

Ames Construction  
 City of Flagstaff  
 Lone Tree Overpass Design-Build  
 Design Services - Amendment #1 R1



8/19/2021

Task #	Description	Cost
1	Geotech Investigation & Potholing	\$113,711.54
2	Survey Support for Geotech Investigation & Potholing	\$26,646.54
3	BNSF Coordination & Flaggers	\$19,847.23
Total Direct Cost Ames		\$160,205.31
Overhead @ 6%		\$9,612.32
Subtotal		\$169,817.63
Profit @ 8%		\$13,585.41
<i>Subtotal Amendment #1 Ames</i>		<i>\$183,403.04</i>
	WSP Scope & Fee for Design Services Amendment #1	\$365,929.50
4	Subcontracted Work Breakout	\$61,900.00
5	Parcel Acquisition Coordination	\$201,726.00
Subtotal		\$629,555.50
Overhead @ 6%		\$37,773.33
<i>Subtotal Design, ROW, Subcontracted Work</i>		<i>\$667,328.83</i>
<b>Design Services Amendment #1 Ames/WSP</b>		<b>\$850,731.87</b>
Owner Contingency @ 5%		\$42,536.59
<b>TOTAL DESIGN SERVICES AMENDMENT #1</b>		<b>\$893,268.46</b>

Assumptions:

- 1) Amendment #2 includes costs associated with Geotechnical Investigation Work within the Lone Tree Overpass Footprint.
- 2) Geotechnical Investigation cost for the BNSF Railway Lowering are not covered in this cost proposal and will be included in a later proposal. Geotechnical Investigation for the BNSF Lowering will be completed in the spring after the final alignment is agreed to by the BNSF.
- 3) WSP's scope of work is attached as a separate document.



Task No	Task Description	Item Description	Unit	Qty	Unit Cost	Task Manhours			MH Rate	Total
						Weeks	Hrs/Wk	MH		
3	<p>BNSF Coordination &amp; Flaggers</p> <p>BNSF coordination for geotechnical work withing the BNSF ROW.</p> <p><b>BNSF Flagger Contingency:</b> For costs associated with providing RR Flaggers where required during geotechnical investigation work for the scope defined in this Amendment.</p> <p><b>BNSF ERail Safe:</b> ERail Safe training for this Amendment.</p> <p><b>Exclusion:</b> Cost of BNSF permits will be paid directly by the City of Flagstaff.</p>	<b>Labor</b>								
		Project Engineer								\$1,494.23
		Safety Manager								\$2,025.00
										\$0.00
										\$0.00
										\$0.00
										\$0.00
										\$0.00
										\$0.00
										<b>Subtotal Labor</b>
		<b>Non Labor</b>								
		ROE Permit Application Fee	LS	1	\$828.00				\$828.00	
		BNSF Flagger Contingency	LS	1	\$15,000.00				\$15,000.00	
		BNSF ERail Safe	LS	1	\$500.00				\$500.00	
									\$0.00	
									\$0.00	
									\$0.00	
									<b>Subtotal Non Labor</b>	\$16,328.00
<b>Task Total</b>									\$19,847.23	

Task No	Task Description	Item Description	Unit	Qty	Unit Cost	Task Manhours			MH Rate	Total		
						Weeks	Hrs/Wk	MH				
4	<p>Subcontracted Work Breakout</p> <p>These items breakout subcontracted work for markup purposes.</p>	<b>Labor</b>										
									0	\$0.00	\$0.00	
										0	\$0.00	\$0.00
										0	\$0.00	\$0.00
										0	\$0.00	\$0.00
										0	\$0.00	\$0.00
										<b>Subtotal Labor</b>		\$0.00
				<b>Subcontractor</b>								
				Miscellaneous Pothole (SSC)	Day	10	\$3,152.00					\$31,520.00
				Western Tech - BTEX	LS	1	\$10,380.00					\$10,380.00
		Geotech Support Contingency	LS	1	\$20,000.00					\$20,000.00		
										\$0.00		
										\$0.00		
									<b>Subtotal Non Labor</b>	\$61,900.00		
<b>Task Total</b>									\$61,900.00			

Task No	Task Description	Item Description	Unit	Qty	Unit Cost	Task Manhours			MH Rate	Total	
						Weeks	Hrs/Wk	MH			
5	Parcel Acquisition Coordination  Flagstaff Parcel 18-A, not included in the Initial Phase 1 Design Services Contract. ROW coordinator time is for parcel 18-A.  Relocation Agent costs are for relocations identified on the ROW Acquisition Costs Spreadsheet.	<b>Labor</b>									
		ROW Coordinator								\$5,400.00	
										\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	
										\$0.00	
									<b>Subtotal Labor</b>	\$5,400.00	
		<b>Non Labor</b>									
		Title Reports	LS	1	\$1,000.00					\$1,000.00	
		Acquisition Agent	LS	1	\$9,000.00					\$9,000.00	
		Appraisals	LS	1	\$3,500.00					\$3,500.00	
		Appraisal Reviews	LS	1	\$1,500.00					\$1,500.00	
		Exhibits & Legals	LS	1	\$3,500.00					\$3,500.00	
		Relocation Agent	LS	1	\$177,826.00					\$177,826.00	
		Survey Cont. for ROW	LS	1	\$0.00					\$0.00	
										<b>Subtotal Non Labor</b>	\$196,326.00
									<b>Task Total</b>	\$201,726.00	



**WSP USA  
Contract No. 2021-23  
LONE TREE OVERPASS  
Project No. 03-19004**

**Scope of Work  
For  
Design Services Amendment 1  
Geotechnical Investigation**

**August 2021**

**Scope of Services**

## **GENERAL DESCRIPTION OF WORK:**

WSP USA (WSP) will provide Design Services for the Lone Tree Overpass project for Ames Construction (Ames). The project involves the construction of a new connection between Lone Tree Avenue and Butler Avenue to the south and a new connection at US 66 to the north. The new roadway will provide an elevated grade separation of the new United States Army Corps of Engineers (USACE) Rio de Flag channel and the Burlington North-Santa Fe (BNSF) Railroad. The project area will extend to the drainage area for the project, which includes the Southside neighborhood to the west, Cherry Hill to the north, the petroleum facility to the east, and Sawmill Road to the south. The limits of the economic impact study and traffic impact analysis will have similar limits with final limits determined during project development. Project limits will also extend east and west within the BNSF right-of-way to the extent required to complete the realignment of the railroad and associated work.

The project will be developed in multiple phases with scope specific to each phase of design. This Scope of Work covers the development of the Project Scope for Amendment 1 in order to provide Geotechnical Investigation services. Survey, Utility SUE, Right-of-Entry with BNSF, including BNSF specific insurance requirements, and field monitoring and disposal will be performed outside of this contract by Ames and others. It is anticipated that the work covered under this scope will have a duration of approximately 2 months.

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1230 West Washington Street  
Tempe, AZ 85281

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WSP will be supported during this phase by four subconsultants:

1. Geomechanics Southwest Inc for field exploration and drilling, inclusive of equipment required for the work.
2. Speedie and Associates for laboratory testing.
3. Trafficade for traffic control design, permitting, set-up, monitoring, and take down.
4. Private Utility for utility location within the drilling location areas.

Additional subconsultants, if needed, will be added to the project with approval of Ames and the City through contract modification. The scope of work for each identified subconsultant is attached at the end of this document.

## TASK 1.0 - PROJECT MANAGEMENT AND COORDINATION

The work under this task will provide general project management and coordination activities during this phase of the project. This task includes meetings, project documentation, coordination with subconsultants, and development of meeting agendas, minutes, and action item logs.

### SUBTASKS:

**TASK 1.1:** Project management work will include project set-up for this phase, coordination with Ames Construction, monthly invoicing, onboarding and coordination with subconsultants, and project tracking.

**TASK 1.2:** This phase will require project coordination with WSP Staff, Ames Construction, subconsultants, City of Flagstaff, ADOT, and BNSF. It is anticipated that a coordination meeting will be required with BNSF prior to any activities within their right-of-way to discuss boring locations, equipment set-up, access, and work activities. This meeting will be held virtually. Additionally, it is assumed that there will be one preactivity meeting prior to actual field activities. This meeting may be held in the field but will be attended virtually by staff who are not required to be in the field. It is anticipated that meetings will be attended by the Design Manager, Senior Geotechnical Engineer, Project Engineer, and the Environmental Coordinator. An agenda will be prepared for all meetings and meeting minutes will be taken during the meeting and distributed to attendees after the meeting is completed.

**TASK 1.3:** This task will provide the Project Quality Assurance for this phase. The Quality Assurance Manager will review all deliverables developed during this phase for adherence to the PSQMP.

**ASSUMPTIONS:** It is assumed that meetings will be virtual and do not require travel.

**DELIVERABLES:** Meeting Agenda (Electronic PDF), Meeting Minutes (Electronic PDF),

## TASK 2.0 - ENVIRONMENTAL

The Work under this task includes development of a Field Monitoring Plan to support the field investigations conducted during this phase. Previous investigations performed by USACE in the area of indicated the potential presence of hydrocarbons near the locations of planned borings. WSP will develop a monitoring plan based on this information to be implemented during the field work.



**SUBTASKS:**

**TASK 2.1:** Preparation of a field monitoring plan that will describe the requirements to investigate and sample, handle, and track hazardous materials present in soil, groundwater, surface water, wastewater or impacted water, that may be encountered during field investigations during this phase of the project.

It is anticipated that field monitoring will be required to occur continuously when contractors are disturbing the upper few feet of soil and on-call as needed based on crews identifying suspicious material at greater depths.

**TASK 2.2:** WSP will review field reports from the field monitoring. Changes to the monitoring plan may be recommended by observed conditions as additional information is obtained from these field reports.

**DELIVERABLES:** Field Monitoring Plan (Electronic PDF) (Draft and Final)

**TASK 3.0 – GEOTECHNICAL**

The Work under this task includes a geotechnical field exploration and laboratory testing, geotechnical and pavement analyses, and development of reports presenting recommendations for the project.

**SUBTASKS:**

**TASK 3.1(A):** This task includes a field investigation using geotechnical borings and laboratory testing to develop an understanding of the subsurface conditions and development of a subsurface profile for design. WSP will subcontract with Geomechanics Southwest Inc. to complete the borings. A summary of the planned borings is shown in the following table.

Feature	No. of borings	Approx. Depth of Borings (ft)	Planned Drill Method	Anticipated Traffic Control
Bridge	10	70-100	Auger/Air/Core	N/A
Retaining Walls	4	40	Auger/Air/Core	N/A
Roadway	13	10	Auger	Shoulder/Lane closures

It is anticipated that some of the roadway borings may require traffic control consisting of temporary lane and/or shoulder closures to safely complete the drilling. WSP will subcontract services from Trafficade to provide traffic control devices for both conditions, as required.

The auger borings listed in the above table will be advanced to the depths shown or terminated in bedrock or at auger refusal, whichever is reached first. Standard SPT and ring samplers will be driven to collect in-situ soil samples on 5-foot or less intervals in the augered portion of the borings. Borings at the bridges will be advanced past the soil horizon and into the bedrock as noted in the table using NQ or HQ rock coring equipment to reach the desired depth. All borings will be backfilled with drill cuttings at the completion of drilling and those completed in the roadway will be backfilled with quick set concrete in the upper foot. If groundwater is encountered, borings will be backfilled in accordance with ADWR requirements.



Arizona Blue Stake (AZ811) will be contacted to locate public utility lines near each boring location. This activity will be completed prior to subsurface drilling activities. In addition, select borings not within City right-of-way will be cleared of utilities using the services of a private utility locator.

Prior to mobilizing to the field, a site health and safety plan will be developed for the field investigation program. The plan will identify and discuss methods of minimizing hazards associated with working along the existing roadway, working in rugged terrain; and working around drilling equipment.

Appropriate laboratory tests will be performed to evaluate soil properties and characteristics for engineering analysis and design as required for the various planned project features. The laboratory tests will include the following types of tests depending upon purpose of the borings, project features and encountered soils.

- Sieve Analysis
- Atterberg Limits
- Moisture Content
- Unit Weight
- Consolidation
- Direct Shear
- R-Values
- Moisture-Density Relationships
- pH & Resistivity
- Chlorides & Sulfates
- Unconfined Compression – rock
- Point Load Test- rock

Laboratory testing will be completed by Speedie And Associates.

Additional testing may be required for drainage elements for the project. This field exploration and testing for drainage elements is not included in this phase and will be deferred to a future phase of the work.

**TASK 3.2:** This task includes geotechnical analysis of the collected field data to develop geotechnical recommendations for the project features, including recommendations for foundations, retaining walls, subgrade, and general earthwork.

**TASK 3.3:** This task includes analysis to develop pavement structural section recommendations for the various pavements on the project, including Lone Tree, Butler Avenue, connections to Business 40 and other local roads. The analyses will generally be performed in accordance with AASHTO and/or ADOT pavement design procedures.

**TASK 3.4:** This task includes the preparation of a Geotechnical Report (draft and final) presenting recommendations for select project features. The report will generally include the following:

- Descriptions of the field investigations completed.
- Laboratory test results.
- Regional and local geology.
- Descriptions of the engineering geology, geologic hazards, geotechnical profile, relevant geologic cross sections, and groundwater conditions encountered at the site.
- Logs of test borings with site plans showing their locations.
- Photographs of recovered rock core.
- Recommendations for the various project features:



- Structures, including foundation capacities, lateral earth pressures, and related design parameters using LRFD design methods.
  - Roadway embankments, including material types and suitability for use in embankments, foundation conditions and subgrade treatments and improvements, settlement impacts and remediation and earthwork factors.
  - Temporary and permanent cut and fill slopes, including slope stability analyses for permanent embankment fill slopes,
  - Impacts of compressible, hydro-collapsible, and/or expansive soils, if present, and proposed mitigations.
  - Corrosion potential of soils on construction materials.
  - Pavement recommendations for non-ADOT roadways.
- Foundation data sheets will be prepared by WSP for inclusion in the bridge plan set.

**TASK 3.5:** This task includes the preparation of a Pavement Design Summary and Materials Design Report (PDS/MDR) for ADOT pavements associated with the connection to Business 40 / US-66. An initial and final report will be prepared generally following the procedures outlined in the ADOT Pavement Design Manual.

#### ASSUMPTIONS:

1. Field explorations will occur during daytime hours. A single mobilization of drilling equipment is planned. The borings are accessible with the planned equipment. Grading for boring access, if needed, will be performed by others. Drilling will occur at times when temperatures are above freezing. Traffic control will not require off-duty officers.
2. Pavement design procedures will be in accordance with AASHTO/ADOT methods and meet or exceed City minimums, where appropriate.
3. In-situ sampling of soils for environmental evaluations associated with Phase 1 or follow up phase ESA's shall be separate from the geotechnical exploration and are typically completed in advance of the geotechnical drilling to clear the area for non-hazardous waste drilling. No environmental constraints related to the field explorations are assumed.

**DELIVERABLES:** Geotechnical Report (Electronic PDF) (Draft and Final), PDS/MDR (Electronic PDF) (Initial and Final)

#### SUBCONSULTANTS

WSP will be supported during this phase by four subconsultants:

1. Geomechanics Southwest Inc for field exploration and drilling, inclusive of equipment required for the work.
2. Speedie and Associates for laboratory testing.
3. Trafficade for traffic control design, permitting, set-up, monitoring, and take down.
4. Private Utility for utility location within the drilling location areas.

Additional subconsultants, if needed, will be added to the project with approval of Ames and the City through contract modification. The scope of work for each identified subconsultant is attached at the end of this document.



## PAYMENT TERMS

This work will be performed by WSP and its Subconsultants on a time and material basis utilizing the billable rates as shown in the attached fee proposal, not to exceed \$365,929.50 based on the scope outlined herein. If additional scope is required, a subsequent contract modification will be submitted at Ames' direction. WSP will invoice Ames for the actual hours of the work and expenses incurred as required for the Scope of Work.

## EXCLUSIONS:

Services excluded from this Scope of Work include, but are not limited to:

1. Field Survey – To be provided by Ames and incorporated into schematic design.
2. Permits and associated fees except as specifically included within this scope of work.
3. Outside agency costs required for site access or project plan reviews, such as BNSF review, flaggers, utility costs, insurance requirements, etc.

## OTHER INFORMATION REQUIRED (FROM OTHERS):

Items required for successful completion of the work include:

1. Right of Entry onto BNSF property, to be completed by AMES Construction.

## CONTINGENCY

No Contingency is anticipated for this phase of the Project.

## ATTACHMENTS

1. Scope and Fee Proposal from Geomechanics Southwest Inc.
2. Scope and Fee Proposal from Speedie and Associates
3. Scope and Fee Proposal from Trafficade
4. Scope and Fee for Private Utility



Contract No.: 2021-23

**Lone Tree Overpass**

New Contract:

Contract Mod: X No. 1

DERIVATION OF COST PROPOSAL SUMMARY

**ESTIMATED DIRECT LABOR**

Classification	Manhours	% of Total		Billable	Estimated Labor
		Hours	Hourly Rate	Costs	
Project Principal	2	0.1%	\$290.00	\$580.00	
Design Manager	14	1.0%	\$235.00	\$3,290.00	
Sr Project Engineer	256	19.1%	\$225.00	\$57,600.00	
Project Engineer	0	0.0%	\$155.00	\$0.00	
Engineer	606	45.3%	\$125.00	\$75,750.00	
Senior Designer	0	0.0%	\$150.00	\$0.00	
Designer	176	13.2%	\$95.00	\$16,720.00	
CADD Tech / Graphics	40	3.0%	\$110.00	\$4,400.00	
Senior Geologist	174	13.0%	\$300.00	\$52,200.00	
Env. Coordinator	34	2.5%	\$200.00	\$6,800.00	
PI Specialist	0	0.0%	\$145.00	\$0.00	
Sr Economist	0	0.0%	\$155.00	\$0.00	
Sr Planner	0	0.0%	\$120.00	\$0.00	
Planner / GIS	24	1.8%	\$95.00	\$2,280.00	
Accountant	4	0.3%	\$120.00	\$480.00	
Administration	8	0.6%	\$90.00	\$720.00	
<b>TOTAL Hours</b>	<b>1,338</b>				

Sub-Total Labor Expense: \$220,820.00

**ESTIMATED DIRECT EXPENSES**

Outside Reproduction	\$0.00
Courier/Postage	\$0.00
Mileage	\$1,322.50
Travel	\$6,275.00
Miscellaneous Expenses	\$0.00

Sub-Total Direct Expenses: \$7,597.50

**ESTIMATED OUTSIDE SERVICES AND CONSULTANTS**

<u>Subconsultant</u>	<u>Method of Compensation</u>	<u>DBE</u>	<u>Fee</u>
GSI	Unit Rate	No	\$112,632.00
Speedie (Lab)	Unit Rate	No	\$16,755.00
Trafficade	Unit Rate	No	\$6,415.00
Private Utility	Unit Rate	No	\$1,710.00

Sub-Total Outside Services Expense: \$137,512.00

**ESTIMATED TOTAL**

**TOTAL ESTIMATED COST:** \$365,929.50

CONTRACT TIME: 2 months  
(Phase 1 Design Services Only)

**CONTINGENCY (0%)** \$0.00

  
Signature

9 Aug 21  
Date



Lone Tree Overpass

Contract No. 2021-23

TASK/DISCIPLINE	Project Principal	Design Manager	Sr Project Engineer	Project Engineer	Engineer	Senior Designer	Designer	CADD Tech / Graphics	Senior Geologist	Env. Coordinator	PI Specialist	Sr Economist	Sr Planner	Planner / GIS	Accountant	Administration	Total
1.0 PROJECT MGMT	2	14	0	0	14	0	0	0	14	6	0	0	0	0	4	8	62.0
2.0 ENVIRONMENTAL	0	0	0	0	0	0	0	0	0	28	0	0	0	24	0	0	52.0
3.0 GEOTECHNICAL	0	0	256	0	592	0	176	40	160	0	0	0	0	0	0	0	1,224.0
<b>PROJECT TOTAL HOURS</b>	<b>2</b>	<b>14</b>	<b>256</b>	<b>0</b>	<b>606</b>	<b>0</b>	<b>176</b>	<b>40</b>	<b>174</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>4</b>	<b>8</b>	<b>1338</b>



Lone Tree Overpass  
Contract No. 2021-23

1.0 PROJECT MGMT																	
TASK DESCRIPTION	Total Hours	Project Principal	Design Manager	Sr Project Engineer	Project Engineer	Engineer	Senior Designer	Designer	CADD Tech / Graphics	Senior Geologist	Env. Coordinator	PI Specialist	Sr Economist	Sr Planner	Planner / GIS	Accountant	Administration
1.1 Project Management (2 Month Duration)	22	2	8													4	8
1.2 Project Meetings	0																
1.2A BNSF Coordination Meeting (1 Total, 2 hours)	8		2			2				2	2						
1.2B Preactivity Meeting (1 Total, 4 hours)	16		4			4				4	4						
1.2C Meeting Preparation and Minutes (2 Total)	4					4											
1.3 Quality Program	12					4				8							
	0																
<b>SUBTOTAL 1.0 PROJECT MGMT</b>	<b>62</b>	<b>2</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>8</b>
																	<b>Task Cost: \$ 12,220.00</b>



Lone Tree Overpass  
Contract No. 2021-23

<b>2.0 ENVIRONMENTAL</b>																	
TASK DESCRIPTION	Total Hours	Project Principal	Design Manager	Sr Project Engineer	Project Engineer	Engineer	Senior Designer	Designer	CADD Tech / Graphics	Senior Geologist	Env. Coordinator	PI Specialist	Sr Economist	Sr Planner	Planner / GIS	Accountant	Administration
2.1 Hazardous Materials Monitoring Plan	40										16				24		
2.2 Field Observation Report Review	12										12						
	0																
	0																
<b>SUBTOTAL 2.0 ENVIRONMENTAL</b>	52	0	0	0	0	0	0	0	0	0	28	0	0	0	24	0	0
<b>Task Cost: \$ 7,880.00</b>																	



Lone Tree Overpass  
Contract No. 2021-23

<b>3.0 GEOTECHNICAL</b>																	
TASK DESCRIPTION	Total Hours	Project Principal	Design Manager	Sr Project Engineer	Project Engineer	Engineer	Senior Designer	Designer	CADD Tech / Graphics	Senior Geologist	Env. Coordinator	PI Specialist	Sr Economist	Sr Planner	Planner / GIS	Accountant	Administration
3.1 Geotech Field Exploration/Lab Testing	600			80		360		80		80							
3.2 Geotech Analysis	164			40		60		40		24							
3.3 Pavement Analysis	124			32		60		24		8							
3.4 Geotech Report (Foundation, Roadway, Pavement)	248			80		80		24	24	40							
3.5 ADOT Pavement Report (PDS/MDR)	88			24		32		8	16	8							
	0																
<b>SUBTOTAL 3.0 GEOTECHNICAL</b>	1224	0	0	256	0	592	0	176	40	160	0	0	0	0	0	0	0

Task Cost: \$ 200,720.00

**Lab Testing by Speedie**

Test	# units		Rate	Total
Grain Size Analysis	10	@	\$ 80.00	\$ 800.00
Dry Unit Weight and water content	19	@	\$ 25.00	\$ 475.00
Water Content	22	@	\$ 15.00	\$ 330.00
Atterberg Limits	22	@	\$ 75.00	\$ 1,650.00
One Dimensional Consolidation	6	@	\$ 125.00	\$ 750.00
Direct Shear (Insitu or remolded)	11	@	\$ 450.00	\$ 4,950.00
Expansion (swell)	1	@	\$ 130.00	\$ 130.00
R-Value	6	@	\$ 325.00	\$ 1,950.00
Determination of pH & Resistivity Soil	8	@	\$ 180.00	\$ 1,440.00
Sulfate content of Soil	8	@	\$ 65.00	\$ 520.00
Chloride content of Soil	8	@	\$ 65.00	\$ 520.00
Unconfined compressive Strength Rock	30	@	\$ 50.00	\$ 1,500.00
Rock Core density	30	@	\$ 40.00	\$ 1,200.00
Moisture Density Relationship (Proctor)	4	@	\$ 135.00	\$ 540.00
				<b>\$ 16,755.00</b>

**Traffic Control**

Shoulder/Turn lane Closure	6	@	\$ 515.00	\$ 3,090.00
Lane Closure	5	@	\$ 665.00	\$ 3,325.00
				<b>\$ 6,415.00</b>

**Private Utility Locate**

Mob/demob	6	@	\$ 165.00	\$ 990.00
Utility locates	4	@	\$ 180.00	\$ 720.00
				<b>\$ 1,710.00</b>

**GSI Drilling (see quote)****\$ 112,632.00**





## ATTACHMENT 1

SCOPE AND FEE FROM GEOMECHANICS SOUTHWEST INC.



# Geomechanics Southwest, Inc.

5435 W. Mohave Street  
Phoenix, Arizona 85043  
602-252-0559

Date: July 8, 2021  
Proposal # [9021P]

AROC 079441 / ADWR 498

[www.gsidrilling.com](http://www.gsidrilling.com)

## Mr. Kevin Porter, P.E.

WSP USA  
1230 W. Washington Street, Suite 405  
Tempe, Arizona 85281  
[kevin.porter@wsp.com](mailto:kevin.porter@wsp.com)

## RE: Lone tree roadway Project – Flagstaff, Arizona

### SCOPE:

- Provide a CME-75HT 2wd truck-mounted drill rig and a CME-75HT track-mounted drill with required support equipment including HQ3 wireline coring equipment, 5-in Tubex dth casing advance and a 3-man crew.
- Tubex/Sample/Core ten (10) bridge borings to a maximum depth of 100-ft (760-ft TOTAL).
- Auger/Sample/Core four (4) retaining wall borings to a depth of 40-ft (160-ft TOTAL).
- Auger/Sample thirteen (13) roadway borings to a depth of 10-ft (130-ft TOTAL)
- Traffic control will be the responsibility of others.
- GSI will provide non-Potable water from the Flagstaff reclaimed water services for coring.
- GSI will permit and grout any borings that encounter gw per ADWR, charges will apply.
- GSI will provide BNSF training for crews prior to arrival.

ITEM	QUANTITY	UNITS	UNIT PRICE	LINE TOTAL
Mobilization / Demobilization * Track-Mounted Drill	1	EACH	2400.00	\$2,400.00
Mobilization / Demobilization ** Track-Mounted Drill	1	EACH	1850.00	\$1,850.00
Daily Prep / Local Travel / Interim Travel	44	HOURS	210.00	\$9,240.00
Tubex / Sample	210	L.F.	35.00	\$7,350.00
Auger / Sample	250	L.F.	15.00	\$3,750.00
Core Drilling	590	L.F.	49.00	\$28,910.00
Core Bit / Fluid Charges	590	L.F.	12.50	\$7,375.00
Core Boxes	59	EACH	12.50	\$ 737.50
Standby / Access / Safety / Move Drill (est.)	25	HOURS	210.00	\$5,250.00
Geotech Ring Set: set of 6 w/sleeve (est.)	27	EACH	18.50	\$ 499.50
Support Track (borings S3, S8)	5	DAYS	250.00	\$1,250.00
Support Truck / Air Compressor	25	DAYS	550.00	\$13,750.00
Water Truck 2000 gallon	25	DAYS	400.00	\$10,000.00
Additional Crew Member (Tubex/Core Borings) (est.)	160	HOURS	50.00	\$8,000.00
Asphalt Patching	10	EACH	15.00	\$ 150.00
Concrete Patching per ADOT 10/60	1	EACH	75.00	\$ 75.00
Auger Bit Wear – Per 100-ft	2	EACH	250.00	\$ 500.00
ADWR on-line permitting (if gw)	1	SEC 22	225.00	\$ 225.00
Grout Abandonment (if gw) (est.)	200	L.F.	8.00	\$1,600.00
Crew Expenses (3-men) lodging \$94.00 per man	20	NIGHTS	282.00	\$5,640.00
Crew Expenses (3-men) M&IE \$42.00 per man	10	DAYS	126.00	\$1,260.00
Crew Expenses (3-men) M&IE \$56.00 per man	15	DAYS	168.00	\$2,520.00
BNSF Training/Badging	1	EACH	300.00	\$ 300.00
<b>ESTIMATED TOTAL</b>				<b>\$112,632.00</b>

**GSI assumes 25 days on site with mobilization.**

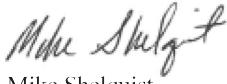
**\* Mobilization / Demobilization track-mounted rig was derived as follows: 7 hours of roundtrip travel and 3 hours of prep at rig rate of \$240/hr. for a total of \$2,400.00**

**\*\* Mobilization / Demobilization 2wd truck-mounted rig was derived as follows: 7 hours of roundtrip travel and 3 hours of prep at rig rate of \$185/hr. for a total of \$1,850.00**

We at Geomechanics Southwest Inc., appreciate the opportunity to provide you with an estimate. If you have any questions, please don't hesitate to call or email us. We look forward to hearing from you soon.

Respectfully submitted by,

**GEOMECHANICS SOUTHWEST, INC.**



**07/08/2021**

Mike Shelquist  
Operations Manager – Phoenix

WSP 070821 Lone tree roadway





## ATTACHMENT 2

SCOPE AND FEE FROM SPEEDIE AND ASSOCIATES

**LABORATORY FEE & RATE SCHEDULE**

Code	Description	Price
<b>Soil &amp; Aggregate Testing</b>		
100	Sample Preparation (Per Hour)	\$60.00
101	Sieve Analysis	\$80.00
102	Sieve Analysis With Hydrometer	\$175.00
103	Plasticity Index (Dry Prep)	\$75.00
104	Plasticity Index (Wet Prep)	\$165.00
105	Moisture Density Relations (Standard)	\$135.00
106	Moisture Density Relations (Modified)	\$155.00
107	Moisture Density Relations (Standard - 1 Point)	\$65.00
108	Moisture Density Relations (Modified - 1 Point)	\$65.00
109	Swell Test	\$130.00
110	Consolidation Test	\$125.00
111	Consolidation Test (Timed/Rebound)	\$250.00
114	Moisture Content	\$15.00
115	Dry Density & Water Content of Undisturbed Sample	\$25.00
116	pH Determination	\$60.00
117	Resistivity of Soils	\$120.00
118	Soluble Salt Content	\$65.00
119	Chloride Content of Soils	\$65.00
120	Sulfate Content of Soils	\$65.00
121	Loss on Ignition (Organic Content)	\$75.00
129	R-Value	\$325.00
130	C.B.R. - 1 Point	\$290.00
131	C.B.R. - 3 Point	\$580.00
132	Shear Test (Per Point - Saturated)	\$200.00
133	Shear Test (Per Point - Dry)	\$150.00
134	Triaxial Compression (3 Points) (Quote)	Quote
135	Unconfined Compression	\$50.00
136	Permeability Test (Constant Head)	\$325.00
137	Flexible Wall Permeability (ASTM 5084)	\$325.00
138	Specific Gravity of Soils	\$90.00
139	Fine Aggregate Specific Gravity & Absorption	\$100.00
140	Coarse Aggregate Specific Gravity & Absorption	\$75.00
141	L.A. Abrasion	\$150.00
142	Sand Equivalent (Dry: Average of 3)	\$90.00
148	Sodium Sulfate Soundness (Coarse or Fine)	\$200.00
149	Magnesium Sulfate Soundness (Coarse or Fine)	\$200.00
153	Percent Carbonates in Aggregate, ARIZ 238	\$300.00
154	Coating Index of Mineral Aggregate	\$200.00
155	Unit Weight & Voids Content of Aggregate	\$100.00
156	Durability of Aggregate (Coarse or Fine)	\$200.00
157	Effect of Organic Impurities	\$450.00
161	Pit Run Sieve Analysis (Up to 6" Maximum Size)	\$165.00
162	Soil Cement or Lime Mix Design	\$1,000.00
163	Compressive Strength (Per Specimen)	\$50.00
164	Preparation of Compressive Strength Specimen (Loose Material)	\$50.00
165	Rock Core Density	\$40.00
166	Uncompacted Voids in Fine Aggregate	\$150.00
170	Sand Equivalent (Wet: Average of 3)	\$200.00
171	Moh's Hardness of Aggregate	\$50.00
172	Lime Content of Soil-Lime Mixtures by Titration (Quote)	Quote
173	Redox (Oxidation Reduction Potential)	\$150.00
174	Sulfide in Soil	\$65.00
176	Torvane Shear	\$175.00
179	Expansion Index	\$150.00
180	Porosity with Specific Gravity	\$200.00
181	C-33 Testing (Coarse & Fine Aggregate) - Quote	Quote
202	Point Load Strength Index of Rock	\$250.00
203	Unconfined Compressive Strength of Rock Core	\$50.00

**LABORATORY FEE & RATE SCHEDULE**

Code	Description	Price
<b>Asphalt Testing</b>		
300	Sample Preparation (Per Hour)	\$60.00
301	Asphalt Content by the Ignition Method with Gradation	\$175.00
302	Asphalt Content by the Ignition Method	\$135.00
303	Marshall Unit Weight on Premixed Asphalt Concrete (Set of 3)	\$135.00
304	Marshall Unit Weight, Stability & Flow on Premixed Asphalt Concrete	\$165.00
305	Gyratory Unit Weight on Premixed Asphalt Concrete (Set of 2)	\$250.00
306	Maximum Theoretical Density of Asphalt Concrete (Rice)	\$150.00
307	Bulk Density and Thickness of Compacted Bituminous Mixtures	\$35.00
308	Measured Thickness of Compacted Bituminous Mixtures (Cores)	\$15.00
309	Sawcutting or Splitting of Asphalt Cores (Per Cut)	\$25.00
310	Moisture Content of Asphalt Concrete	\$30.00
311	Nuclear Asphalt Content Gauge Calibration	\$1,000.00
312	Calibration of Ignition Furnace (Per Mix)	\$1,000.00
316	Bulk Density of Paraffin Coated Specimens (Cores)	\$75.00
317	Bulk Density of Paraffin Coated Specimens (Remolded)	\$190.00
320	Nuclear Gauge Asphalt Content (Per Sample)	\$100.00
321	Asphalt-Rubber Friction Course Mix Design (Quote)	Quote
322	Marshall Mix Design Verification/Checkpoint	\$1,500.00
323	ADOT/MAG/Asphalt Institute Marshall Mix Design	\$3,000.00
324	SHRP Volumetric Mix Design	\$5,000.00
325	Artificial Grading of Aggregate (ADOT 244)	\$500.00
326	Marshall Unit Weight on Lab Prepared Asphalt Concrete (Set of 3)	\$160.00
327	Marshall Unit Weight on Lab Prepared Asphalt Concrete with Stability & Flow	\$190.00
328	Immersion Compression of Asphalt Concrete (Set of 6)	\$800.00
329	Tensile Strength Ratio of Asphalt Concrete (Set of 6)	\$800.00
330	Gyratory Test Specimens Prepared at Single Binder Content	\$500.00
342	Viscosity of Asphalt-Rubber	\$100.00
343	Crumb Rubber Gradation	\$75.00
344	Moisture Content of Crumb Rubber	\$25.00
345	Detection of Metal in CRM Rubber	\$50.00
346	Ductility of Asphalt-Rubber Binder (Quote)	Quote
347	Specific Gravity of Crumb Rubber	\$120.00
348	Penetration, Resilience or Softening Point of Bitumen	\$100.00
373	Asphalt Retention Factor, Rush (Per Lot)	Quote
374	Residue in Emulsified Asphalt	\$100.00
375	Emulsified Asphalt Testing - Complete (Quote)	Quote
376	Abson Recovery, Viscosities & Penetration on Asphalt (Quote)	Quote
377	Asphalt Retention Factor (Set of 4)	\$2,500.00
378	Preformed Expansion Joint Filler (Quote)	Quote
379	Rejuvenating Fog Seal Testing - Complete (Quote)	Quote
380	Coating and Stripping of Bitumen - Aggregate Mixture (Quote)	Quote
381	Asphalt Binder Verification (Quote)	Quote
382	SHRP Volumetric Mix Design Verification/Checkpoint	\$2,000.00
383	Asphalt-Rubber Binder Design (non-ADOT Method) (Quote)	Quote
396	Specific Gravity of Bituminous Materials	\$100.00
397	Artificial Grading of Aggregate (Single Product)	\$250.00
398	Asphalt Mixture Properties (per sample)	\$450.00
399	Solvent Extraction (Per Sample)	\$500.00

**LABORATORY FEE & RATE SCHEDULE**

Code	Description	Price
<b>Concrete Testing</b>		
500	Specimen Trimming (Per Cut)	\$15.00
501	Concrete Cores (End Preparation & Compressive Strength)	\$60.00
502	Unit Weight of Hardened Concrete	\$40.00
503	Compressive Strength of Mortar (2 x 4)	\$15.00
504	Compressive Strength of Mortar (2 x 2)	\$15.00
505	Compressive Strength of Grout Prisms	\$20.00
506	Compressive Strength of Concrete Cylinders (4 x 8)	\$15.00
507	Compressive Strength of Concrete Cylinders (6 x 12)	\$25.00
508	Tensile Strength of Concrete Cylinders (4 x 8)	\$15.00
509	Flexural Strength of Concrete Beam (Per Specimen)	\$65.00
510	Absorption of Brick/Paver (each, 3 min.)	\$50.00
511	Compressive Strength of Brick/Pavers (each, 3 min.)	\$50.00
512	Concrete Mix Design (Quote)	Quote
513	Mix Design/Restrained Expansion/Sulfate Resistance (Per Trial) (Quote)	Quote
514	Concrete Resistance to Sulfate Attack (Per Trial)(Quote)(Quote)	Quote
515	Restrained Expansion of Concrete (Per Trial) (Quote)	Quote
516	Length Change of Hardened Concrete	\$450.00
517	Chemical Analysis of Portland Cement (Quote)	Quote
518	Chloride and/or Sulfate Content of Concrete (Quote)	Quote
519	Set Time	\$200.00
520	Water Soluble Chloride (ASTM C1218)	\$350.00
521	Thickness of Hardened Concrete (Cores)	\$20.00
522	Air Content of Mortar	\$125.00
523	Mortar Mix Design (Quote)	Quote
524	Compressive Strength (Non-Standard Specimen) (Quote)	Quote
525	Slurry/CLSM Mix Design (Quote)	\$500.00
526	Compressive Strength of Concrete Cylinders (3 x 6)	\$15.00
529	Compression of Grouted or Ungouted Masonry Prism	\$175.00
530	Dimensional Tolerances of Brick (per specimen)	\$35.00
531	Squareness of Brick (per specimen)	\$25.00
532	Density, Absorption, and Voids in Hardened Concrete (per specimen)	\$125.00
698	Miscellaneous Testing (Quote)	Quote



## ATTACHMENT 3

### SCOPE AND FEE FROM TRAFFICADE



# WSP

**Attn: Kevin Porter**

**Lo: Various Locations, Flagstaff AZ.**

**Bid Date: 6/9/2021**

01B

**WE PROVIDE:**

BARRICADES

TRAFFIC CONTROL

TRAFFIC PLANS

PLATES & SHORING

PAVEMENT MILLING

SAWING & CORING

BARRIER WALL

SAFETY SUPPLIES

CUSTOM SIGNS

SIGN INSTALLATIONS

ASPHALT PAVING

**Locations:**

**Phoenix**

2533 W. Holly St.  
Phoenix, AZ 85009  
(602) 431-0911

**Chandler**

17046 S. Weber Dr.  
Chandler, AZ 85226  
(602) 431-0911

**Tucson**

2802 N. Flowing Wells Rd  
Tucson, AZ 85705  
(520) 624-0465

**Prescott**

11580 E. Santa Fe Loop  
Dewey, AZ 86327  
(928) 759-0094

**Flagstaff**

5301 E. Commerce Ave.  
Flagstaff, AZ 86004  
(928) 759-0094

**Yuma**

3178 33<sup>rd</sup> Place, Suite A  
Yuma, AZ 85365  
(928) 344-5046

**TRAFFIC CONTROL ESTIMATED DAILY RENTAL COST\***

**R1, R6, R8, R11, R12 OR R13: typical 1-direction edgeline OR typical 1-direction turn lane closure – Work Area: 50 FT.**

- Estimated rental cost per day is \$40.00\*.
- Estimated initial charge for sale items & (1) TCP is \$115.00\*.
- Estimated labor cost for the initial set up OR final pick up is \$120.00\* per occurrence.

**R4, R7, R8, R9, OR R10: typical 1-direction single lane closure – Work Area: 50 FT.**

- Estimated rental cost per day is \$130.00\*.
- Estimated initial charge for sale items & (1) TCP is \$115.00\*.
- Estimated labor cost for the initial set up OR final pick up is \$140.00\* per occurrence.

**EXCLUSIONS:**

Municipal Plan Review Fee, Permit Fees, Shadow Truck, Project Specialty Signs, Concrete or Water Filled Barrier Wall, Flagman, Police Officers, Stand by Time, ADA Ramp, ADA Compliance.

**\*TERMS / CONDITIONS:**

- Invoices will be based off the actual ticketed equipment and / or labor delivered to the job.
- This quote is valid for 60 days. If work starts after 60 days, then Trafficade reserves the right to nullify this quote and re-quote at its own discretion.
- Sales tax is not included and will be added to all billings. Tax rate subject to change if the prevailing rate changes.
- 0% Retention

**Trafficade Estimator: Luis Aguilar  
602-431-0911 - luis@trafficade.com**



## ATTACHMENT 4

### SCOPE AND FEE FROM PRIVATE UTILITY



USGroundZero Utility Locates LLC

15301 N 183<sup>rd</sup> Dr.

Surprise, AZ 85388

(480) 868-0504

(602) 366-0686

[c.torrez@usgzutilitylocates.com](mailto:c.torrez@usgzutilitylocates.com)

INVOICE:     P2934    

DATE:     06.16.21    

## AUTHORIZATION TO PROVIDE SERVICES

BILL TO: WSP USA

JOB LOCATION: 11 drilling locations

NAME: Kevin Porter, P.E

NAME: Commercial Property

ADDRESS: 1230 W. Washington St, Ste 405  
Tempe, AZ 85281

ADDRESS: Flagstaff, AZ

Kevin.porter@wsp.com

PHONE: (480) 449-4933

HOME PHONE: \_\_\_\_\_

WORK: (480) 907-4626

JOB DESCRIPTION:

Will locate "private traceable utilities" within a 25' radius of (9) drilling locations. Not all lines may be located due to public utilities and non-traceable utilities in area.

\*Public bluestake should be notified for verification. (811) No public utilities will be located per ACC.

Billing at \$165/hr dispatch fee x 6 = \$990.00

Billing at \$180/hr x 4 hr minimum = \$720.00

Total: \$1,710.00 (Proposal is void after 30 days.)

The Customer agrees that services performed under this Agreement by USGroundZero Utility Locates, LLC, may result in less than all buried lines, pipes and other items being located due to local soil conditions and other unforeseen variables in attempting to locate items buried beneath the soil. It is further agreed that USGroundZero Utility Locates, LLC, has given no guarantee or warranty, implied or expressed, that it will be able to locate any or all buried items contracted for. It is understood that USGroundZero Utility Locates, LLC's services are limited to a "best effort basis" only. No one, be it salesperson, firm or corporation, shall be authorized to agree or assume for USGroundZero Utility Locates, LLC, any other liability in connection with contracting of services hereunder. In the event that the customer suffers damage of any kind as a result of USGroundZero Utility Locates, LLC's failure to locate any or all other buried items contracted for, be it by negligence or otherwise, then in that event, the parties hereto agree that recoverable damages from USGroundZero Utility Locates, LLC, shall be limited to the customers actual damages or an amount not exceeding the contract price, whichever is the lesser. The sum is agreed to for liquidated damages with the understanding that U/SGroundZero Utility Locates, LLC, has not guaranteed or warranted its performance in any manner.

The Customer agrees to pay to USGroundZero Utility Locates, LLC, the charges set forth above. Payment shall be made upon receipt of the service or billing date, whichever occurs first. In the event payment is not made within such time period, customer agrees to pay interest at the rate of 2.5% per month (24%) per annum on the unpaid balance from the date of the completion of service or date of billing, whichever occurs first. In the event it is necessary to refer customer's account for collection, customer hereby agrees to pay all costs of collection including attorney's fees incurred.

The terms and conditions as stated above on this Agreement are incorporated herein by this reference. By his/her signature below, Customer acknowledges they have read and received a copy of it.

I hereby acknowledge the satisfactory completion of the above described work.

Customer's Signature \_\_\_\_\_

Date \_\_\_\_\_



**Western Technologies Inc.**

The Quality People Since 1955

2400 East Huntington Drive  
Flagstaff, Arizona 86004-8934  
(928) 774-8700 • fax 774-6469

**AUTHORIZATION FOR SERVICE**

CLIENT NO. P.O. OR W.O. NO. **2581PE284**

CLIENT **AMES CONSTRUCTION**  
**ATTN: MR. DARIN BAILEY**  
**8333 EAST HARTFORD DRIVE**  
**SCOTTSDALE, ARIZONA 85255**

WT JOB NO.

EVENT / INVOICE NO.

AUTHORIZED BY

LAB NO.

DATE

FUNCTION CODE

TELEPHONE NO. **602-319-5207**

FAX NO. **EMAIL: DARINBAILEY@AMESCO.COM**

PROJECT NAME **LONE TREE OVERLAY OF BRIDGE – ENVIRONMENTAL MONITORING**

PROJECT LOCATION **LONE TREE, FLAGSTAFF, ARIZONA**

COPIES OF REPORT TO: **MR. DARIN BAILEY**

VERBAL REPORTS TO: **MR. DARIN BAILER**

WT PAY CODE	SCOPE OF WORK
	WESTERN TECHNOLOGIES INC. WILL FURNISH THE MATERIALS AND LABOR NECESSARY TO PERFORM THE FOLLOWING SERVICES PERTAINING TO THE ABOVE PROJECT
1	The Client has requested WT conduct environment monitoring during the assessment of the parcels associated with the Lone Tree Overlay of the Bridge. WT considered <b>20</b> hours of project management for this project at a fee rate of <b>\$135.00</b> per hour (total <b>\$2,700.00</b> ).
2	WT will observe the field activities associated with pot hole excavations and drilling conducted at the proposed seven locations within Ames identified parcels 104-04-011D, 104-01-019, 104-01-020D, 104-01-023, 104-01-093, 104-01-097D, and 104-01-098A. WT assumes that the Project can be completed in level D personal protective clothing. Field screening equipment will be used to monitor air conditions during field activities. The field screening equipment fee is <b>\$75.00</b> per day (considered 8 days thus a total of <b>\$600.00</b> ). WT considered an estimate of <b>30</b> hours of field time at a fee rate of <b>\$80.00</b> per hour (total <b>\$2,240.00</b> ).
3	WT will collect soil samples based on field observations and screenings. WT considered up to two samples per excavation or boring. These samples will be documented on a chain-of-custody record and stored in a cooler with ice and shipped to the Arizona Department of Health Services licensed laboratory. The laboratory will be instructed to analyze the samples on a standard 7- to 10--working day basis, from the date of receipt by the laboratory.
4	The soil samples will be submitted to the laboratory and analyzed for BTEX (benzene, toluene, ethylbenzene and total xylenes) using EPA method 8260, polynuclear aromatic hydrocarbons using EPA method 8270C SIM, and Toxicity Characteristic Leaching Procedure for the 8 Resource Conservation and Recovery Act metals using EPA method 1311. The analytical results will be compared to applicable regulatory action levels and landfill disposal levels. The fee for the analysis of one sample with these analyses is <b>\$310.00</b> . For a total of 14 soil samples analyzed the fee is <b>\$4,340.00</b> .
5	A letter summarizing field activities and field reading will be provided along with the analytical reports with the chain-of-custodies. The reporting fee estimate is <b>\$500.00</b> . The total fee for WT's services is estimated at <b>\$10,380.00</b> . Additional work, which might be indicated by the discovery of unanticipated conditions in the field, will be performed only with your authorization and as part of subsequent studies in accordance with our current fee schedule attached hereto.
THE DEFINED WORK ASSIGNMENT WILL BE COMPLETED BY (DATE): <b>TBD</b>	

FEES FOR SERVICES
FEES FOR THESE SERVICES WILL BE: (A) LUMP SUM OF (B) IN ACCORDANCE WITH ATTACHED FEE SCHEDULE WITH AN ESTIMATED MAXIMUM OF <b>\$10,380.00</b>
PAYMENT FOR SERVICES WILL BE PAID: <input type="checkbox"/> IN ADVANCE <input checked="" type="checkbox"/> DUE IN FULL UPON INVOICING

SPECIAL INSTRUCTIONS:

RECEIVED BY \_\_\_\_\_ DATE \_\_\_\_\_  PROPOSED BY **SUSAN B. KALETA** DATE **8/13/2021**

THE "STANDARD TERMS AND CONDITIONS" ATTACHED TO THIS FORM ARE AN INTEGRAL PART OF THIS CONTRACTUAL AGREEMENT. AMONG OTHER THINGS, THE STANDARD TERMS AND CONDITIONS LIMIT THE LIABILITY OF WESTERN TECHNOLOGIES INC. ("WT") TO CLIENT. TOGETHER WITH THE FOREGOING SCOPE OF WORK AND THE RELATED FEES AND CHARGES, THE STANDARD TERMS AND CONDITIONS COMPRISE THE ENTIRE AGREEMENT (THE "AGREEMENT") BETWEEN CLIENT AND WT WITH RESPECT TO THE SCOPE OF WORK.	THE UNDERSIGNED, ACTING AS A DULY AUTHORIZED REPRESENTATIVE OF CLIENT, HAS REVIEWED THE ABOVE SCOPE OF WORK AND RELATED FEES AND CHARGES AND ALL OTHER PARTS OF THE AGREEMENT, AND HEREBY ACCEPTS THE AGREEMENT AND AUTHORIZES WT TO PROCEED. CLIENT: <b>AMES CONSTRUCTION</b>
IN THE EVENT A WRITTEN MASTER AGREEMENT, SIGNED BY BOTH CLIENT AND WT, IS PRESENTLY IN EFFECT THAT BY ITS TERMS IS INTENDED TO GOVERN THE SCOPE OF WORK DESCRIBED ABOVE, THEN THE TERMS AND CONDITIONS OF SUCH AGREEMENT SHALL CONTROL IF IN CONFLICT WITH THE STANDARD TERMS AND CONDITIONS ATTACHED TO THIS FORM.	BY (SIGNATURE) _____ DATE _____ PRINT NAME _____ TITLE _____

COMMENTS:

*Juan B. Kalita* **8-13-2021**  
COMPLETED / APPROVED BY WT PROJECT MANAGER DATE

## STANDARD TERMS AND CONDITIONS

The Agreement between **Western Technologies Inc.** ("WT") and Client shall include and be subject to WT's Proposal and these Standard Terms and Conditions. The terms of the Agreement shall prevail over any different or additional terms contained in any document to which WT's work relates. WT's commencement of work shall constitute Client's acceptance of the Agreement.

### 1. SERVICES

**1.1** WT agrees to render such services requested in writing by Client that are stated in the Scope of Services or similar written agreement. WT shall have no responsibility to perform services beyond such requests, and none shall be imputed or implied.

**1.2** The services rendered by WT are for the benefit of Client alone and relate only to conditions observed at specified locations at the time WT's work is performed. There are no intended third-party beneficiaries to this Agreement, and nothing herein shall create a contractual relationship with or claim or cause of action in favor of a third party against WT.

**1.3** The presence of WT's field technicians or representatives, if called for in the Agreement, is for the provision of services hereunder, and does not include supervision or direction of the work of Client or its subcontractors. Neither the presence of, nor any observation or testing by WT personnel shall excuse Client or its subcontractors from any deficiencies in their work.

**1.4** When performing its work, WT will take reasonable precautions to avoid damage or injury to subterranean structures or utilities. Client shall indemnify, defend, and hold WT harmless from and against any damages to such structures and utilities that are not called to WT's attention and correctly shown on the plans furnished to WT. It is Client's obligation to contact appropriate utility companies and/or private utility locators for information regarding buried utilities, mark such utilities, and take other precautions to prevent damage or injury.

**1.5** Client agrees that if Client commences litigation, mediation, arbitration, or any such proceeding against WT, WT shall have the right to withdraw and terminate ongoing work and services conducted for Client on any contract and project, in which event Client shall pay WT for work and services performed up to the time of termination.

### 2. PAYMENT

**2.1** WT will invoice Client monthly for services performed. Client shall pay such invoices upon receipt without deduction for retention or offset. **Failure to pay within 60 days of invoice shall operate to release WT from any and all claims that Client may have; Client further shall have no right to use or rely on any report prepared by WT, and shall return all such reporting to WT.** Furthermore, WT shall have the right to immediately terminate and cease performance of all services then being performed for Client on any contract and project until all amounts owed are received by WT. Interest shall accrue on the unpaid balance of any invoice not paid in full within 30 days at the rate of 1.5% per month. Collection agency fees, attorneys' fees, and associated costs that are incurred by WT to collect past-due invoices (including post-judgment fees and costs) shall be payable by Client.

**2.2** Estimates of fees are only estimates and shall not be regarded as "lump sum" or "fixed price" or "guaranteed maximum" compensation. Client remains obligated to pay WT's invoices for actual work performed, whether or not the fee estimate is exceeded. For work requested by Client that is additional to or outside the written Scope of Services and/or written service request, Client shall sign such documentation requesting such work or services and process and pay WT's invoices.

### 3. STANDARD OF CARE

**3.1** The services referred to herein will be performed in accordance with the general standard of care practiced locally by providers of such services, and relate only to the conditions observed or samples tested at the time and place reported. **WT makes and intends no other warranty or representation, express or implied.** WT shall not be responsible for any consequences due to changed conditions or for the failure of any person or entity to perform or install work in accordance with the plans and specifications.

**3.2** Soil, subsurface, and groundwater conditions can vary between and among sampling points and with time. WT makes no representation that the points selected for sampling are in any way representative of the entire site or project. **Unless circumstances have changed justifying an earlier expiration of validity, geotechnical and earthwork reports are valid for a period of one year from the date of issuance; all other reports, including Phase I reports, are valid for a period of 180 days from the date of issuance.**

**3.3** Where WT's services involve geotechnical evaluations or field observation of earthwork, grading, filling, or compaction, Client agrees:

**3.3.1** WT is not responsible for the manner in which such work is performed;

**3.3.2** WT is not responsible for any work performed at any time when WT was not physically present and observing that specific work; and

**3.3.3** For continuous observations, Client shall not allow grading, filling, or compaction to be performed at any time that WT is not physically present at the site, and shall restrict the amount and extent of such grading, filling and compaction to that which can be observed by WT at the site.

**3.4** WT has no right, duty, or obligation to stop Client's or any of Client's subcontractor's work.

**3.5** Client agrees and acknowledges that WT makes no recommendation or opinion other than those set forth in writing and contained in WT's reporting; WT makes no oral recommendations or opinions. Field and lab technicians are not engineers. Client acknowledges and agrees that it has no right to rely on, and that there will be no, express or implied recommendations or opinions of any sort from field or lab technicians.

**3.6** Client is obligated to, and shall, directly and specifically notify WT as and when Client wants WT to perform services hereunder. WT shall be subject to no implied duties to observe or test, or to provide reports, other than the actual observation, testing, and reporting performed.

**3.7** "Certification" means and implies the expression of professional opinion. It is not a warranty or guaranty.

### 4. INDEMNITY AND INSURANCE

**4.1 NOTWITHSTANDING ANY OTHER PROVISION IN THE PARTIES' AGREEMENT, WT PROVIDES NO INDEMNITY, WARRANTY, OR GUARANTEE, EXPRESS OR IMPLIED, TO CLIENT OR TO ANY OTHER PERSON OR ENTITY.**

**4.2** Client shall be adequately insured. Client and its insurers jointly and severally waive subrogation against WT and its insurers.

### 5. LIMITATIONS OF LIABILITY

Client and WT recognize the relative risks and benefits of this Agreement, and agree to the fair allocation of risk between them as follows:

**5.1 NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, WT'S TOTAL AGGREGATE LIABILITY TO ANY PERSON OR ENTITY, INCLUDING CLIENT, ON ANY CLAIM, ACTION OR LIABILITY OF ANY KIND OR BASIS WHATSOEVER, IN ANY MANNER ARISING OUT OF THE WORK DONE BY WT SHALL BE STRICTLY LIMITED TO THE GREATER OF \$50,000 OR THE FEE CHARGED FOR WT'S SERVICES HEREUNDER.**

**5.2** WT shall not be liable for loss of profit, delay, or for any special, incidental, indirect, or consequential damages of any kind, nature or description, from any cause whatsoever.

**5.3** No proceeding, action or claim of any kind whatsoever, whether in law or equity, may be brought against WT regarding any work performed by WT, more than four years after the cessation of WT's work.

**5.4 EXCEPT FOR ENVIRONMENTAL SERVICES THAT SPECIFICALLY INCLUDE AN INDOOR MOLD SURVEY, NO ACTION OR CLAIM OF ANY KIND WHATSOEVER MAY BE BROUGHT AGAINST WT ARISING OUT OF THE PRESENCE OR EXISTENCE OF MOLD. ALL SUCH ACTIONS ARE ABSOLUTELY BARRED AND CLIENT ABSOLUTELY AND IRREVOCABLY RELEASES WT FROM ALL SUCH CLAIMS AND LIABILITIES.**

**5.5** No officer, director, principal, employee, or agent of WT shall ever be personally sued, joined, liable, or responsible regarding any claim whatsoever. **ALL SUCH ACTIONS ARE ABSOLUTELY BARRED AND CLIENT ABSOLUTELY AND IRREVOCABLY RELEASES SUCH INDIVIDUALS FROM ALL ACTIONS, CLAIMS, LIABILITIES, AND RESPONSIBILITY.**

### 6. HAZARDOUS MATERIALS AND OTHER SITE CONDITIONS

WT does not create, generate, arrange for or transport, dispose, own, or store hazardous materials or operate any such facility in the performance of its work. Client shall maintain possession of and be responsible for the removal and disposal of all hazardous materials including, but not limited to samples, drilling mud, fluids and cuttings, decontamination and well development fluids, and used protective gear and equipment. Client assumes full responsibility for compliance with the provisions of RCRA and any other federal or state statute or regulation governing the handling, treatment, or storage and disposal of hazardous wastes and pollutants. Client shall be solely responsible for notifying all appropriate agencies and prospective buyers of the existence of any hazardous or dangerous materials located on or in the project site, or discovered during the performance of the Agreement, as may be required or advised by such agencies and buyers.

### 7. PROPERTY

**7.1** All work papers (including reports, field notes, laboratory notes, laboratory test data, calculations and other documents prepared by WT), electronic data files and other work product generated by or for WT in connection with the Scope of Work are the property of WT. Samples obtained shall remain the property of Client.

**7.2** Client has the right to use the reports, recommendations, design criteria and similar information submitted to it by WT, provided that Client pays WT's invoices. Client expressly agrees that no information produced or provided by WT shall be used for or at any location or for any project or project extension that is not expressly set forth in this Agreement without WT's prior written permission.

**7.3** Because data stored on electronic media can deteriorate or be modified without WT's knowledge or control, Client assumes all responsibility for the completeness, correctness, and/or readability of electronic data. Client will indemnify, defend, and hold WT harmless of and from the use of and any reliance upon any part of said electronic data and/or anything generated from them. The controlling document regarding any document prepared by WT shall remain and always be the signed hard-copy paper document, and not any electronic form or format of such document.

**7.4** Client shall not assign this Agreement, any of WT's reporting or work product, or any legal or equitable claim involving WT, without the prior express written consent of WT. Any purported assignment without the prior express written consent of WT shall be null and void.

### 8. TERMINATION

In addition to termination otherwise authorized by law and equity, this Agreement may be terminated by either party upon providing written notice of termination.

### 9. WT NOT BOUND

WT shall not be bound by: any provision incorporating by reference any contract or term of any contract unless the term or terms incorporated by reference are specifically furnished to WT and are expressly agreed to in a writing signed by WT; any provision or agreement providing for or imposing liquidated damages however described or denominated; any provision waiving any right to a mechanic's lien; any provision conditioning payment for WT's services upon payment to Client by any third party; any provision requiring the application of law or jurisdiction other than that which applies to the place of the project; any provision permitting Client to take possession of any property of WT; or any provision requiring mediation or arbitration of any claim or dispute.

### 10. FEES AND COSTS

In the event of any claim or litigation arising out of the work, including the Agreement, the prevailing party shall be entitled to an award of its attorneys' fees, consultants' fees, and costs.



**CURRENT WT FEE SCHEDULE**

**ENVIRONMENTAL SERVICES**

Project Principal .....	\$ 150.00 Hr
Project Director .....	\$ 135.00 Hr
Certified Industrial Hygienist .....	\$ 140.00 Hr
Project Manager .....	\$ 125.00 Hr
Senior Project Engineer/Geologist/Scientist .....	\$ 85.00 Hr
Project Engineer/Geologist/Scientist/Industrial Hygienist .....	\$ 80.00 Hr
Senior Graphics Technician .....	\$ 75.00 Hr
Clerical Support Services .....	\$ 50.00 Hr
Safety Equipment, Per Man, Per Day .....	\$ 75.00 Ea
Field Sampling Equipment, Per Day .....	\$ 75.00 Day
Field Monitoring Equipment, per instrument per day .....	\$ 75.00 Day
Polarized Light Microscopy (PLM), 5-day .....	\$ 11.00 Ea
Phase Contrast Microscopy (PCM), 24-hour .....	\$ 20.00 Ea
Transmission Electron Microscopy (TEM), 24-hour .....	\$ 120.00 Ea
Volatile Organic Compounds (VOCs Full List 8260B), 5 to 7 day .....	\$ 105.00 Ea
Polynuclear Aromatic Hydrocarbons (PAHs 8310), 5 to 7 day .....	\$ 105.00 Ea
Mileage .....	\$ 0.65 Ea
Any Other Analytical Chemistry Services .....	by quote
Subcontracts/Materials/Supplies/Expendables .....	cost + 20%



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## SERVICE AGREEMENT

August 17, 2021

**Specialized Services Company**, an **Arizona Corporation** ("**SSC**" and/or "**Specialized Services**"), 2001 W. North Lane, Phoenix, Arizona, 85021, proposes to furnish and provide all labor, material, and equipment necessary to provide the following services for **Ames Construction** (the "Client"):

**Services to be performed:** Vacuum excavation services as required at Client-designated sites.

**Time or Location of Performance:** Lone Tree Project – Flagstaff, AZ

Scope of Work: **See Attachment A**

**Payment Terms:** Net 30 days

Any alteration or deviation from the specifications contained in this proposal involving extra cost for material, labor, or other expenses resulting from the alteration or deviation from the specification will only be executed upon written orders for same and will require extra charges over the sum quoted in this proposal. All agreements will be made in writing.

### SPECIALIZED SERVICES COMPANY

By: *Arvid L. Veidmark III*  
Arvid Veidmark III – Executive Vice President

### **Client's Acceptance:**

Specialized Services Company is hereby authorized to furnish all labor, equipment, and other resources required to complete the work described in this proposal as required by the Client, for which the Client agrees to pay the amount specified in said proposal and according to the terms thereof. Should either party to this Agreement be in default and the contract placed in the hands of a third party for collection, or if suit is brought thereon, the undersigned organization, or person or persons or either, agree to pay reasonable collection or attorney's fees, plus default interest at 1.5 % per month in addition to the amount due thereon for the expenses of collection.

All parties agree that a facsimile transmission of the signature constitutes an original and binding document. The laws of the State of Arizona shall govern this Agreement and suits may only be brought in Arizona courts.

Signature Corporate Officer: \_\_\_\_\_ Date: \_\_\_\_\_

Authorized to sign for: \_\_\_\_\_ (Print company name)

Print Name: \_\_\_\_\_ Title: \_\_\_\_\_

# ATTACHMENT A

This Attachment A is specifically incorporated into and made a part of the Service Agreement between Specialized Services Company and the Client.

## Scope of Work:

SSC will provide a vacuum truck and crew to vacuum excavate and expose utilities or provide vacuum excavation as directed by the Client. SSC will temporarily backfill all holes temporarily with native material. SSC will dump all remaining spoils onsite at a location designated by the Client. SSC will patch all holes in asphalt or concrete with temporary cold patch.

## Proposal:

### Schedule of Values (VacMaster System 4000 Air Vac):

\$225.00 per hour when crew(s) arrives at jobsite until crew(s) leaves jobsite, 4 hr. min.

Mobilization for the crew(s) is \$160.00 per hour portal to portal, 1 hr. Min.

Saturday/Sunday/Holiday/Overtime work is \$235.00 per hour when crew(s) arrives at jobsite until crew(s) leaves jobsite, 4 hr. min.

- SSC will supply the Client with a hand-written Utility Report for each utility located, included in hourly rate.
- Additional crewmembers are \$48.00 per hour.
- All holes in asphalt or concrete will be patched with temporary cold patch and backfilled with native soil unless noted otherwise, backfilling is temporary.
- Any utility we pothole where we encounter slurry backfill or concrete encasement will require 2 holes, one on either side of the encasement to confirm the depth on each side.
- The Client or Owner is responsible for all compaction testing on holes.
- Overnight stay for the crew will be billed at a nightly per diem rate of \$320.00 per night.
- Traffic control, temporary fencing, shoring, permits and barricades provided at cost + 15%.

**Note: Estimated totals for hours are estimates only, final quantities will be based on completed hours accumulated in the field upon completion of the project.**

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Initial: \_\_\_\_\_ Date: \_\_\_\_\_

**Comments:**

- A.  SSC will keep daily logs and sign-off sheets on site for hour/hole projects. The Client is responsible for having a representative on-site to sign-off on a daily basis. If the Client does not have a representative on-site to sign-off, then the Client agrees to accept all hour/holes billed by SSC backed up by the daily logs.
- B.  SSC is not responsible for cleaning-out excavations dug by SSC crews that become filled with rain run-off, debris from broken water, sewer, and force main or pressurized lines that fill the hole or cause settlement. The Client and SSC will mutually determine additional compensation for SSC's time and materials to clean out any excavations.
- C.  SSC reserves the right to subcontract any portion of the work listed in the scope and inclusions as needed to maintain the Client's schedule.
- D.  SSC is not responsible for any holes that settle regardless of the backfill and restoration method.
- E.  Mobilization of equipment and personnel for this project will be subject to availability of equipment on a first come-first served basis at the time of an executed subcontract.
- F.  Where safety is an issue an additional crewmember may be required, this would be if excavating in a pit over 4' deep or in an area where 3 crewmembers are needed to run the job safely. Where this is the case the additional crewmember will be charged to the job at the rate listed on page 2.
- G.  During the course of the agreement if a project arises that has Davis-Bacon Wages, SSC reserves the right to increase the hourly rate to compensate for the increase in hourly pay to the crew members.
- H.  Customer understands and agrees that services performed using electronic utility locating may result in less than all buried lines, pipes and other items from being located. Electronic utility locating can be used to provide a starting point of locating of private utilities, followed by vacuum excavation to confirm the exact elevation and location of the identified utility.
- I.  A pre-lien notice will be mailed on all projects and is not a reflection on the integrity of any Owner, Contractor or Subcontractor.

**Exclusions:**

Specialized Services Company is not responsible for the following:

- A.  De-watering of any type if ground water is encountered during excavation or potholes
- B.  Replacement of any permanent concrete replacement such as sidewalk or driveways and any compaction testing on the holes after backfilling.
- C.  Supply, setup, tear down, and removal of any temporary fencing of entire job site, pits & equipment
- D.  Permits, bonds and sales taxes (SSC Bond rate 2.5%)
- E.  Special insurance, special wording including but not limited to additional insured on forms CG2010 (\$100.00 per additional insured listed) & CG2037 (\$500.00 per additional insured listed).
- F.  Construction water and/or fire hydrant hook-ups and any meters
- G.  Security personnel to protect the job site
- H.  Steel plates of any size to cover the hole or excavation
- I.  Pea-gravel to backfill potholes
- J.  Slurry to fill excavations or potholes

***This offer is good for 15 days from date of issue.***

Initial: \_\_\_\_\_ Date: \_\_\_\_\_

## Project Information Sheet

Please help us to provide you with the best service by providing this basic project and administrative information.

Project Name: \_\_\_\_\_

Actual Address: \_\_\_\_\_

Project Owner: \_\_\_\_\_

Field Contact: \_\_\_\_\_ Phone #: \_\_\_\_\_

Billing Contact: \_\_\_\_\_ Phone #: \_\_\_\_\_

E-Mail Address for Invoices: \_\_\_\_\_

Job #/PO # to Reference on Invoices: \_\_\_\_\_

Any other information that might be helpful for us to know:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*Thank you!*



Initial: \_\_\_\_\_ Date: \_\_\_\_\_