



February 20, 2025

Matthew Gurney, Public Works Director
City of Bisbee
76 Erie Street
Bisbee, AZ 85603

Re: Amendment Number 02 to Professional Services Agreement

Dear Mr. Gurney:

Kimley-Horn and Associates, Inc. ("Kimley-Horn" or "Consultant") and CITY OF BISBEE ("Client") entered in a Professional Services Agreement dated October 4, 2022 ("Agreement") concerning Professional Services Agreement, On Call Engineering Services ("Project").

The parties now desire to amend the Agreement to include services to be performed by Consultant for compensation as set forth below in accordance with the terms of the Agreement, which are incorporated by reference.

Consultant will provide the services specifically set forth below.

- **Observation, testing, and sampling during subgrade soils, aggregate base, concrete, and asphalt placement.**
- **Laboratory testing of soils, aggregate base, concrete, and asphalt.**
- **Coordinate the project, review reports, and process data.**
- **Utility bedding testing**

We will provide our services as expeditiously as practicable.

For the services set forth above, Client shall pay Consultant the following compensation:

1. **A lump sum of \$18,710 (eighteen thousand seven hundred and ten Dollars and 00/100's) for Geotechnical services (see Exhibit A, proposal from Ninyo & Moore, dated February 17, 2025).**
2. **A lump sum of \$5,500 (fifty-five hundred dollars and 00/100's) for coordination of the field testing and review of the results.**



We appreciate the opportunity to provide these services to you. Please contact me if you have any questions.

Very truly yours,

KIMLEY-HORN AND ASSOCIATES, INC.

Erin Harris

Digitally signed by Erin Harris
DN: C=US,
E=Erin.Harris@Kimley-Horn.com,
CN=Erin Harris
Date: 2025.03.05 12:09:38-07'00'

Erin Harris, P.E.
Project Manager

AGREED AND ACCEPTED:

CITY OF BISBEE, ARIZONA

By: 
Ken Budge

Title: Mayor

Date: 3-4-2025

February 17, 2025
Proposal No. 12TUC02-02550

Ms. Samone Marquez
Kimley-Horn
3300 East Sunrise Drive, Suite 130
Tucson, Arizona 85718

Subject: Proposal to Provide Materials Testing Services
Camp Naco Phase I Parking Renovations and Drainage Improvements
Naco, Arizona

Dear Ms. Marquez:

Ninyo & Moore is pleased to present this proposal to provide materials testing services at the subject site. We review the development package for Camp Naco Phase I. The project involves renovating the parking area, including eleven parking spaces and drainage improvements. This proposal was prepared without the benefit of a construction schedule and is based on our assumptions as to the services that may be required.

SCOPE OF SERVICES

Our scope of services will include the following:

- Observation, testing, and sampling during subgrade soils, aggregate base, concrete, and asphalt placement.
- Laboratory testing of soils, aggregate base, concrete, and asphalt.
- Coordinate the project, review reports, and process data.

PROJECT ASSUMPTIONS

This proposal includes the following assumptions:

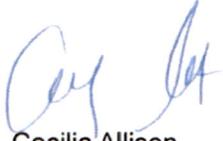
- Perform density testing of subgrade soils for the parking lot.
- Perform concrete sampling and testing every 50 cubic yards; and
- Sample asphalt every 500 tons placed.

ESTIMATED FEE

Ninyo & Moore estimates our service fee will be approximately **\$11,200** (Eleven Thousand Two Hundred Dollars). Please note that our estimated fee is based on reviewing the project information provided. Services will be performed on a time and materials basis, and fees will be for the amount of time expended and the number of tests performed on the project.

Ninyo & Moore appreciates the opportunity to provide services on this project and we look forward to working with you.

Respectfully submitted,
NINYO & MOORE



Cecilia Allison
Project Manager



Nick Moore
Construction Services Manager

CDA/DNM/acc

Attachments: Table 1 – Breakdown of Estimated Fee
Schedule of Fee

Table 1 – Breakdown of Estimated Fee						
Field Services						
Field Technician Earthwork, Asphalt & Concrete	80 hours	@	\$	70.00 /hour	\$	5,600.00
				Subtotal	\$	5,600.00
Laboratory Testing						
Proctor Density	2 tests	@	\$	175.00 /test	\$	350.00
Gradation	2 tests	@	\$	150.00 /test	\$	300.00
Atterberg Limit	2 tests	@	\$	110.00 /test	\$	220.00
Asphalt Marshall Bulk Density	2 tests	@	\$	125.00 /test	\$	250.00
Maximum Theoretical Specific Gravity (Rice)	2 tests	@	\$	135.00 /test	\$	270.00
Asphalt Extraction/Gradation	2 tests	@	\$	250.00 /test	\$	500.00
Concrete Cylinders Compressive Strength	30 tests	@	\$	25.00 /test	\$	750.00
				Subtotal	\$	2,640.00
Reimbursables						
Field Vehicle	80 hours	@	\$	10.00 /hour	\$	800.00
Equipment	80 hours	@	\$	12.00 /hour	\$	960.00
				Subtotal	\$	1,760.00
Project Management and Data Processing						
Project Engineer	8 hours	@	\$	110.00 /hour	\$	880.00
Data Processor	6 hours	@	\$	55.00 /hour	\$	330.00
				Subtotal	\$	1,210.00
TOTAL ESTIMATED FEE					\$	11,210.00

Additional allowance for utility bedding testing \$7,500.00
TOTAL ESTIMATED FEE **\$18,710.00**

Schedule of Fees

Hourly Charges for Personnel

Professional Staff

Principal Engineer/Geologist/Environmental Scientist/Certified Industrial Hygienist	\$ 180
Senior Engineer/Geologist/Environmental Scientist	\$ 150
Senior Project Engineer/Geologist/Environmental Scientist	\$ 140
Project Engineer/Geologist/Environmental Scientist	\$ 120
Senior Staff Engineer/Geologist/Environmental Scientist	\$ 115
Staff Engineer/Geologist/Environmental Scientist	\$ 110
GIS Analyst	\$ 100
Technical Illustrator/CAD Operator	\$ 75

Field Staff

Certified Asbestos/Lead Technician	\$ 140
Field Operations Manager	\$ 100
Nondestructive Examination Technician (UT, MT, LP)	\$ 100
Special Inspector (Structural Steel, Welding, and Fireproofing)	\$ 90
Special Inspector (Concrete and Masonry)	\$ 85
Senior Technician	\$ 75
Technician	\$ 70

Administrative Staff

Geotechnical/Environmental/Laboratory Assistant	\$ 55
Information Specialist	\$ 55
Data Processor	\$ 55

Other Charges

Concrete and Asphalt Coring Equipment (includes technician)	\$ 220/hr
Anchor Load Test Equipment (includes technician)	\$ 190/hr
GPR Equipment	\$ 180/hr
Inclinometer	\$ 100/hr
Hand Auger Equipment	\$ 80/hr
Rebar Locator (Pachometer)	\$ 25/hr
Vapor Emission Kit	\$ 65/kit
Equipment Usage	\$ 12/hr
Same Day Schedule Fee (Calling after 3 pm the day before or same day)	\$ 25/hr
Field Vehicle	\$ 10/hr
Direct Expenses	Cost plus 15 %
Special equipment charges will be provided upon request.	

Notes

For field and laboratory technicians and special inspectors, overtime rates at 1.5 times the regular rates will be charged for work performed more than 8 hours in one day, Monday through Friday, and all day on Saturday. Rates at twice the regular rates will be charged for all work over 12 hours per day, on Sundays and holidays.

Field technician and special inspection hours are charged at a 4-hour minimum and an 8-hour minimum for hours exceeding 4 hours.

Invoices are payable upon receipt. A service charge of 1.5 percent per month may be charged on accounts not paid within 30 days.

Ninyo & Moore's Work Authorization and Agreement form includes the terms and conditions.

Schedule of Fees for Laboratory Testing

SOILS

Atterberg Limits, D 4318, T 89, T90, (Wet Prep add \$30)	\$ 110
California Bearing Ratio (CBR), D 1883	\$ 470
Chloride and Sulfate Content, ARIZ 733, 736	\$ 120
Clay Expansion, FHA Swell	\$ 130
Consolidation, D 2435, T 216-94	\$ 300
Crumb Test Dispersion Test, D 4647	\$ 80
Direct Shear, D 3080, T236, (Remolded add \$100)	\$ 350
Expansion Index, D 4829, UBC 18-2	\$ 140
Expansion Potential (Method A), D 4546	\$ 130
Hydraulic Conductivity, D 5084	\$ 325
Hydrometer Analysis, D 7928, T 88-93	\$ 200
Double Hydrometer Analysis, D 4221, T 88	\$ 400
Lime Determination, pH Method, D 62765	\$ 210
Standard Proctor Density, D 698	\$ 175
Standard Proctor Density Treated Soils, D 698	\$ 200
Modified Proctor Density, D 1557, T 180-93, T 99-94	\$ 240
Miller Box Resistivity	\$ 70
Moisture, Ash, & Organic Matter of Peat/Organic Soils	\$ 110
Moisture Only, D 2216, T 265	\$ 30
Moisture and Density, D 2937	\$ 45
Permeability, CH, D 2434, T 215	\$ 250
pH and Resistivity, ARIZ 236 c	\$ 110
Pinhole Dispersion Test, D 4647	\$ 250
R-value, D 2844, T 190	\$ 350
Sand Equivalent, D 2419, T 176	\$ 140
Sieve Analysis, D 6913	\$ 90
Sieve Analysis, C-136 (includes 200 wash), D 6913, D 1140	\$ 150
Solubility	\$ 80
Specific Gravity, D 854, T 100-93	\$ 120
Sulfate & Chloride Content	\$ 100
Swell Test, D 4546	\$ 290
Thermal Resistivity (ASTM 5334, IEEE 442)	\$ 875
Triaxial Shear, U.U., D 2850 per point	\$ 280
Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt.	\$ 350
Triaxial Shear, C.D., D 4767, T 297 per pt	\$ 425
Unconfined Compression, D 2166, T 208	\$ 185

MASONRY

Brick Absorption, C 67	\$ 70
Brick Compression, C 67	\$ 30
Brick Moisture, C 67	\$ 30
CMU Block Compression Test, 8x8x16, C 140	\$ 75
CMU Block Moisture Content, C 140	\$ 70
Core Compression	\$ 40
Concrete Block Linear Shrinkage, C 426	\$ 150
Grout Prisms Compressive Strength, C 1019	\$ 40
Masonry Grout, 4x4x8 prism compression, UBC 21-18	\$ 25
Masonry Mortar, 2x4 cylinder compression, UBC 21-16	\$ 25
Masonry Prism, half size, compression, UBC 21-17	\$ 120
Mortar Cubes Compressive Strength, C 109	\$ 40

REINFORCING AND STRUCTURAL STEEL

Chemical Analysis, A-36, A615	\$ 150
Fireproofing Density Test, UBC 7-6	\$ 90
Hardness Test, Rockwell, A-370	\$ 80
High Strength Bolt, Nut & Washer Conformance, set, A-325	\$ 150
Mechanically Spliced Reinforcing Tensile Test, ACI	\$ 175
Pre-Stress Strand (7 wire), A 416	\$ 170
Reinforcing Tensile or Bend up to No. 11, A 615 & A 706	\$ 85
Structural Steel Tensile Test: Up to 200,000 lbs., A 370	\$ 100
Welded Reinforcing Tensile Test: Up to No. 11 bars, ACI	\$ 90

CONCRETE

Concrete Core Absorption ASTM C 497 Method A	\$ 85
Concrete Core Compressive Strength, C 42, T 24-93	\$ 90
Concrete Coring Minimum Charge	\$ 300
Concrete Laboratory Mix Verification, excluding cylinders	\$ 300
Concrete Mix Design	\$ 2,500
Compression Tests, 4x8 Cylinder, C 39, T 22-92	\$ 25
Compression Tests, 6x12 Cylinder, C 39, T 22-92	\$ 30
Drying Shrinkage, C 157	\$ 300
Flexural Test, C 78	\$ 100
Gunita/Shotcrete, Panels, 3 cut cores per panel and test, ACI	\$ 220
Lightweight Concrete Fill Compression, C 495	\$ 50
Measurement of Concrete Cores, ASTM C 174	\$ 20
Rapid Chloride Permeability, C 1202	\$ 425
Splitting Tensile Strength, C 496	\$ 95

ASPHALT

Asphalt Mix Design Review	\$ 400
Asphalt Mix Design, 5 points, Tex	\$ 1,900
Asphalt Content/Gradation (Ignition Oven), T 308, D 6307	\$ 250
Bulk Density Lab Molded Samples, Tex 207F (per set)	\$ 60
Bulk Specific Gravity per specimen (non-absorptive), D 2726	\$ 60
Bulk Specific Gravity per specimen (coated), D 1188	\$ 60
Compressive Strength of Hot Mix Asphalt, T 167	\$ 300
Extraction, % Asphalt, including Gradation, D 2172, T 164-94 T 30-93, Tex 210F	\$ 250
Hveem Stability and Unit Weight CTM or ASTM, CT 366	\$ 100
Hveem Stability, Tex 208F (per set)	\$ 90
Marshall Stability, Flow and Unit Weight, (set of 3) T 245-94	\$ 230
Marshall Mix Design	\$ 4,000
Maximum Theoretical Unit Weight, D 2041, CT 309, Tex 227F	\$ 225
Marshall Unit Weight, (set of 3) T 245-94	\$ 125
Tensile Strength Ratio D 4867, T283	\$ 400
Gyratory Unit Weight	\$ 200

AGGREGATES

Absorption, Coarse, C 127	\$ 90
Absorption, Fine, C 128	\$ 90
Alkali Reactivity, C 1260	\$ 825
Alkali-Silica Reactivity, C 1567	\$ 825
Clay Lumps and Friable Particles, C 142	\$ 105
Fractured Faces, NDOT, T 2303, ARIZ 212e	\$ 155
Los Angeles Abrasion, C 131 or C 535	\$ 220
Moisture, C 566, T 255-92	\$ 30
Mortar make properties of fine aggregate, C 87	\$ 330
Organic Impurities, C 40	\$ 100
Sand Equivalent, D 2419, T 176	\$ 100
Sieve Analysis, Coarse Aggregate, C 136	\$ 120
Sieve Analysis, Fine Aggregate (included wash), C 136	\$ 120
Sodium Sulfate Soundness (per size fraction), C 88	\$ 350
Specific Gravity, Coarse, C 127	\$ 150
Specific Gravity, Fine, C 128	\$ 150
Unit Weight C 29, T 19	\$ 80

Special preparation of standard test specimens will be charged at the technician's hourly rate.
Ninyo & Moore is accredited to perform the AASHTO equivalent of many ASTM test procedures.