TASK ORDER on a time and expense basis not to exceed \$61,000. Payment shall be in accordance with the FEE SCHEDULE attached hereto as Exhibit B and in accordance with the AGREEMENT.
5. **SCHEDULE.** The Tasks 1 through 6 SERVICES associated with this TASK ORDER are anticipated to be completed within 120 days following written authorization from the OWNER to proceed and availability of survey data.
6. **ATTACHMENTS AND EXHIBITS.** Both parties have read and understood all attachments and exhibits referenced in or attached to this TASK and agree that such items are hereby incorporated into and made part of the AGREEMENT.

IN WITNESS WHEREOF, OWNER and ENGINEER have executed this TASK ORDER as of the date first above written.

OWNER: City of Moab

By: _____

Printed Name: _____

Its: _____

ENGINEER:

By:  _____

Printed Name: Benjamin D. Miner

Its: Senior Principal

**SCOPE OF SERVICES
CITY OF MOAB
PACK CREEK NRCS EMERGENCY WATERSHED PROTECTION PROJECT**

BACKGROUND

On July 25, 2021, heavy precipitation fell in the Pack Creek watershed on top of a recent burn event. This carried ash, mud, and debris down Pack Creek where much of it deposited within Moab limits. Broad scale deposition occurred with the flatter-than-canyon slopes within the City. Additionally, debris was carried and deposited at locations along Pack Creek, including near bridges. The high flow velocities damaged and eroded stream banks.

The City of Moab has applied for and been awarded funding from the National Resource Conservation Service's (NRCS's) Emergency Watershed Protection (EWP) Program. The NRCS's Damage Survey Report (DSR) includes funding for the following four locations along Pack Creek which were damaged by the recent flood: 1) 500 West bridge and pedestrian underpass bridge, 2) Mill Creek Pedestrian bridge located between 100 West and Main Street, 3) Main Street Bridge, and 4) the 400 East Bridge. The City of Moab requested that Hansen, Allen, & Luce, Inc. (HAL) prepare a scope of work for the design services required for locations 1, and 4 (not including the pedestrian bridge or main street) which include protection of the bridges, and stream banks, debris removal, grading, permitting and an operation and maintenance plan.



Figure 1: Project Location

SCOPE OF WORK

Task 100 – Project Management and Meetings

Objective: Communicate and coordinate with City and stakeholders

101. General project coordination and communication with City and stakeholders. Project management. Receive phone calls and emails. Prepare email responses. Answer questions.
102. Start-up meeting with the City of Moab to discuss the project (done)
103. Review Standards including NRCS standards for bank protection design and other standards.
104. Status meetings. Assume two video meetings: one to focus on conceptual planning and one to focus on design plan review. Additional plan review will occur using redlines sent via e-mail.

Deliverables: Meeting notes and documentation.

Task 200 – Data Gathering

Objective: Collect data required for project design and construction.

201. Land survey anticipated to be performed by Bunker Engineering or Red Desert Surveying. Survey to include field work and parcel boundary research.
202. Cultural Resource Survey as required by NRCS which is anticipated to be completed by Bighorn Archaeological Consultants. Survey to include field work, report production, including site forms and maps. The cultural resource study will be conducted for *all three* locations.
203. Base mapping in CAD to aggregate available data including imagery, City utilities, land ownership, and surveys listed above.

Deliverables: Land and Cultural Resource Surveys
CAD basemap for use in future Tasks.

Task 300 – Hydrology and Hydraulics

Objective: Evaluate stream hydraulics and provide a basis for stream improvements.

- 301. Hydrologic Study Coordination. A hydrologic study will not be performed. We understand from speaking with Jason Dodds (NRCS) that a design flowrate of 1,500 cfs has been identified. Coordination time is included in the budget.
- 302. Prepare hydraulic calculations or a model for each site to predict flow velocities and tractive forces.

Deliverables: Hydraulic models
Design flowrate

Task 400 – Preliminary Design

Objective: Prepare preliminary design drawings. These drawings will help guide final design decisions and will be used for permit applications and cost estimating.

- 401. Conduct a Web meeting with City and NRCS to discuss project approach. It is anticipated that riprap protection will be added to protect bridges.
- 402. Prepare preliminary design drawings, including
 - a. Cover
 - b. Index and Legend
 - c. General Location Map
 - d. Site Plans (2 sheets)
 - e. Cross Sections (2 sheets)
 - f. One riprap details sheet
- 403. Opinion of probable construction cost estimate. Prepare 50% opinion of probable construction costs.
- 404. Prepare preliminary design memo

Deliverables: Preliminary design drawings
Selected alternatives with construction cost estimates

Task 500 – Stream Alteration Permit

Objective: Prepare a stream alteration permit to be filed with the Utah Division of Water Rights.

501. Stream Alteration Permit. Prepare a stream alteration permit. No ESA or aquatic resources study is assumed in this scope of work.
- a. Identify Ordinary High Water Mark based on survey data.
 - b. Prepare vicinity map, section drawings and plan
 - c. Prepare application form

Deliverables: Stream Alteration Permit

Task 600 – Final Design

Objective: Prepare final design drawings.

601. Prepare final proposed project model. A hydraulic computer model will be finalized based on the design flowrate and proposed improvements.
602. Prepare final riprap/gabion design calculations.
603. Prepare final design memorandum. Prepare final design memorandum documenting analysis and design criteria.
604. Prepare 90% and final design drawings. The sheets will consist of the same ones identified in the preliminary design phase.
605. Prepare bidding documents and technical specifications.
606. Submit plans to City of Moab and NRCS for review.
607. Update final plans and specifications based on comments.
608. Opinion of probable construction cost estimate. Prepare final opinion of probable construction costs.

Deliverables: Hydraulic models including design changes.
Design sheets to be used in construction.
Construction Quantities and Cost Estimates.

Task 700 – Bidding Services

Objective: Assist the City with project bidding.

701. Advertisement. Assist the City with advertisement.
702. Bidder Questions. Address potential questions on documents from the Bidders.

- 703. Prepare Addenda. Prepare addenda to address questions proposed by the bidders.
- 704. Prebid Meeting. Prepare for and attend a virtual/ video pre-bid meeting.
- 705. Bid Opening. Bid opening will be performed by the City. HAL will not attend.

Deliverables: Addenda
Award recommendation

Task 800 – Services During Construction

Objective: Review construction progress and ensure specifications are met.

- 801. Prepare conformed documents. Prepare a conformed set of drawings and specifications and assist the City in preparation of the project manual, including the signed agreement and all contract documents.
- 802. Preconstruction meeting. Participate in a preconstruction meeting in Moab.
- 803. Review Constructor Submittals. Using the approved plans and specifications, review and respond to Contractor's submittals.
- 804. Construction Observation. One visit by HAL.
- 805. Payment Requests. Payment processing will be by the City of Moab.
- 806. Office Support. Provide office engineering support for responding to questions raised by the Contractor and/or the City personnel.
- 807. Change Orders. Prepare potential change order request, review contractor's claims for change orders and assist (if requested) in preparing Change Order documents. One change order assumed.
- 808. Final Walk Through and Punch List Items. Attend a final project walk-thru with the City and Contractor. Prepare a final punch list. City to verify punch list.

Deliverables: Conformed documents
Meeting notes
Submittal responses
Payment documentation
Change order responses

ASSUMPTIONS

- The Hansen, Allen & Luce, Inc. Scope of Work and Fee have been developed and estimated assuming that the project will proceed in general conformance with this task order.
- The Bid Opening will be by City personnel. HAL will not attend.
- The only submittals will be riprap and gabion baskets if used.
- It is assumed that a simple plan drawings and cross sections are adequate.
- HAL will provide up to two site visits.
- City and design team members will provide requested data and provide plan input.
- Construction costs will be estimated using data from various sources including recently bid projects, supplier budget level quotes, the latest RS Means Heavy Construction Data, and other available data.
- The City will pay the Stream Alteration Permit fee.
- Structural design will not be necessary.
- It is assumed that the project will primarily be installation of riprap and that review comments will be minimal.
- HAL will provide the cultural resource study. Other environmental reviews are assumed to be by the NRCS or others.

STANDARD FEE SCHEDULE

PERSONNEL CHARGES

Client agrees to reimburse Hansen, Allen & Luce, Inc. (HAL), for personnel expenses directly related to the completion of the project, in accordance with the following:

Senior Managing Professional.....	\$209.32/hr
Managing Professional	\$189.50/hr
Senior Professional III	\$178.89/hr
Senior Professional II	\$170.48/hr
Senior Professional I	\$157.62/hr
Professional III.....	\$148.17/hr
Professional II.....	\$132.89/hr
Professional I.....	\$124.57/hr
Professional Intern.....	\$112.60/hr
Engineering Student Intern	\$59.26/hr
Water Resource Specialist	\$130.60/hr
Geologist.....	\$132.64/hr
Senior Designer.....	\$119.29/hr
Senior Field Technician	\$119.29/hr
Field Technician	\$98.50/hr
CAD Operator.....	\$98.50/hr
Public Relations Specialist.....	\$143.85/hr
Administrative Assistant.....	\$69.05/hr
Professional Land Surveyor.....	\$133.00/hr
1 Man GPS Surveying Services . PLS	\$162.50/hr
Drone Pilot	\$192.00/hr
Expert Legal Services.....	\$320.00/hr

DIRECT CHARGES

Client also agrees to reimburse HAL for all other costs directly related to the completion of the project. Direct charges shall include, but not be limited to, the following:

Communication, Computer, Reproduction	\$6.00 per labor hour
Out-of-town per diem allowance (lodging not included)	\$64.00 per day
Vehicle	\$0.65 per mile
Outside consulting and services	Cost plus 10%
Other direct expenses incurred during the project.....	Cost plus 10%
Trimble GPS Unit.....	\$135.00 per day
Data Logger/Transducer.....	\$130.00 per week

INTEREST CHARGE AFTER 30 DAYS FROM INVOICE DATE.....1.5% per month

Note: Annual adjustments to personnel and direct expense charges will occur in January of each year. Mileage rate changes are based on fuel prices.

HAL PROPOSAL SPREADSHEET



CLIENT: **City of Moab**
 PROJECT: **Pack Creek NRCS EWP**

Pha Task #	Task Activity	Billing Period	Hours						Total Hours	Labor Cost	Communications /Office Expense	Miles Travel	Direct Expense	Expense Cost	Total HAL Cost with Contingency & Rate Inc.	COMMENT
			MP3 Greg	MP1 Ben	Prof 3 Kayson	Prof I Dan/Garrick	Intern	Field Tech/CAD Admin Asst								
I Project Management and Meetings																
100		1							0	\$0.00	\$0.00		\$0.00	\$0.00		
101	General project management and communication	1		8	4	2			14	\$2,359.94	\$84.00		\$84.00	\$2,566.14		
102	Start-up meeting (done)	1		12	12				24	\$4,058.40	\$144.00	500	\$469.00	\$4,753.77	Teams	
103	Review NRCS design standards	1		1	2				3	\$486.90	\$18.00		\$18.00	\$530.15		
104	Status meetings	1		2	2				4	\$676.40	\$24.00		\$24.00	\$735.42	Two web meetings on Teams	
199	Quality Control (QC) / Quality Assurance (QA)	1		0.5					0.5	\$94.75	\$3.00		\$3.00	\$102.64		
SUBTOTAL HOURS/UNITS:			0	23.5	20	2	0	0	45.5							
SUBTOTAL:			\$0.00	\$4,453.25	\$2,974.00	\$249.14	\$0.00	\$0.00		\$7,676.39	\$273.00	\$325.00	\$0.00	\$598.00	\$8,688.11	\$0.00 Subconsultant Cost
II Data Gathering																
200		1							0	\$0.00	\$0.00		\$0.00	\$0.00		
201	Land survey	1		1	2				3	\$486.90	\$18.00		\$18.00	\$530.15	\$7,800.00 Bunker or Red Desert	
202	Cultural resource survey	1		1	1				2	\$338.20	\$12.00		\$12.00	\$367.71	\$5,280.00 Big Horn Archaeological	
203	Base mapping	1		1	2	12			15	\$1,981.74	\$90.00		\$90.00	\$2,175.33		
299	Quality Control (QC) / Quality Assurance (QA)	1							0	\$0.00	\$0.00		\$0.00	\$0.00		
SUBTOTAL HOURS/UNITS:			0	3	5	12	0	0	20							
SUBTOTAL:			\$0.00	\$568.50	\$743.50	\$1,494.84	\$0.00	\$0.00		\$2,806.84	\$120.00	\$0.00	\$0.00	\$120.00	\$3,073.18	\$13,080.00 Subconsultant Cost
III Hydrology and Hydraulics																
300		1							0	\$0.00	\$0.00		\$0.00	\$0.00		
301	Hydrological and hydraulic study review	1		2	2				4	\$676.40	\$24.00		\$24.00	\$735.42		
302	Prepare hydraulic models	1		1	4	2			7	\$1,033.44	\$42.00		\$42.00	\$1,129.21		
399	Quality Control (QC) / Quality Assurance (QA)	1							0	\$0.00	\$0.00		\$0.00	\$0.00		
SUBTOTAL HOURS/UNITS:			0	3	6	2	0	0	11							
SUBTOTAL:			\$0.00	\$568.50	\$892.20	\$249.14	\$0.00	\$0.00		\$1,709.84	\$66.00	\$0.00	\$0.00	\$66.00	\$1,864.63	\$0.00 Subconsultant Cost
IV Preliminary Design																
400		1							0	\$0.00	\$0.00		\$0.00	\$0.00		
401	Conduct a web meeting to discuss approach	1		2	2				4	\$676.40	\$24.00		\$24.00	\$735.42		
402	Prepare preliminary design	1							0	\$0.00	\$0.00		\$0.00	\$0.00		
a	Cover	1		0.5				2	2.5	\$291.75	\$15.00		\$15.00	\$322.09		
b	General Location Map	1		0.5	1			3	4.5	\$538.95	\$27.00		\$27.00	\$594.25		
c	Site Plans for each site (1 sheet at each site)	1		1	8			24	33	\$3,743.10	\$198.00		\$198.00	\$4,138.16		
d	Cross sections (2 sheets total)	1		1	8			16	25	\$2,955.10	\$150.00		\$150.00	\$3,260.36		
e	Grading plans (6 sheets) - NOT IN SCOPE	1							0	\$0.00	\$0.00		\$0.00	\$0.00		
f	Riprap detail	1		1	4			4	9	\$1,178.30	\$54.00		\$54.00	\$1,293.92		
404	50% Cost estimate	1				5			5	\$622.85	\$30.00		\$30.00	\$685.49		
405	Prepare preliminary design memo	1		2	6	2			10	\$1,520.34	\$60.00		\$60.00	\$1,659.36		
499	Quality Control (QC) / Quality Assurance (QA)	1		1					1	\$189.50	\$6.00		\$6.00	\$205.28		
SUBTOTAL HOURS/UNITS:			0	9	29	7	0	49	94							
SUBTOTAL:			\$0.00	\$1,705.50	\$4,312.30	\$871.99	\$0.00	\$4,826.50	\$0.00	\$11,716.29	\$564.00	\$0.00	\$0.00	\$564.00	\$12,894.30	\$0.00 Subconsultant Cost
V Stream Alteration Permit																
500		1							0	\$0.00	\$0.00		\$0.00	\$0.00		
501	Prepare Stream Alteration Permit	1		1		3		2	6	\$788.41	\$36.00		\$36.00	\$865.63		
502	Identify Ordinary High Water Mark	1		1		1			2	\$314.07	\$12.00		\$12.00	\$342.37		
503	Prepare vicinity map, section drawings and plan	1		2		6			8	\$1,126.42	\$48.00		\$48.00	\$1,233.14		
504	Prepare application form.	1		1		3			4	\$563.21	\$24.00		\$24.00	\$616.57		
599	Quality Control (QC) / Quality Assurance (QA)	1							0	\$0.00	\$0.00		\$0.00	\$0.00		
SUBTOTAL HOURS/UNITS:			0	5	0	13	2	0	20							
SUBTOTAL:			\$0.00	\$947.50	\$0.00	\$1,619.41	\$225.20	\$0.00		\$2,792.11	\$120.00	\$0.00	\$0.00	\$120.00	\$3,057.72	\$0.00 Subconsultant Cost

VI Final Design

600		1							0	\$0.00	\$0.00		\$0.00	\$0.00			
601	Prepare final hydraulics design model	1		2	2				4	\$546.54	\$24.00		\$24.00	\$599.07			
602	Prepare riprap/gabion design calculations	1	1	3					4	\$635.60	\$24.00		\$24.00	\$692.58			
603	Prepare final design memo	1	0.5	1	2				3.5	\$492.59	\$21.00		\$21.00	\$539.27			
604	Prepare final design drawings	1							0	\$0.00	\$0.00		\$0.00	\$0.00			
a	Cover	1					1		1	\$98.50	\$6.00		\$6.00	\$109.73			
b	General Location Map	1					1		1	\$98.50	\$6.00		\$6.00	\$109.73			
c	Site Plans for each site (2 sheets)	1		4			4		8	\$988.80	\$48.00		\$48.00	\$1,088.64			
d	Cross sections (2 sheets)	1		4			4		8	\$988.80	\$48.00		\$48.00	\$1,088.64			
e	Grading plans (6 sheets) - NOT IN SCOPE	1							0	\$0.00	\$0.00		\$0.00	\$0.00			
f	Riprap detail (1 sheet)	1		1			4		5	\$542.70	\$30.00		\$30.00	\$601.34			
605	Prepare bidding documents and specifications	1	2	4	12				18	\$2,468.64	\$108.00		\$108.00	\$2,705.47			
606	Submit plans for review	1		1					1	\$148.70	\$6.00		\$6.00	\$162.44			
607	Update final plans and specifications	1	2	2	2		8		14	\$1,713.54	\$84.00		\$84.00	\$1,887.42			
608	Prepare final cost estimate	1			3				3	\$373.71	\$18.00		\$18.00	\$411.30			
699	Quality Control (QC) / Quality Assurance (QA)	1	1						1	\$189.50	\$6.00		\$6.00	\$205.28			
SUBTOTAL HOURS/UNITS:			0	6.5	22	21	0	22	0	71.5							
SUBTOTAL:			\$0.00	\$1,231.75	\$3,271.40	\$2,615.97	\$0.00	\$2,167.00	\$0.00	\$9,286.12	\$429.00	0	0	\$429.00	\$10,200.88	\$0.00	Subconsultant Cost

VII Bidding Services

700		1							0	\$0.00	\$0.00		\$0.00	\$0.00			
701	Assist City with advertisement	1	1						1	\$189.50	\$6.00		\$6.00	\$205.28			
702	Bidder questions	1	2	2					4	\$676.40	\$24.00		\$24.00	\$735.42			
703	Prepare addenda	1		3					3	\$446.10	\$18.00		\$18.00	\$487.31		Assume 1 addendum	
704	Prebid meeting by video	1	2						2	\$379.00	\$12.00		\$12.00	\$410.55			
705	Attend bid opening (by City, HAL doesn't attend)	1							0	\$0.00	\$0.00		\$0.00	\$0.00			
799	Quality Control (QC) / Quality Assurance (QA)	1							0	\$0.00	\$0.00		\$0.00	\$0.00			
SUBTOTAL HOURS/UNITS:			0	5	5	0	0	0	0	10							
SUBTOTAL:			\$0.00	\$947.50	\$743.50	\$0.00	\$0.00	\$0.00	\$0.00	\$1,691.00	\$60.00	0	0	\$60.00	\$1,838.55	\$0.00	Subconsultant Cost

VIII Services During Costruction

800		1							0	\$0.00	\$0.00		\$0.00	\$0.00			
801	Prepare conformed documents	1			2				2	\$249.14	\$12.00		\$12.00	\$274.20			
802	Addend a pre-construction meeting	1		12					12	\$1,784.40	\$72.00	500	\$397.00	\$2,290.47			
803	Review contractor submittals	1			3				3	\$373.71	\$18.00		\$18.00	\$411.30		Assume rip rap only	
804	Construction observation (1 by HAL)	1		12					12	\$1,784.40	\$72.00	500	\$397.00	\$2,290.47		None assumed, by City	
805	Payment requests (by City)	1							0	\$0.00	\$0.00		\$0.00	\$0.00			
806	Office support	1	2						2	\$379.00	\$12.00		\$12.00	\$410.55			
807	Change orders	1		2	2				4	\$546.54	\$24.00		\$24.00	\$599.07		Assume 1	
808	Final walk through (by City)	1							0	\$0.00	\$0.00		\$0.00	\$0.00			
899	Quality Control (QC) / Quality Assurance (QA)	1							0	\$0.00	\$0.00		\$0.00	\$0.00			
SUBTOTAL HOURS/UNITS:			0	2	26	7	0	0	0	35			1000	0			
SUBTOTAL:			\$0.00	\$379.00	\$3,866.20	\$871.99	\$0.00	\$0.00	\$0.00	\$5,117.19	\$210.00	1000	0	\$860.00	\$6,276.05	\$0.00	Subconsultant Cost

TOTAL HOURS BY EMPLOYEE: 0 57 113 64 2 71 0 307

PHASE	TASK	Labor Costs	Direct Exp Cost	Subtotal w/Contingency	Subconsultant Costs	SubTotal with Contingency
I	Project Management and Meetings	\$7,676.39	\$598.00	\$8,688.11	\$0.00	\$8,688.11
II	Data Gathering	\$2,806.84	\$120.00	\$3,073.18	\$13,080.00	\$16,153.18
III	Hydrology and Hydraulics	\$1,709.84	\$66.00	\$1,864.63	\$0.00	\$1,864.63
IV	Preliminary Design	\$11,716.29	\$564.00	\$12,894.30	\$0.00	\$12,894.30
V	Stream Alteration Permit	\$2,792.11	\$120.00	\$3,057.72	\$0.00	\$3,057.72
VI	Final Design	\$9,286.12	\$429.00	\$10,200.88	\$0.00	\$10,200.88
VII	Bidding Services	\$1,691.00	\$60.00	\$1,838.55	\$0.00	\$1,838.55
VIII	Services During Costruction	\$5,117.19	\$860.00	\$6,276.05	\$0.00	\$6,276.05
TOTAL w/Contingency:		\$44,935.57	\$2,957.85	\$47,893.42	\$13,734.00	\$60,973.42