### RESOLUTION NO. 04 25 2024A

A RESOLUTION AUTHORIZING A SUPPLEMENTAL AGREEMENT WITH SCI ENGINEERING, INC., PROVIDING FOR ADDITIONAL GEOTECHNICAL SERVICES FOR THE O'FALLON REGIONAL LAW ENFORCEMENT TRAINING CENTER, IN AN AMOUNT NOT TO EXCEED \$39,270.00.

WHEREAS, the City of O'Fallon entered into an agreement with SCI Engineering, Inc., in 2022 for geotechnical and environmental services for an amount not to exceed \$53,700; and

WHEREAS, the City of O'Fallon entered into Supplemental Agreement No. 1 with SCI Engineering, Inc., in 2022 for additional environmental services for an amount not to exceed \$4,300; and

**WHEREAS**, the City of O'Fallon will enter into Supplemental Agreement No. 2 for additional geotechnical services that include soil, lab, and construction material testing, which pushes the total amount of the contract above the threshold requiring City Council approval; and

WHEREAS, City Staff recommends approval of this Resolution.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF O'FALLON, MISSOURI, AS FOLLOWS:

**SECTION 1:** The City Council approves on behalf of the City an agreement with SCI Engineering Inc. for additional geotechnical services at a cost not to exceed \$39,270, in substantial conformity with the agreement terms shown on Exhibit A attached hereto and incorporated herein by this reference as if set out here in full, together with such changes therein as shall be approved by the officers of the City executing same which are consistent with the provisions and intent of this legislation and necessary, desirable, convenient or proper in order to carry out the matters herein authorized. The City Administrator and other appropriate City officials are hereby authorized to execute Supplemental Agreement No. 2 and such additional documents and take any and all actions necessary, desirable, convenient or prudent in order to carry out the intent of this legislation.

PASSED BY THE CITY COUNCIL FOR THE CITY OF O'FALLON, MISSOURI, THIS 25<sup>TH</sup> DAY OF APRIL 2024.

Presiding/Officer

Attest:

Bess Bacher, City Clerk

## **RESOLUTION NO. 04 25 2024A**

APPROVED BY THE MAYOR FOR THE CITY OF O'FALLO	ON, MISSOURI, THIS 25 <sup>TH</sup> DAY OF
APRIL 2024.	
Attest: Bess Bacher, City Clerk	Bill Hennessy, Mayor
D. C.	Approved as to Form:
DI I M	Bu M. O'Kal.
	Kevin M. O'Keefe, City Attorney

# SUPPLEMENTAL AGREEMENT #2 TO GEOTECHNICAL ENGINEERING SERVICES AGREEMENT

This Supplemental Agreement is made part of an agreement dated <u>April 1, 2022</u> between the <u>City of O'Fallon</u> and <u>SCI ENGINEERING, INC.</u> for additional geotechnical engineering as part of the <u>O'Fallon Regional Law Enforcement Training Center Project.</u>

The purpose of this supplemental agreement is to provide for additional geotechnical engineering services for grading work, and also includes construction material testing for the project to be in an amount not to exceed <u>Thirty Nine Thousand Two Hundred and Seventy Dollars and No Cents</u> (\$39,270.00) without further authorization. The total cost of services for the contract, including all supplementals, shall be in an amount not to exceed Ninety Seven Thousand Two Hundred Seventy Dollars and No Cents (\$97,270.00).

In all other respects, the terms and conditions of the survey Services Agreement shall remain in full force and effect, except as specifically modified by this Supplemental Agreement.

Attachment A outlines the Scope of Services and the Cost for this Supplemental Agreement.

Supplemental Agreement accepted as defined herein:

CITY OF O'FALLON, MISSOUI	RI SCI ENGINEERING, INC.
(Signature) Josep - Cledy	(Signature)
Michael Snowden (Printed Name)	Printed Name)
City Administrator (Title)	Project runger (Title) 4/5/24
04/25/2024 (Date)	(Date)
ATTEST:	ATTEST:
Bess Bacher	To Marie The Control of the Control
TOUR DED	



SCI ENGINEERING, INC.
EARTH • SCIENCE • SOLUTIONS

GEOTECHNICAL
ENVIRONMENTAL
NATURAL RESOURCES
CULTURAL RESOURCES
CONSTRUCTION SERVICES

March 29, 2024

Chris Clercx City of O'Fallon 100 North Main Street O'Fallon, Missouri 63366

RE: Construction Observation/Testing Services Fee Estimate

O'Fallon Police Department Training Facility - Phase 1A

O'Fallon, Missouri SCI No. 2022-0217.01

### Dear Chris Clercx:

SCI Engineering, Inc. (SCI) is pleased to present our *Fee Estimate* to provide Construction Testing and Observation Services for the Phase 1A portion of the O'Fallon Police Department Training Facility project, in O'Fallon, Missouri. We previously explored the subsurface conditions of the project site, and reported our results in our subsurface report titled, "*Geotechnical Report – O'FALLON POLICE DEPARTMENT TRAINING FACILITY – O'FALLON, MISSOURI.*" dated June 2022.

### PROJECT DESCRIPTION

Based on the plans prepared by Crawford, Murphy & Tilly, we understand Phase 1A of the project will consist of mass grading to prepare the site for the future installation of the police firing range, a pavilion building, and the access road from Firma Road. Phase 1A includes grading to prepare all site building pads for future buildings not part of this phase. Phase 1A also includes a storm pipe, weir structure, and grading to properly convey water through the site.

### SCOPE OF SERVICES

During construction, we understand our scope of services includes:

• Compaction testing of mass grading and utility trench backfill (60 days)

Although not specifically requested at this time, SCI can also perform additional services, if desired. Should any additional services be required, please contact us. We may provide you with a supplemental proposal, at that time.

SCI personnel will make trips to the project site, as scheduled by your representative, to perform the requested testing/inspection services. As part of the construction team, SCI's on-site personnel will work with the contractor's personnel to perform the requested tests and inspections, and provide verbal results as the tests and inspections are performed. A copy of our field report can be provided to your representative, which will summarize our services that day, and list any non-conforming items. Formal test reports are typically issued upon completion of project milestones, or an agreed-upon distribution timeline.

#### **COST OF SERVICES**

In accordance with your request, SCI has prepared a fee estimate to provide the testing/observation services listed above, during construction on the O'Fallon Police Department Training Facility project. This estimate is based on a brief review of the plans and specifications, and information provided by you. In addition to this information, we made necessary assumptions regarding schedule, scope, time required on-site, and other items, in order to develop this estimate. Variables that will influence our costs include the contractor's production rate, the weather, and site conditions.

We have assumed access to the areas requiring inspections or tests will be provided by the contractor, which includes use of lifts, ladders, scaffolding, etc. If SCI is required to provide equipment to access these areas, an additional fee of the rental cost, plus 15 percent will be charged.

An escalation rate of 5 percent of the fee or unit rates will apply for services of an ongoing project, where our services are required more than one calendar year, from the date of the proposal. An additional 5 percent escalation rate will apply to each calendar year, thereafter.

We appreciate the opportunity to be of service to you, on this project. If you have any questions or comments, please contact us at (636) 949-8200, or <a href="mailto:rearroll@sciengineering.com">rearroll@sciengineering.com</a>.

Respectfully,

SCI ENGINEERING, INC.

Z. Cuml

Ryan T. H. Carroll Field Manager

Karl T. Koenigsfeld, P.E.

Karl Koeneggle

Senior Engineer

RTHC/KTK/khg/smb

Enclosure:

Fee Estimate Rate Schedule Price List

N:\Projects\2022\2022-0217.01 CS Proposal - O'Fallon Police Department Training Facility\Financial\01\Financial\02022-0217.01 CS Proposal - O'Fallon PD. Training Facility - Ph1A.docx

Proposal Accepted By:

Please provide formal authorization for this project by signing in the space provided below, and returning an original for our records. The General Terms and Conditions from our *O'FALLON LAW ENFORCEMENT TRAINING FACILITY ENVIRONMENTAL & GEOTECHNICAL ENGINEERING SERVICES AGREEMENT*, dated April 1, 2022, apply to this scope of services.

Name and Title (please print or type)	a a	
Signature:	Email:	

Company Name: \_\_\_\_\_ Date: \_\_\_\_\_



SCI ENGINEERING, INC. 130 Point West Boulevard St. Charles, Missouri 63301 636-949-8200 www.sciengineering.com

### O'Fallon Police Department Training Facility

O'Fallon, Missouri SCI Job No. 2022-0217.01

Construction Testing Services - Detailed Fee Estimate

### Site Work

Site Grading and Sewer Backfill

Item	Rate	Quantity/Day	Cost/Day
Project Manager	\$120.00	0.25	\$30.00
Construction Technician	\$62.00	8	\$496.00
Administrative Assitant	\$58.00	0.25	\$14.50
Nuclear Gauge	\$75.00	1	\$75.00
Trip Charge	\$25.00	1	\$25.00
Total			\$640.50

Days: 60

Cost: \$38,430.00

**Laboratory Testing** 

Item	Rate	Quantity/Day	Cost/Day
Standard Proctor	\$300.00	2	\$600.00
Atterberg Limit	\$85.00	2	\$170.00
Aggregate Gradation	\$70.00	1	\$70.00
Total	-		\$840.00

Site Estimated Fee: \$39,270.00





### RATE SCHEDULE

City of O'Fallon, MO O'Fallon Police Department Facility

March 29, 2024 SCI No. 2022-0217.01

Labor Description	Rate
Senior Engineer III	210.00 /hour
Senior Engineer II	172.00 /hour
Senior Engineer I	155.00 /hour
Project Engineer II	136.00 /hour
Project Engineer I	120.00 /hour
Staff Engineer II	108.00 /hour
Staff Engineer I	90.00 /hour
Project Manager	120.00 /hour
Field Manager II	96.00 /hour
Field Manager I	75.00 /hour
Special Inspector (NDT)	102.00 /hour
Special Inspector (Steel/SFRM)	92.00 /hour
Deep Foundation Inspector	75.00 /hour
Special Inspector (Concrete/Masonry)	70.00 /hour
Construction Material Testing Technician	62.00 /hour
Senior Scientist III	210.00 /hour
Senior Scientist II	172.00 /hour
Senior Scientist I	155.00 /hour
Project Scientist II	136.00 /hour
Project Scientist I	120.00 /hour
Staff Scientist II	108.00 /hour
Staff Scientist I	90.00 /hour
Field Scientist II	75.00 /hour
Field Scientist I	69.00 /hour
Environmental Technician	69.00 /hour
Senior Archaeologist II	150.00 /hour
Senior Archaeologist I	126.00 /hour
Archaeologist	100.00 /hour
Archaeological Crew Chief	76.00 /hour
Archaeological Technician	66.00 /hour
GIS/CAD Specialist	96.00 /hour
GIS Analyst	120.00 /hour
Project Assistant	66.00 /hour
Administrative Assistant	58.00 /hour
Expenses	
Vehicle Mileage	0.80 /mile

### Vehicle Mileage

0.80 /mile Cost + 15 percent Transportation, Meals/Per Diem, lodging, subcontractors, subconsultants, etc.

#### Overtime/Night-Time Differential

Overtime is charged for hours worked per individual employee in excess of 8 hours per day, or work performed on Saturdays, Sundays, or Holidays. Overtime for SCI employees will be billed at 11/2 times our regular hourly rates. A 10 percent premium, and a minimum of 8 hours, will be charged for all labor performed during a night-time shift. An additional fee of \$200 will apply for all material testing/inspection services that are requested the day the service is performed.

### **Expert Testimony**

Expert witness testimony for deposition, arbitration, mediation and trial proceeding will be billed at 11/2 times the applicable hourly rate.

### Field and Lab Services

We prefer a 24-hour notice to schedule field services but will always try to work within the time constraints provided. Coordination and report review will be invoiced at engineering rates. Field services will be invoiced in one hour increments. A minimum charge of 4 hours per site visit will apply for structural steel inspection and other specialty structural inspections, and 3 hours per site visit will apply for all other

SCI Engineering, Inc. is a multi-discipline firm offering services during all phases of projects – from development and design through final construction. SCI provides services that include: geotechnical, construction, environmental, natural resources, and cultural resources. This Labor Rate Schedule is not inclusive of all of our services. Labor Rates for all of our services will be furnished upon request.





City of O'Fallon, MO O'Fallon Police Department Facility March 29, 2024 SCI No. 2022-0217.01

ESTING	ASTM/AASHTO	Price	Unit
tory Tests			
Compaction Control			
Moisture-Density Relationship			
TXDOT 113E/114E	TxDOT 113E/114E	350.00/300.00	Ea
Standard Proctor	D698/T99	300.00	Ea
Modified Proctor	D1557/T180	330.00	Ea
California Bearing Ratio (CBR) (moisture-density relationship additional)		***	-
Single-Point (unsoaked)	D1883/T193	200.00	Ea
Single-Point (soaked)		210.00	Ea
3-Point Single Moisture (soaked)		485.00	Ea
Relative Density - Minimum and maximum density	D4253/4254	Upon Request	Ea
2 Material Characterization			
Manual/Visual Description	D2488	35.00	Ea
TxDOT 104E, 105E, 106E Atterberg Limits	TxDOT 104E,105E,106E	95.00	Ea
Atterberg Limits - Method A or B	D4318/T89,90	85.00	Ea
Liquid Limit Only	T89	65.00	Ea
Unit Weight Determination	D7263	60.00	Ea
Grain Size Analysis			
Sieve Analysis (includes percent finer than No. 200)	D6913/T88	98.00	Ea
Sieve Analysis with Hydrometer	D7928	180.00	Ea
Percent finer than No. 200 (washed)	D1140	60.00	Ea
Specific Gravity of Soil	D854/T100	160.00	Ea
Moisture Content	D2216/T265	14.00	Ea
Organic Content	D2974/T267	75.00	Ea
Organic Classification Using Atterberg Method	D2487	165.00	Ea
Wet Organic Content	T194	150.00	Ea
TxDOT 121E pH Lime Series Curve	TxDOT 121E	250.00	Ea
TxDOT 121E pH Determination	TxDOT 128E	50.00	Ea
pH	D4972/T289	50.00	Ea
<u> </u>	G51	40.00	Ea
pH On the production			
Soil Resistivity	T288	210.00	Ea
3 Strength and Behavioral Properties			
One Dimensional Consolidation Test - Includes laboratory e-log and p-curve	D2435/T216	625.00	Ea
Swell Test	D4546	350.00	Ea
Unconfined Compression Test			
Undisturbed Samples (includes dry density)	D2166/T208	115.00	Ea
Using Rimac on ss samples		18.00	Ea
Triaxial Strength Testing			
TxDOT 117E Texas Triaxial	TxDOT 117E	1,750.00	Ea
Unconsolidated, Undrained (UU) (Q)	D2850/T296	170.00	Pt
Consolidated, Undrained (CU) (R)	D4767/T297		
Per Point		480.00	Ea
Additional Multi-Stage Points		275.00	Ea
Consolidated, Drained (CD)	D7181		
Per Point		650.00	Ea
Additional Multi-Stage Points		275.00	Ea
Direct Shear	D3080/T236		
Non-cohesive	2000.1200	265.00	per poi
Cohesive		365.00	per poi
Hydraulic Conductivity Tests		303.00	per por
	D5084	385.00	Ea
Triaxial Flexible Wall			
Rigid Wall	D2434/T215	300.00	Ea
Thermal Conductivity	DESC.	***	***
5-pt Curve	D5334	900.00	Ea
Single Point		160.00	per poi
Rock Core			
Description/photo		85.00	Box
Unconfined Compression Test	D7012 Method C	92.00	Ea
Direct Shear	D3080	275.00	Ea
Remolding Samples	D3080		
Samples for Consolidation, Swell, or Direct Shear		62.00	Ea
Samples for QU, UU, CU, or Hydraulic Conductivity		92.00	Ea
4 Chemical Testing			
Total Sulfates	C1580/T290	55.00	Ea
Chlorides	T291	55.00	Ea
	1	55.00	1.4
ervices			
Nuclear Density Equipment	D2922/T130	75.00	Day
Sand Cone Equipment & Materials per Test	D1556/T191	50.00	Test
Drive Tube Equipment	D2937	25.00	Day
Settlement Plates	D6598	350.00	Ea
	20070	45.00	Day





City of O'Fallon, MO O'Fallon Police Department Facility March 29, 2024 SCI No. 2022-0217.01

CRETE TESTING	ASTM/AASHTO	Price	Unit
	ASIWAASIIIO	Price	Unit
ratory Services			
1 Compressive Strength			
Cylinders - 4"x8", 3"x6" (Cast by SCI, Tested or held in reserve)	C39/T22	21.00	Ea
Cylinders - 6"x12" (Cast by SCI, Tested or held in reserve)	C39/T22	28.00	Ea
Cylinders - Cast by Others (Tested or held in reserve)	C39/T22	36.00	Ea
2" x 4" Cylinder	C780	21.00	Ea
2" x 2" Cube	C109/T106	21.00	Ea
Drilled Cores (including sawcutting one end)	C42/T24	65.00	Ea
CLSM w/Density	D4832	95.00	Ea
Sawcut Cylinders (If ends are not in compliance with ASTM standards)	C39	28.00	Ea
Nominal 4" x 4" x 8" Grout Sample	C39	45.00	Ea
Concrete Masonry Unit	C140	112.00	Ea
2 Cylinder Molds Purchased Separately (4x8 or 6x12)	2510 102	2.00	Ea
3 Flexural Strength - 6" x 6" x 21" or 24" beam	C78/T97	98.00	Ea
4 Shrinkage/Length Change of Hardened Concrete (Set of 3)	C157/C490	550.00	Ea
Alkili-Silica Reactivity - Accelerated Mortar-Bar Method	C1260/C1567	1,500.00	Ea
	C1200/C1307	1,500.00	La
5 Mix Design/Verification (does not include aggregate tests)	0100	1 600 00	
Trial Mix Verification (1-point, includes 6 cylinders)	C192	1,600.00	Ea
Trial Mix (includes 3-point w/c ratio relationship & 18 cylinders		3,500.00	Ea
6 Masonry Mortar Mix Test		610.00	Ea
7 Aggregate Characteristics			
TxDOT 110E Gradation	TxDOT 110E	95.00	Ea
Sieve Analysis	C136/T27	70.00	Ea
Washed Sieve Analysis (includes percent finer than No. 200)		98.00	Ea
Washed Sieve Analysis (percent finer than No. 200 only)	C117/T11	60.00	Ea
Rapid Turnaround (Stove drying)		45.00	Add
Add for samples with nominal maximum sizes greater than 1"		28.00	Add
Unit Weight and Voids in Aggregate	C29/T19	92.00	Ea
Specific Gravity and Absorption of Coarse Aggregate	C127/T85	125.00	Ea
Specific Gravity and Absorption of Fine Aggregate	C128/T84	160.00	Ea
Clay Lumps and Friable Particles in Aggregate	C142/T112	132.00	Ea
MoDOT Deleterious Determination	TM71	80.00	Ea
Surface Moisture in Fine Aggregate	C70	32.00	Ea
Soundness (sodium sulfate)	C88/T104	590.00	Ea
Soundness (magnesium sulfate)	C88/T104	490.00	Ea
TxDOT 116E Wet Ball Mill	TxDOT 116E	480.00	Ea
Resistance to Abrasion	C131	650.00	Ea
Flat & Longated, Flat or Elongated	D4791	60.00	Ea
Lightweight Particle	C123/T113		
Fine Aggregate ( 2.0SG)		115.00	Ea
Coarse Aggregate (2.0SG)		180.00	Ea
Coarse Aggregate (2.4SG)		325.00	Ea
Organic Impurities in Fine Aggregate for Concrete	C40/T21	135.00	Ea
8 Concrete Core Thickness	C174/T148	25.00	Ea
9 Potential Alkili Reactivty of Aggregates (Mortar-Bar Method)	C1260/C1587/C1105	950.00	Ea
Field Testing	C31/T23	Per Rate Schedule	Hr
2 Concrete Batch Plant Inspection by Registered Professional Engineer (NRMCA Certification)	C311 123		111
		Upon request	N
3 Climate Controlled Site Initial Curing Box		900.00	Montl
ace Testing			
1 Rebound Hammer Tests	C805	Per Rate Schedule	Hr
2 Windsor Probe Penetration Tests	C803		
Field Testing		Per Rate Schedule	Hr
Equipment		150.00	Day
Probes (set of three)		95.00	Ea
3 Coring (350.00 minimum)			
Field Testing		Per Rate Schedule	Hr
Bit Wear		6.00	Inch
Coring Machine		120.00	Day
	E1155	120.00	Day
4 Floor Flatness	E1155		
Field Testing		Per Rate Schedule	Hr
Dipstick Floor Profiler		185.00	Day
5 Vapor Emission Test	F1869	70.00	Ea
Field Testing		Per Rate Schedule	Hr
Tield Testing			Ea
6 Relative Humidity Loggers in Floor Slab	F2170	78.00	La
	F2170	Per Rate Schedule	Hr





City of O'Fallon, MO O'Fallon Police Department Facility March 29, 2024 SCI No. 2022-0217.01

PHALTIC CONCRETE TESTING	ASTM/AASHTO	Price	Unit
poratory Services			
1 Bitumen Content			
2 Extraction	D2172/T164		
Asphalt Content		300.00	Ea
Asphalt Content and Gradation		360.00	Ea
3 Ignition Oven	D (0.00 PRO 0.00		
Asphalt Content	D6307/T308	210.00	Ea
Asphalt Content and Gradation	D6307/D5444	270.00	Ea
4 Bulk Specific Gravity	D2726/T166	46.00	Ea
5 Maximum Theoretical Specific Gravity	D2041/T209	125.00	Ea
6 Aggregate Correction Factor Determination for Asphalt Ignition Oven	D6307	825.00	Ea
7 Asphalt Core Thickness	D3549	20.00	Ea
ld Services			
1 Commercial Placement Observation (includes determining maximum density of field mix, monitoring			
density, estimating thickness, and recording temperature)			
Field Testing	D2950	Per Rate Schedule	Hr
Nuclear Density Equipment		75.00	Day
2 Coring (350.00 minimum)			
Field Testing		Per Rate Schedule	Hr
Bit Wear		4.00	Inch
Coring Machine		125.00	Day
ECIAL INSPECTIONS TESTING			
Structural Steel Observations (includes visual weld inspection, bolt torque determination, and			
Skidmore-Wilhem bolt tension calibrator)	Tours Excellent		
Field Inspection	AWS D1.1	Per Rate Schedule	Hr
Equipment		60.00	Day
2 Nondestructive Testing			
Ultrasonic Inspection			
Field Testing	AWS D1.1	Per Rate Schedule	Hr
Equipment		150.00	Day
3 Magnetic Particle Inspection			
Field Testing	E1444/E709	Per Rate Schedule	Hr
Equipment		85.00	Day
4 Dye Penetrant Inspection	E165	Upon Request	
Welding Operator Qualifications And Inspection (includes welder performance verification and guided bend test)	AWS D1.1	Upon Request	
6 Adhesion testing of epoxied items into concrete and masonry (includes pullout testing of epoxied anchor bolts and reinforcing steel)			
Field Testing	IBC	Per Rate Schedule	Hr
Testing Equipment		125.00	Day
7 Bond or Tensile Strength Testing (Pull-off Method)			
Field Testing	C1583/D4541/D7234	Per Rate Schedule	Hr
Testing Equipment		125.00	Day
8 Spray-applied Fireproofing Density Testing			
Field Testing	IBC/E605	Per Rate Schedule	Hr
Lab Testing		42.00	Ea
9 Spray-applied Fireproofing Cohesion/Adhesion Testing			
Field Testing	IBC/E736	Per Rate Schedule	Hr
Testing Equipment		35.00	Ea
10 Intumescent Coating Dry Film Thickness (DFT) Testing			
Field Testing	IBC	Per Rate Schedule	Hr
Testing Equipment		85.00	Day
LEAGE FOR ALL SERVICES		0.80	per mil