

CITY OF SANTA FE  
PROFESSIONAL SERVICES CONTRACT

THIS AGREEMENT is made and entered into by and between the City of Santa Fe, New Mexico, hereinafter referred to as the "City," and Miller Engineering (DBA Souder, Miller & Associates (SMA)) hereinafter referred to as the "Contractor," and is effective as of the date set forth below upon which it is executed by the Parties.

## IT IS AGREED BETWEEN THE PARTIES:

**1. Scope of Work.**

A. The Contractor shall provide on-call task order Design Professional Services for the City in accordance with attached Request for Proposals (Exhibit A) and Unit Rate Schedules (Exhibit B) by Miller Engineering (DBA -Souder, Miller & Associates), and as stipulated herein, including, but not limited to surveying, design, approvals, permitting, bidding and construction administration of City of Santa Fe improvement projects under the purview of the Public Works Department, Engineering Division.

**2. Compensation.**

A. The City shall pay to the Contractor in full payment for services satisfactorily performed in the sum not to exceed five hundred thousand dollars and no cents (\$500,000.00), excluding of applicable gross receipts taxes in the total term of this agreement. The New Mexico gross receipts tax levied on the amounts payable under this Agreement totaling (\$42,187.50) shall be paid by the City to the Contractor. **The total amount payable to the Contractor under this Agreement, including gross receipts tax and expenses, shall not exceed (\$542,187.50). This amount is a maximum and not a guarantee that the work assigned to be performed by Contractor under this Agreement shall equal the amount stated herein. The parties do not intend for the Contractor to continue to provide services without compensation when the total compensation amount is reached. Contractor is responsible for notifying the City when the services provided under this Agreement reach the total compensation amount. In no event will the Contractor be paid for services provided in excess of the total compensation amount without this Agreement being amended in writing prior to those services in excess of the total compensation amount being provided.**

B. Payment is subject to availability of funds pursuant to the Appropriations Paragraph set forth below and to any negotiations between the parties from year to year pursuant to Paragraph 1, Scope of Work, and to approval by the City. All invoices **MUST BE** received by the City no later than thirty 30 days after the termination of the Fiscal Year in which the services were delivered. Invoices received after such date **WILL NOT BE PAID.**

C. Contractor must submit a detailed statement accounting for all services performed and expenses incurred. If the City finds that the services are not acceptable, within thirty days after the date of receipt of written notice from the Contractor that payment is requested, it shall provide the Contractor a letter of exception explaining the defect or objection to the services, and outlining steps the Contractor may take to provide remedial action. Upon certification by the City that the services have been received and accepted, payment shall be tendered to the Contractor within thirty days after the date of acceptance. If payment is made by mail, the payment shall be deemed tendered on the date it is postmarked. However, the City shall not incur late charges, interest, or penalties for failure to make payment within the time specified herein.

3. **Term.**

THIS AGREEMENT SHALL NOT BECOME EFFECTIVE UNTIL APPROVED BY THE CITY. This Agreement shall terminate four years from signature of the City unless terminated pursuant to paragraph 4 (Termination), or paragraph 5 (Appropriations). In accordance with Section 13-1-150 NMSA 1978, no contract term for a professional services contract, including extensions and renewals, shall exceed four years, except as set forth in Section 13-1-150 NMSA 1978.

4. **Termination.**

A. **Termination.** This Agreement may be terminated by either of the parties hereto upon written notice delivered to the other party at least thirty (30) days prior to the intended date of termination. Except as otherwise allowed or provided under this Agreement, the City's sole liability upon such termination shall be to pay for acceptable work performed prior to the Contractor's receipt of the notice of termination, if the City is the terminating party, or the Contractor's sending of the notice of termination, if the Contractor is the terminating party; provided, however, that a notice of termination shall not nullify or otherwise affect either party's liability for pre-termination defaults under or breaches of this Agreement. The Contractor shall submit an invoice for such work within thirty (30) days of receiving or sending the notice of termination. Notwithstanding the foregoing, this Agreement may be terminated immediately upon written notice to the Contractor if the Contractor becomes unable to perform the services contracted for, as determined by the City or if, during the term of this Agreement, the Contractor or any of its officers, employees or agents is indicted for fraud, embezzlement or other crime due to misuse of state funds or due to the Appropriations paragraph herein. **THIS PROVISION IS NOT EXCLUSIVE AND DOES NOT WAIVE THE City's OTHER LEGAL RIGHTS AND REMEDIES CAUSED BY THE CONTRACTOR'S DEFAULT/BREACH OF THIS AGREEMENT.**

B **Termination Management.** Immediately upon receipt by either the City or the Contractor of notice of termination of this Agreement, the Contractor shall: 1) not incur any further obligations for salaries, services or any other expenditure of funds under this Agreement without written approval of the City; 2) comply with all directives issued by the City in the notice of termination as to the performance of work under this Agreement; and 3) take such action as the City shall direct for the protection, preservation, retention or transfer of all property titled to the City and records generated under this Agreement. Any non-expendable personal property or equipment provided to or purchased by the Contractor with contract funds shall become property of the City

upon termination and shall be submitted to the City as soon as practicable.

**5. Appropriations.**

The terms of this Agreement are contingent upon sufficient appropriations and authorization being made by the City Council for the performance of this Agreement. If sufficient appropriations and authorization are not made by the City Council, this Agreement shall terminate immediately upon written notice being given by the City to the Contractor. The City's decision as to whether sufficient appropriations are available shall be accepted by the Contractor and shall be final. If the City proposes an amendment to the Agreement to unilaterally reduce funding, the Contractor shall have the option to terminate the Agreement or to agree to the reduced funding, within thirty (30) days of receipt of the proposed amendment.

**6. Status of Contractor.**

The Contractor and its agents and employees are independent contractors performing professional services for the City and are not employees of the State of New Mexico. The Contractor and its agents and employees shall not accrue leave, retirement, insurance, bonding, use of state vehicles, or any other benefits afforded to employees of the State of New Mexico as a result of this Agreement. The Contractor acknowledges that all sums received hereunder are reportable by the Contractor for tax purposes, including without limitation, self-employment and business income tax. The Contractor agrees not to purport to bind the State of New Mexico unless the Contractor has express written authority to do so, and then only within the strict limits of that authority.

**7. Assignment.**

The Contractor shall not assign or transfer any interest in this Agreement or assign any claims for money due or to become due under this Agreement without the prior written approval of the City.

**8. Subcontracting.**

The Contractor shall not subcontract any portion of the services to be performed under this Agreement without the prior written approval of the City. No such subcontract shall relieve the primary Contractor from its obligations and liabilities under this Agreement, nor shall any subcontract obligate direct payment from the City.

**9. Release.**

Final payment of the amounts due under this Agreement shall operate as a release of the City, its officers and employees, and the State of New Mexico from all liabilities, claims and obligations whatsoever arising from or under this Agreement.

**10. Confidentiality.**

Any confidential information provided to or developed by the Contractor in the performance of this Agreement shall be kept confidential and shall not be made available to any individual or organization by the Contractor without the prior written approval of the City.

**11. Product of Service -- Copyright.**

All materials developed or acquired by the Contractor under this Agreement shall become the property of the City and shall be delivered to the City no later than the termination date of this

Agreement. Nothing developed or produced, in whole or in part, by the Contractor under this Agreement shall be the subject of an application for copyright or other claim of ownership by or on behalf of the Contractor.

**12. Conflict of Interest; Governmental Conduct Act.**

A. The Contractor represents and warrants that it presently has no interest and, during the term of this Agreement, shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance or services required under the Agreement.

B. The Contractor further represents and warrants that it has complied with, and, during the term of this Agreement, will continue to comply with, and that this Agreement complies with all applicable provisions of the Governmental Conduct Act, Chapter 10, Article 16 NMSA 1978.

C. Contractor's representations and warranties in Paragraphs A and B of this Article 12 are material representations of fact upon which the City relied when this Agreement was entered into by the parties. Contractor shall provide immediate written notice to the City if, at any time during the term of this Agreement, Contractor learns that Contractor's representations and warranties in Paragraphs A and B of this Article 12 were erroneous on the effective date of this Agreement or have become erroneous by reason of new or changed circumstances. If it is later determined that Contractor's representations and warranties in Paragraphs A and B of this Article 12 were erroneous on the effective date of this Agreement or have become erroneous by reason of new or changed circumstances, in addition to other remedies available to the City and notwithstanding anything in the Agreement to the contrary, the City may immediately terminate the Agreement.

D. All terms defined in the Governmental Conduct Act have the same meaning in this section.

**13. Amendment.**

A. This Agreement shall not be altered, changed or amended except by instrument in writing executed by the parties hereto and all other required signatories.

B. If the City proposes an amendment to the Agreement to unilaterally reduce funding due to budget or other considerations, the Contractor shall, within thirty (30) days of receipt of the proposed Amendment, have the option to terminate the Agreement, pursuant to the termination provisions as set forth in Article 4 herein, or to agree to the reduced funding.

**14. Merger.**

This Agreement incorporates all the Agreements, covenants and understandings between the parties hereto concerning the subject matter hereof, and all such covenants, Agreements and understandings have been merged into this written Agreement. No prior Agreement or understanding, oral or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in this Agreement.

**15. Penalties for violation of law.**

The Procurement Code, Sections 13-1-28 through 13-1-199, NMSA 1978, imposes civil and

criminal penalties for its violation. In addition, the New Mexico criminal statutes impose felony penalties for illegal bribes, gratuities and kickbacks.

**16. Equal Opportunity Compliance.**

The Contractor agrees to abide by all federal and state laws and rules and regulations, and executive orders of the Governor of the State of New Mexico, pertaining to equal employment opportunity. In accordance with all such laws of the State of New Mexico, the Contractor assures that no person in the United States shall, on the grounds of race, religion, color, national origin, ancestry, sex, age, physical or mental handicap, or serious medical condition, spousal affiliation, sexual orientation or gender identity, be excluded from employment with or participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity performed under this Agreement. If Contractor is found not to be in compliance with these requirements during the life of this Agreement, Contractor agrees to take appropriate steps to correct these deficiencies.

**17. Applicable Law.**

The laws of the State of New Mexico shall govern this Agreement, without giving effect to its choice of law provisions. Venue shall be proper only in a New Mexico court of competent jurisdiction in accordance with Section 38-3-1 (G) NMSA 1978. By execution of this Agreement, Contractor acknowledges and agrees to the jurisdiction of the courts of the State of New Mexico over any and all lawsuits arising under or out of any term of this Agreement.

**18. Workers Compensation.**

The Contractor agrees to comply with state laws and rules applicable to workers compensation benefits for its employees. If the Contractor fails to comply with the Workers Compensation Act and applicable rules when required to do so, this Agreement may be terminated by the City.

**19. Professional Liability Insurance.** Contractor shall maintain professional liability insurance throughout the term of this Agreement providing a minimum coverage in the amount required under the New Mexico Tort Claims Act. The Contractor shall furnish the City with proof of insurance of Contractor's compliance with the provisions of this section as a condition prior to performing services under this Agreement.

**20. Other Insurance**

If the services contemplated under this Agreement will be performed on or in City facilities or property, Contractor shall maintain in force during the entire term of this Agreement, the following insurance coverage(s), naming the City as additional insured.

A. Workers Compensation (including accident and disease coverage) at the statutory limit. Employers liability: \$100,000.

B. Comprehensive general liability (including endorsements providing broad form property damage, personal injury coverage and contractual assumption of liability for all liability the

Contractor has assumed under this contract). Limits shall not be less than the following:

- a. Bodily injury: \$1,000,000 per person /\$1,000,000 per occurrence.
- b. Property damage or combined single limit coverage: \$1,000,000.
- c. Automobile liability (including non-owned automobile coverage): \$1,000,000.
- d. Umbrella: \$1,000,000.

C. Contractor shall maintain the above insurance for the term of this Agreement and name the City as an additional insured and provide for 30 days cancellation notice on any Certificate of Insurance form furnished by Contractor. Such certificate shall also specifically state the coverage provided under the policy is primary over any other valid and collectible insurance and provide a waiver of subrogation.

**21. Records and Financial Audit.**

The Contractor shall maintain detailed time and expenditure records that indicate the date; time, nature and cost of services rendered during the Agreement's term and effect and retain them for a period of three (3) years from the date of final payment under this Agreement. The records shall be subject to inspection by the City. The City shall have the right to audit billings both before and after payment. Payment under this Agreement shall not foreclose the right of the City to recover excessive or illegal payments

**22. Indemnification.**

The Contractor shall defend, indemnify and hold harmless the City from all actions, proceeding, claims, demands, costs, damages, attorneys' fees and all other liabilities and expenses of any kind from any source which may arise out of the performance of this Agreement, caused by the negligent act or failure to act of the Contractor, its officers, employees, servants, subcontractors or agents, or if caused by the actions of any client of the Contractor resulting in injury or damage to persons or property during the time when the Contractor or any officer, agent, employee, servant or subcontractor thereof has or is performing services pursuant to this Agreement. In the event that any action, suit or proceeding related to the services performed by the Contractor or any officer, agent, employee, servant or subcontractor under this Agreement is brought against the Contractor, the Contractor shall, as soon as practicable but no later than two (2) days after it receives notice thereof, notify the legal counsel of the City.

**23. New Mexico Tort Claims Act**

Any liability incurred by the City of Santa Fe in connection with this Agreement is subject to the immunities and limitations of the New Mexico Tort Claims Act, Section 41-4-1, et. seq. NMSA 1978, as amended. The City and its "public employees" as defined in the New Mexico Tort Claims Act, do not waive sovereign immunity, do not waive any defense and do not waive any limitation of liability pursuant to law. No provision in this Agreement modifies or waives any provision of the New Mexico Tort Claims Act.

**24. Invalid Term or Condition.**

If any term or condition of this Agreement shall be held invalid or unenforceable, the remainder of this Agreement shall not be affected and shall be valid and enforceable.

**25. Enforcement of Agreement.**

A party's failure to require strict performance of any provision of this Agreement shall not waive or diminish that party's right thereafter to demand strict compliance with that or any other provision. No waiver by a party of any of its rights under this Agreement shall be effective unless express and in writing, and no effective waiver by a party of any of its rights shall be effective to waive any other rights.

**26. Notices.**

Any notice required to be given to either party by this Agreement shall be in writing and shall be delivered in person, by courier service or by U.S. mail, either first class or certified, return receipt requested, postage prepaid, as follows:

To the City:  
City of Santa Fe  
Public Works Department –Engineering Division  
PO Box 909  
Santa Fe NM 87504-0909

To the Contractor:  
Miller Engineers, Inc, (DBA Souder, Miller & Associates-SMA)  
2904 Rodeo Park Drive, Building 100  
Santa Fe NM, 87505  
[www.soudermiller.com](http://www.soudermiller.com) , [contracts@soudermiller.com](mailto:contracts@soudermiller.com)

**27. Authority.**

If Contractor is other than a natural person, the individual(s) signing this Agreement on behalf of Contractor represents and warrants that he or she has the power and authority to bind Contractor, and that no further action, resolution, or approval from Contractor is necessary to enter into a binding contract.

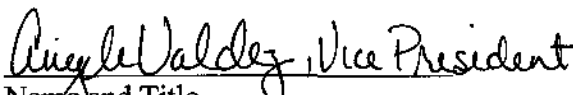
IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date of the signature by the required approval authorities below.

CITY OF SANTA FE:

  
ALAN M. WEBBER, MAYOR

DATE: 9/18/19

CONTRACTOR:

  
Name and Title

DATE: 9/26/19

CRS#02-040132-00-9

Registration # 19-00031366

ATTEST:

Yolanda Y. Vigil  
YOLANDA Y. VIGIL, CITY CLERK  
cc mtg. 9-11-19

APPROVED AS TO FORM:

EMM 9/8/19  
ERIN K. MCSHERRY, CITY ATTORNEY

APPROVED:

Mary McCoy  
MARY T. MCCOY, FINANCE DIRECTOR

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## **EXHIBIT A SCOPE OF SERVICES**

### **BACKGROUND AND SUMMARY**

The City of Santa Fe's Public Works Department/Engineering Division requires an on call professional design services for addressing unanticipated project development needs for transportation, infrastructure, stormwater facilities, and river and watershed drainage improvement projects. Such needs may include, but are not be limited to, engineering analysis and design for location study activities; preparation of preliminary and final plans, specifications, estimates and bid documents for construction; and construction engineering and management services for a variety of new construction, reconstruction or rehabilitation projects.

Project improvements may require roadway, traffic, structural, geotechnical and drainage engineering analysis and design including related environmental, surveying, right-of-way, and subsurface utility engineering and landscape design efforts. Tasks may include the following:

1. Roadway Design
  - Horizontal/Vertical Alignment
  - Grading Plans & Earthwork Computations
  - Typical Sections & Cross Sections
  - Pavement Design
  - ADA Improvements
  - Traffic Calming Improvements
2. Traffic Analysis and Design
  - Traffic Studies (i.e. roadway/intersection capacity analysis, warrant studies, gap analysis, speed studies, traffic counts, accident studies, etc.).
  - Geometric Improvements
  - Permanent Signing & Striping Plans
  - Roadway Lighting & Signalization Plans
  - Signal Synchronization, Interconnect & Timing Plans
  - Traffic Control Plans
3. Structural/Geotechnical Analysis and Design
  - Geotechnical Investigations
  - Bridge, Foundation and Retaining Wall Analysis & Design
4. Drainage Analysis and Design
  - Hydraulic/Hydrological/Scour Analysis
  - Floodplain Management Evaluation (in accordance w/FEMA requirements)
  - Section 401/404 & NOI Applications/Permits
  - Erosion & Sediment Control Plans
  - Water Quality Investigation and Analysis
  - Storm Drainage & Erosion Control Improvements (i.e. culverts, drop inlets, manholes, flow control structures, grade control structures, etc.)

The Consultant shall be required to provide on call design services for any number of the activities listed under Scope of Work upon the request of the City. Once a need is identified, the City will issue a written project assignment to the Consultant detailing the services required. Upon receiving the City's request for services, the Consultant shall promptly provide the City with an estimated man-hour summary (or work-hour schedule), cost summary, and project schedule required to complete the assignment or task. Work-hour schedules may be compiled on a City of Santa Fe Work-Hour Schedule Form (see Exhibit A as an example) while cost summaries shall be compiled on a City of Santa Fe Cost Summary Form attached as Exhibit B. Project schedules, negotiated price, and completion dates shall be determined on a project by project basis and dependent upon the urgency of that task. The Consultant may be required to do some of the work in phases.

***NOTE: At the City's discretion, multiple professional services agreements (i.e. contracts) may be awarded for the on call professional design services described herein.***

#### **BASIC FIRM QUALIFICATIONS**

Consultants must clearly demonstrate they currently have the requisite staff and necessary engineering expertise for this project. As required, or in the interest of best practices, contracting of sub-consultants by the Prime Design Professional shall include, but is not limited to, the following professionals and services:

- a. Professional Engineers
- b. Landscape Architects
- c. Architects
- d. Professional Surveyors
- e. Environmental Specialists
- f. Geotechnical Services
- g. Archeological Services
- h. Materials and Systems Testing Services
- i. Hazardous Materials Testing and Abatement Services
- j. Specialty Design Services (irrigation)

The Design Professional shall not subcontract any portion of services to be performed under the Professional Services Agreement without the prior written approval from the City.

The City fully anticipates the Consultant immediately begins work on project tasks with the notice to proceed and expediently complete the design work within an approved schedule. Consultants need to demonstrate environmental sensitivity in design, knowledge of city, state, and federal environmental clearance requirements and ability to work with the public in project development.

Consultants will need to complete design requirements in accordance with applicable municipal, state and federal codes, laws and standards, including but not limited to those

of the following: City of Santa Fe, New Mexico Department of Transportation (NMDOT) Design Manual, Federal Highway Administration (FHWA), American Association of State Highway and Transportation Officials (AASHTO), the Manual on Uniform Traffic Control Devices (MUTCD) and American with Disabilities Act Accessibility Guidelines (ADAAG).

Proposals should address the Consultant's strategy and key staff to complete project assignments and their approach to coordinate the efforts of any sub-consultants on their team.

### **Quality Control**

Consultants must provide detailed internal quality control procedures for verification of plans, quantities and cost estimates. The City will not provide an extensive review of plans, however, if the City must do so, it will back charge consultants its actual costs. Errors and omissions will be the responsibility of the consultant. Consultants will not be liable for errors or omissions in owner furnished data.

### **Timely Performance**

The City expects the consultant to adhere to the negotiated schedule and perform in a timely manner. The consultant is expected to submit deliverables on or ahead of schedule. The City reserves the right to assess liquidated damages stipulated in the professional services agreement for consultant's failure to meet specific, contracted, milestone dates. Milestone dates may include, but are not limited to, submission of Alignment Study, submission of Preliminary Design Report and Plans, submission of Right-of-Way Plans (if required), and submission of Bid Package including Construction Plans, Specifications and Estimates.

### **SCOPE OF WORK**

The basic tasks the consultant may be expected to accomplish for project assignments are listed as follows:

#### **PHASE I – LOCATION STUDY**

1. Alignment Study
2. Environmental Investigations and Documentation
3. Property Ownership, Location Survey & Mapping
4. Coordination
5. Public Involvement

#### **PHASE II – PRELIMINARY DESIGN**

1. Subsurface Utility Engineering
2. Drainage Analysis
3. Geotechnical Investigations
4. Preliminary Design Plans
5. Coordination
6. Public Involvement

### **PHASE III – FINAL DESIGN**

1. Right-of-Way Design
2. Final Design
3. Coordination
4. Public Involvement
5. Construction Bid Documents

### **PHASE IV – CONSTRUCTION SERVICES**

1. Construction Engineering and Management

### **PHASE I – LOCATION STUDY**

#### **1. Alignment Study**

The City may require the Consultant to conduct alignment studies in accordance with the NMDOT Location Study Procedures (i.e. Phase IA, IB). The scope shall be defined and negotiated on a project-by-project basis. This work involves the development and preparation of an Alignment Study Report which may include, but is not limited to, a traffic analysis (intersection capacity analysis, queuing analysis and signal timing recommendations) for existing and design year conditions; evaluation of right-of-way and needs; drainage system evaluation and improvement recommendations; and bridge evaluation and recommendations. The traffic analysis portion of the alignment study shall be conducted in accordance with the latest traffic engineering guidelines and software. When required, Two (2) copies of the Alignment Study Report shall be submitted to the City.

The primary purpose of the Alignment Study is to provide recommendations for improvements to the existing facilities and/or construction of new facilities including:

- Need for turning lanes.
- Need for improvements to vertical and horizontal alignment.
- Need for street lighting, signal hardware improvements, and signal interconnect.
- Evaluation of existing right-of-way and preliminary right-of-way requirements.
- Drainage investigations, analysis and recommendations for improvements.
- Bridge structure recommendations and evaluation of structure types.

## **2. Environmental Investigations and Documentation**

The Consultant shall determine the environmental level of effort required for a project assignment and prepare environmental clearance documents (i.e. checklist, CE, EA, EIS, etc.), if necessary (see "NOTE" below). Prepare required environmental, cultural and/or biological reports as appropriate for a project assignment including permit application submittals (i.e. NPDES, 401, 404, etc.) Reports must be prepared by qualified environmental and natural resource personnel (archeologists, biologists, etc.). The Consultant will select logical termini for addressing environmental concerns on a sufficiently broad scope. All environmental, cultural, or biological reports shall be prepared in accordance with applicable guidelines and regulations. The following outlines tasks that may be required for project assignments:

- Review the most recent list of federal endangered and threatened species in Santa Fe County to determine the potential presence of any listed species in the project vicinity, as required under the Endangered Species Act.
- Conduct a biological survey and prepare a biological memorandum.
- Conduct a cultural resources survey and prepare a cultural resources report.
- Coordinate cultural resource findings with the Archaeological Review Committee.
- Coordinate with the State Historic Preservation Officer, City Historic Preservation personnel and Native American Tribes, as necessary.
- Conduct jurisdictional wetland determination and delineation, and if necessary, provide a report for regulatory agency review and approval.
- Coordinate with the US Army Corps of Engineers and New Mexico Environment Department.
- Complete a US Army Corps of Engineers Nationwide Permit Application form.
- Submit the biological and cultural resources technical reports to the City of Santa Fe for review and incorporate any requested revisions. Submit the appropriate number of final documents and attachments to the City of Santa Fe.
- Public involvement, including meetings and preparation of comment forms.
- Noise and air technical analyses.
- Impacts to prime or unique farmlands or farmland of statewide or local importance.
- Biological or hazardous materials issues.

All reports submitted to the City are subject to City approval before investigations are accepted as complete. Based on engineering, cost, environmental and right-of-way impacts, the Consultant shall; determine, recommend, and obtain the City's concurrence on the preferred alternative to be used for final design.

***NOTE: National Environmental Protection Act (NEPA) requirements will be determined by the Consultant in coordination with the City on a project-by-project basis.***

### **3. Property Ownership, Location Survey & Mapping**

Research and investigate adjacent property ownership within areas of new construction by use of county and/or city records. The Consultant shall provide a location survey to include location of fences, structures, and above ground utilities (i.e. manholes, pull boxes, etc.) that could conflict with proposed improvements should be identified. Use of City GIS orthophotography in conjunction with the location survey is acceptable. All surveying shall be performed under the direct supervision of a New Mexico Registered Professional Land Surveyor and conform with the Minimum Standards for Surveying in New Mexico adopted by the New Mexico Board of Registration for Professional Engineers and Surveyors.

The Consultant, having obtained all the necessary records and field data, will show all pertinent survey data and information (i.e. existing right-of-way limits, property lines, monuments, structures, etc.) and tie to existing or set monuments on or near the project area. Survey information shall be prepared at the same scale as the planimetric plan and profile sheets and shown on these sheets.

### **4. Coordination**

The Consultant will be responsible for all coordination necessary to accomplish the work required by the contract. This responsibility shall include coordination with the public, all property owners and federal (ex. FHWA, US Fish & Wildlife), state (ex. NMDOT, NMED, SHPO), city (all departments/divisions/committees as required), county, schools (ex. NM School for the Deaf) and other agencies having jurisdiction, management responsibilities, sensitive resource responsibilities, permit authority or interest in the project (ex. Santa Fe Railyard Community Corp., Trust for Public Land, SHPO, NMED, Acequia Madre Ditch Association). This will include obtaining approvals and/or concurrence on all work that is to be completed by the Consultant including work completed by sub-contractors working under this contract.

This responsibility shall also include obtaining all formal and informal approvals. For any required formal (written) approvals, the Consultant will provide the City with all required data and draft/final draft letters of transmittal. In the event the Consultant is not successful in obtaining formal or informal approvals, the Consultant shall promptly notify the City in writing, and the City will assist in resolving the matter.

The appropriate agencies, the public and other interested groups will be contacted to insure that the community and governmental concerns are identified and considered for inclusion in the study and design development of the project. The Consultant shall be responsible for all coordination that is required to provide a satisfactory public involvement plan and environmental document, as necessary.

In addition to the above, the Consultant shall be responsible for:

- Scheduling all design reviews
- Writing design review reports
- Writing design team meeting reports (minutes)
- Distributing all reports, plans and documents
- Performing property owner interviews and documenting the interviews
- Providing monthly progress reports for design, utilities, environmental, right-of-way, and construction
- Providing periodic progress presentations to the City and local elected officials (i.e. Public Works Director, Engineering Division Director, City Council, City Committees, MPO, RPA, etc.)

### **5. Public Involvement**

The Consultant shall be responsible for the implementation and cost of all public meeting (or public hearing) coordination including advertisement of the meetings, arrangement and cost for required recording equipment; news media coordination; providing and arranging for the meeting facilities; responding to agency and public comments; preparation of handouts, exhibits and displays; coordination of meetings; preparation of reports of all meetings and contacts; preparation of transcripts and summaries of public meetings; and any coordination with the general public, property owners, or agency involvement that may be required before or after the public meetings.

Property owner contacts shall be conducted in the field by arranging to meet with owners at their respective parcels. An overview of the project will be discussed and include preliminary access, drainage, fencing or other issues as applicable. Also, the specifics on how the property owner's access, fencing, gates, drainage, etc., will be affected by the project are to be discussed.

If applicable, the Consultant shall be responsible for following City development code, Chapter 14-3.1(f), Early Neighborhood Notification (ENN) Procedures (i.e. notice of public meetings).

## **PHASE II – PRELIMINARY DESIGN**

### **1. Subsurface Utility Engineering**

The Subsurface Utility Engineering (SUE) process is to identify the type, size and the ownership of existing underground and overhead utilities and establish their exact/precise location within the proposed project limits of City proposed construction projects. Such SUE effort may include all necessary records research, field investigations (designation), pot-holing (locating), surveying and mapping, design analysis and recommendations relative to impacts on existing and/or proposed utility systems on City projects. Pot-holing (locating) is only anticipated if substructure construction/excavation is required. After identifying

utility locations the Consultant shall map utility locations onto plan and profile sheets and aerial photographs. Subsurface Utility Engineering services shall be provided by qualified, experienced SUE consultants.

## **2. Drainage Analysis**

The Consultant will be required to evaluate the necessary level effort for floodplain evaluation and drainage engineering analysis and design needed considering the scope of the project assignment. This may include, but is not limited to evaluation of flows, FEMA/FIRM base flood elevations and floodplain management related issues (i.e. CLOMR/LOMR, etc.), recommendations for erosion/scour protection, and recommendations for the replacement of existing affected drainage structures or addition of new structures in the immediate area.

The drainage report will require a detailed study of the project area and recommendations are to be developed with alternate proposals to correct any problems. The Consultant shall submit two (2) "Draft" Drainage Reports for review and comment by City staff. Upon addressing comments from City staff, the consultant shall furnish the City two (2) bound hard copies and a digital version including all data files of the final Drainage Reports.

Prior to performing a drainage study, the Consultant shall meet with the City's Project Manager to discuss the analysis of existing and proposed drainage structures. The Drainage Report shall include:

- Floodplain Management Related Issues (i.e. floodway development, no rise, CLOMR/LOMR, other)
- Discussion of soil types
- Vegetation and land use distribution
- Curve number or rational formula "C" calculations
- *Time of concentration* calculations
- Drainage area topographic map with existing structures inventory
- Drainage areas
- Design discharges and corresponding physical properties. Design discharge frequency calculated shall be determined based on the overall project needs to provide flood protection, erosion protection, stormwater quality enhancement and meet all floodplain management criteria.
- Summary of the drainage field inspection results including City personnel (public and other local agencies) interviews and drainage structure field inspection forms
- CME's required to construct and maintain the structures
- Summary table of existing and recommended drainage structure sizes and types, and identification of sources used in the analysis
- Preliminary erosion protection and energy dissipaters design and preliminary details



For urban projects, the preliminary hydraulics shall be computed based on existing information to provide scope of drainage work and cost estimate that will be the basis for the Final Drainage Report. The Drainage Report shall include preliminary design and locations of drop inlets, trunk lines, other preliminary drainage data, and dimensions of CME's and ponds needed.

Floodplain issues shall be addressed completely to assure the project is in compliance with all applicable federal, state and City of Santa Fe regulations.

A detailed hydraulic analysis such as: backwater profiles, flow velocities, scour calculations, and other hydraulic design data are required for major structures and design of permanent erosion protection.

In preparing the Drainage Report, the Consultant shall perform, on all major structures or channels, a hydraulic analysis using the appropriate (HEC-2, HECRAS, SWMM or WSPRO) computer model to develop water surface profiles for the existing conditions and for the proposed conditions. An approved Drainage Report shall be prepared for the selected alternative which shall incorporate all pertinent design data into a concise document including: drainage map(s); floodplain maps & profiles, inventory of existing drainage structures; detailed structure recommendations including drainage areas, design discharges, head water depths; and a Water Surface Profile Structure Layout Sheet for any major structures. If a retention pond is needed, the Consultant shall prepare and submit a Notice of Intent (NOI) groundwater application, as may be required. If Section 401 and 404 applications are required, the Consultant shall prepare and submit the necessary applications with the approval of the City. This work shall not be done prior to the completion and approval of the environmental documentation, as applicable.

For urban projects, include in the Drainage Report the storm drain design data at each drop inlet and manhole such as design discharges, carry over discharges, intercept discharges, and other hydraulics data. The construction plans shall include storm drain system data such as hydraulic grade line for 100-year discharge, invert elevations, slopes, velocities, and discharges.

If the disturbed area is greater than one acre, the Consultant shall prepare a storm water pollution prevention plan (SWPPP) and submit a Notice of Intent (NOI) to the Environmental Protection Agency on behalf of the City. The Consultant shall also prepare temporary erosion and sediment control plans (TESCP). Additional information regarding the SWPPP and TESCP may be available from the NMDOT Drainage Section.

If the project is located in a designated flood hazard area, the consultant shall determine if and prepare all applications for permits required on the project. The consultant shall prepare any submittals needed for Letters of Map Change that may be required based upon the final design and/ or construction as appropriate.

The Consultant shall use the NMDOT "Drainage Design Manual – July 2018", and "National Pollutant Discharge Elimination System Handbook", current edition, and all relative FEMA documents for methodologies and references needed in preparation of the Drainage Report.

### **3. Geotechnical Investigations**

#### **A. Geotechnical Services - General**

The Consultant may be required to provide geotechnical recommendations and a Geotechnical Report. The Geotechnical Report will be submitted as part of the Preliminary Design of the selected alignment.

The City may elect that the Consultant provide geotechnical services as defined below:

#### **Geotechnical Investigation and Laboratory Testing**

Geologic/geotechnical exploration shall follow the procedures, requirements and guidelines as outlined in the latest edition of the NMDOT Materials Geotechnical Manual. The Geotechnical Report shall present data collected during the geotechnical investigation. Information shall include at least the following:

- Project location map
- Description of the project scope
- Presentation of the field investigations
- Descriptions of the earth materials encountered during the field investigation
- Laboratory test results including consolidation, tri-axial testing of undisturbed samples if clay soils are encountered, direct shear tests, rock core point load and unconfined compression tests (rock cores)
- For bridge elements, one soil boring and/or rock core shall be completed at each abutment and each pier element. At the abutments the borings should be taken to a depth of 80 feet. At the piers, the borings should be taken to a depth of 100 feet. Lesser depths of exploration will be acceptable with the presence of bedrock or very dense soil strata.
- For drainage structures, the need for borings will be determined on a site by site basis.
- Geophysical test results
- Plan and profile sheets with test holes or pits shown in plan and profile views

#### **Geotechnical Design Recommendations**

Final design recommendations shall address some or all of the following:

- Stabilization/densification of unsuitable embankment or native soils
- Slope stability/steepened slope design
- Mitigation of settlements

- Rock excavation and blasting requirements
- Maximum cut slope angles in soil and rock
- Suitability of foundation soils or rock to support an embankment or structure
- Shrink and swell factors of earthwork
- Groundwater affecting the project/need for cut-off trenches
- Special treatments, i.e. use of geotextiles, soil nails, pressure grouting, etc.

### **Geotechnical Report**

The Geotechnical Report shall document the results of the geotechnical activities. The geologic and geotechnical study of the final alignment within the corridor shall make final geotechnical design recommendations to provide for a stable roadway prism including final pavement design. An electronic copy of this report shall be submitted to the City in conjunction with the Preliminary Design Plans.

### **B. Geotechnical Services – Structures & Foundations**

The Consultant may be required to provide geotechnical recommendations related to any structures and submit a Foundation Report. The Foundation Report, to include detailed recommendations for structures and retaining walls, shall be prepared for the selected structure alternatives.

The City may elect that the Consultant provide geotechnical services as defined below.

### **Retaining Walls**

Retaining walls shall be designed based on AASHTO and/or FHWA DEMO 82 Reinforced Soil Structures design guidelines. Bearing capacity, settlement, and global stability analysis shall be performed at all retaining walls to insure serviceability of the walls. Requirements for stabilization of unsuitable subsoils will be specified where required to meet serviceability requirements. Mechanically Stabilized Earth (MSE) walls will utilize NMDOT's approved MSE wall manufacturers.

### **Bridge Foundation Analysis**

Perform geotechnical analysis of foundations to determine type, size and depths of foundations recommended. Load capacity analysis for vertical loads including immediate and long-term settlement analysis will be required. Lateral load analysis will be required to develop equivalent points of fixity, substructure stiffness and design forces of substructure elements. Suitable design methods are covered in the Manual or as recommended by the State Geotechnical Engineer. Provide a written report, showing completed soil boring lab test results, engineering analysis, foundation recommendations and required foundation depths.

### **Approach Embankment Analysis**

Approach embankments shall be analyzed for long-term settlement potential, including settlements due to low in-situ density, hydro-collapsible soils.

Requirements for stabilization of unsuitable subsoils will be specified where required to meet serviceability requirements. Approach embankments shall be specified for 100% standard Proctor density as required by City standard details with approach slabs bearing on AASHTO A-1-a material.

#### **Foundation Report**

The Foundation Report shall document the results of the field exploration and laboratory testing, bridge foundation recommendations and analysis and retaining wall recommendations and analysis. All work shall be completed according to the standards set forth in the most recent edition of the NMDOT Materials Geotechnical Manual. The Foundation Report may be included as a part of the Geotechnical Report.

#### **4. Preliminary Design Plans**

The Consultant may be required to provide or conduct the following:

##### **Preliminary Design Plans**

Provide preliminary design plans (30% completion plans) for the project which may include: traffic signal & lighting and intersection design details, geometrics, traffic control plan, plan and profile sheets showing recommended horizontal and vertical alignment, typical sections, culvert sections, intersection layouts, drainage requirements, slope limits, right-of-way requirements, utility relocation/adjustment requirements, preliminary earthwork analysis, structure requirements such as bridges, retaining walls, and major drainage structures and a preliminary construction cost estimate by construction type. Project plans shall be prepared to the City's standards for general content and format. Plans shall be prepared for the alignment and typical sections, as approved by the City.

***Project plans shall be prepared to the NMDOT's Standards for general content and format.***

##### **30% Completion Design Review**

Schedule and conduct the 30% completion design review. The review shall include the preparation of the 30% completion review report. Project plan shall be prepared to the City's standards for general content and format, in CAD version compatible with or full convertible to the City's current AutoCAD software version. The Consultant shall submit and distribute (1) full sized bound plan set printed to scale and (1) PDF set. Additional sets may be requested by the City. All information must be completely legible on the plan sets provided.

#### **5. Coordination**

The Consultant will be responsible for all coordination necessary to accomplish the work required by the contract. This responsibility shall include coordination with the public, all property owners and federal (ex. FHWA, US Fish & Wildlife), state (ex. NMDOT, NMED, SHPO), city (all departments/divisions/committees as required), county, schools (ex. NM School for the Deaf) and other agencies having

jurisdiction, management responsibilities, sensitive resource responsibilities, permit authority or interest in the project (ex. Santa Fe Railyard Community Corp., Trust for Public Land, SHPO, NMED, Acequia Madre Ditch Association). This will include obtaining approvals and/or concurrence on all work that is to be completed by the Consultant including work completed by sub-contractors working under this contract.

This responsibility shall also include obtaining all formal and informal approvals. For any required formal (written) approvals, the Consultant will provide the City with all required data and draft/final draft letters of transmittal. In the event the Consultant is not successful in obtaining formal or informal approvals, the Consultant shall promptly notify the City in writing, and the City will assist in resolving the matter.

The appropriate agencies, the public and other interested groups will be contacted to insure that the community and governmental concerns are identified and considered for inclusion in the study and design development of the project. The Consultant shall be responsible for all coordination that is required to provide a satisfactory public involvement plan and environmental document, as necessary.

In addition to the above, the Consultant shall be responsible for:

- Scheduling all design reviews
- Writing design review reports
- Writing design team meeting reports (minutes)
- Distributing all reports, plans and documents
- Performing property owner interviews and documenting the interviews
- Providing monthly progress reports for design, utilities, environmental, right-of-way, and construction
- Providing periodic progress presentations to the City and local elected officials (i.e. Public Works Director, Engineering Division Director, City Council, City Committees, MPO, RPA, etc.)

## **6. Public Involvement**

The Consultant shall be responsible for the implementation and cost of all public meeting (or public hearing) coordination including advertisement of the meetings, arrangement and cost for required recording equipment; news media coordination; providing and arranging for the meeting facilities; responding to agency and public comments; preparation of handouts, exhibits and displays; coordination of meetings; preparation of reports of all meetings and contacts; preparation of transcripts and summaries of public meetings; and any coordination with the general public, property owners, or agency involvement that may be required before or after the public meetings.

Property owner contacts shall be conducted in the field by arranging to meet with owners at their respective parcels. An overview of the project will be discussed

and include preliminary access, drainage, fencing or other issues as applicable. Also, the specifics on how the property owner's access, fencing, gates, drainage, etc., will be affected by the project are to be discussed.

If applicable, the Consultant shall be responsible for following City development code, Chapter 14-3.1(f), Early Neighborhood Notification (ENN) Procedures (i.e. notice of public meetings).

## **PHASE III - FINAL DESIGN**

### **1. Right-of-Way Design**

The City may require right-of-way design services. If required, a portion or all of the services listed below will be negotiated. When right-of-way design services are necessary, the Consultant will provide right-of-way surveying, mapping, title reports, appraisal, negotiation and monumentation.

#### **Right-of-Way Surveying**

The development of the right-of-way surveying work shall be closely coordinated with the City staff.

All right-of-way surveying shall be performed by a Professional Surveyor licensed in New Mexico and ultimately should conform with Rule(s) 500.6 and 500.7 of the Minimum Standards for Surveying in New Mexico adopted by the New Mexico Board of Registration for Professional Engineers and Surveyors. Right-of-way surveying, mapping, monumentation should also conform with the latest NMDOT Right-of-Way Surveying, Mapping, and Monumentation Procedures/Policies and subsequent guidelines, standards, revisions and amendments.

Prior to commencing right-of-way surveying the Consultant shall meet with the City to review and concur on the scope of right-of-way surveying, mapping and monumentation required based on the 30% completion plans, report and the preliminary property ownership layout maps. Right-of-way surveying, mapping, and monumentation will be performed only in areas where new right-of-way is required. The Consultant shall then submit the work-hour and fee proposal for the right-of-way surveying, right-of-way mapping and monumentation requirements to the City.

Upon receiving approval on the scope of right-of-way surveying work to be performed and after completing the necessary right-of-way and property boundary research, the Consultant shall proceed with the right-of-way field survey and locating existing right-of-way limits and intersecting property lines impacted by proposed fee take parcels and construction maintenance easements. Also, locate all fences, structures, septic tanks, billboard signs and other improvements which may be affected by proposed right-of-way widening, appraisals, acquisitions, etc. Some of these features may have been obtained during the location survey phase of the project but they may need to be appropriately tied to the right-of-way surveys and maps. Also, provide sufficient survey information on ties to existing or set monuments on the project.

The Consultant, having obtained all the necessary field data, will prepare the right-of-way survey maps and will show all pertinent survey data, existing right-of-way limits, intersecting property lines, accepted and rejected monuments, encroachments, buildings, billboard signs or structures within fifty feet of the right-

of-way, etc., annotation and notes upon which future right-of-way acquisition boundaries will be electronically overlaid and computed.

### **Right-of-Way Mapping**

The Consultant shall meet with the City to review the completed right-of-way survey map. Key topics of review and discussion at this session will be confined to the methodology utilized in the determination of existing right-of-way limits, intersecting property lines, encroachments, hiatus, prescriptive rights, accepted/rejected monuments etc. This meeting should be scheduled prior to beginning the preparation of right-of-way maps.

The Consultant will prepare the preliminary right-of-way maps for presentation and review at the 60% completion design review. Immediately following the review and, prior to the 90% completion design review, the Consultant shall submit three (3) final Right-of-Way Map print sets of the final Right-of-Way Map with one copy of all documents including legal descriptions and title reports to the City for first review. Ownership shall be shown on the right-of-way maps exactly as listed in the title reports. These final Right-of-Way Maps shall locate all parcel takes and construction maintenance easements. Temporary construction permit locations shall also be shown on the map if they are located in areas for which mapping has been developed. All temporary construction permits shall, however, be listed on the parcel block sheet of the final Right-of-Way Maps as well as shown on the plan and profile sheets. The City will not provide an extensive detail check of any of the final maps and plans. Therefore, any errors and/or omissions in the final Right-of-Way Maps, legal descriptions, and subsequent monumentation mapping and staking will be the full responsibility of the Consultant. Acceptance of the final Right-of-Way Map or other work products developed under the contract and termination of the contract when work is completed will not remove the responsibility of the Consultant as outlined above.

The second review prior to the 90% completion design review is primarily for the purpose of assuring that the red-lined markups of the first review set have been made and to assure that items of concern resulting from the first review are adequately addressed and communicated to the Consultant. If alignments or other major changes occur to the right-of-way maps presented for the first review, the City shall be notified and may result in additional time necessary for reviews by the City.

### **Title Reports**

All title services work shall be performed in accordance with Executive Order No. 89-15, dated March 30, 1989 and the policies and procedures as contained in the NMDOT Right-of-Way Handbook Volume II, utilizing the forms and/or formats set out therein.

**Note:** For work-hour estimates assume 10 title reports will be required, each a 33 year abstract.



### **Takes and Construction Maintenance Easements (CME's)**

The Consultant shall provide the following:

- A thirty-three (33) year certified title search on every parcel affected in the right-of-way acquisition.
- A Chain of Title (Index) reflecting all transactions affecting said parcel shall be provided.
- Copies of all pertinent documents described in Chain of Title (Index).
- A five year tax search (or computer print out) reflecting the current assessed owner, address, description of property and the amount of taxes for the current assessed year reflecting whether paid or unpaid.
- Caption sheet or title sheet showing current owner and address of record, description of property being abstracted.
- Work map and index identifying each parcel abstracted.
- Information on any mortgages, liens, or judgments that have been released of record does not have to be shown on said search. For any probates or district court proceedings only pertinent proceedings need be shown, not the complete case file.

### **Temporary Construction Permits (TCP's)**

The Consultant shall provide the following:

- Provide current ownership.
- Title sheet showing current owner, address of record, description of property, document creating ownership and certificate.

### **General**

The Consultant shall:

- Execute and submit with each title report the "Certificate of Title" form and hold the title reports in confidence and reveal the title reports or opinions only to the City unless otherwise directed in writing by the City.
- Deliver title reports to the City "satisfactorily completed" in a timely manner. Delivery of such shall be defined as (1) actual transfer of possession in the form approved by the City incorporating all required corrections and clarifications, and (2) written acceptance by the City of the Consultant's work.
- The City's acceptance or rejection of the Consultant's work product shall be given in writing. The City shall return deficient or inadequate title reports within 30 calendar days of receipt.
- The dates for the submission of title reports shall be determined at the initial meeting between the City and Consultant.
- All documents must be letter size, except for surveys and/or maps, which may be folded. All title reports must be bound securely (abstract form). All title reports submitted must be prepared by a licensed and bonded Title Company.
- Promptly correct all deficiencies and return the title reports for further review within (30) calendar days from date of return.
- Be fully responsible for the accuracy of all work.

**The City shall:**

- Shall return to the Consultant, within thirty (30) calendar days of receipt, individual title reports found to be deficient or inadequate with the reviewer's comments, if applicable.
- May hold a review of the title work for the purpose of further discussion of the type of title work required.
- Shall make available to the Consultant, City records as may be available and pertinent for the purpose of the work herein described.
- May schedule and hold a review with the Consultant and representatives of the City involved in the project as necessary.

**Monumentation**

Upon assignment of a final map date by the City, the Consultant shall prepare the preliminary monumentation mapping, field staking of right-of-way limits as defined by the final Right-of-Way Maps and Right-of-Way Certification and recordation of the final Right-of-Way Monumentation Map(s) will be required. The final monumentation maps shall meet the NMDOT's Monumentation Mapping guidelines/policies and current pertinent provisions of the Minimum Standards for Surveying in New Mexico.

**2. Final Design**

The Consultant may be required to provide or conduct the following:

**60% & 95% Completion Design Plans**

Provide 60% & 95% design plans for the project which may include, but are not limited to, roadway typical sections and pavement design, quantity summary and schedules, plan and profile sheets showing horizontal and vertical alignment, lane configuration and intersection geometrics, permanent signing and striping plans, traffic signal and lighting plans, structure sections, roadway turnouts, slope limits, proposed right-of-way limits, storm drain system identification, drainage requirements, TЕСM plan, traffic control plan and sequence of construction, utility relocation/adjustment requirements, earthwork analysis, structure details for bridges, retaining walls, and major drainage structures (and aesthetic details if necessary) and a construction cost estimate by construction type. Identification of areas requiring work permits, temporary construction permits and construction maintenance easements may also be required. Project plans shall be prepared to the NMDOT's standards for general content and format.

**60% & 95% Completion Design Review**

Schedule and conduct the 60% & 95% completion design review with appropriate City staff. The Consultant shall prepare the 60% & 95% completion review reports (or meeting minutes).

Project plans shall be prepared to the City's standards for general content and format, in CAD version compatible with or full convertible to the City's current AutoCAD software version. The Consultant shall submit and distribute (1) full

sized bound plan set printed to scale and (1) PDF set. Additional sets may be requested by the City. All information must be completely legible on the plan sets provided.

The Consultant shall provide final design plans, which may include, but are not limited to, the following:

1. General Sheets
  - Title Sheet
  - Vicinity Map
  - Project Layout Sheet
  - Index of Sheets
  - Summary of Quantities
  - General Notes and Incidental Items
  - Environmental Concerns and Mitigation Measures
2. Miscellaneous Sheets
  - Typical Sections
  - Miscellaneous Details
  - Surfacing Schedule
  - Structure Quantities
  - Miscellaneous Quantities
  - Curb and Gutter Layouts
  - Metal Barrier Layouts
  - Erosion and Sediment Control
  - Seeding and Landscaping
  - Grading
  - Visual/Aesthetic Details
3. Plan and Profiles Sheets
  - Mainline
  - Cross Roads
4. Turnout Profiles
5. Bridge/Retaining Wall/Noise Wall Plans
6. Traffic Control Plans
  - Notes
  - Sequence of Construction
  - Sign Face Details
  - Traffic Control Plans
7. Signal Plans
  - Signal Warrant Analysis for at-grade intersections
  - Signal Design Plans

- Interconnect Plans
8. Lighting Plans
    - Lighting Analysis
    - Lighting Plan
  9. Permanent Signing and Striping Plans
    - Plans
    - Overhead Signs
    - Sign Face Details
  10. Drainage Plans
    - Plan and Profile
    - Structure Sections
    -
  11. Earthwork Cross-Sections
  12. Performance Specifications
    - Small projects not requiring full plans

### **3. Coordination**

The Consultant will be responsible for all coordination necessary to accomplish the work required by the contract. This responsibility shall include coordination with the public, all property owners and federal (ex. FHWA, US Fish & Wildlife), state (ex. NMDOT, NMED, SHPO), city (all departments/divisions/committees as required), county, schools (ex. NM School for the Deaf) and other agencies having jurisdiction, management responsibilities, sensitive resource responsibilities, permit authority or interest in the project (ex. Santa Fe Railyard Community Corp., Trust for Public Land, SHPO, NMED, Acequia Madre Ditch Association). This will include obtaining approvals and/or concurrence on all work that is to be completed by the Consultant including work completed by sub-contractors working under this contract.

This responsibility shall also include obtaining all formal and informal approvals. For any required formal (written) approvals, the Consultant will provide the City with all required data and draft/final draft letters of transmittal. In the event the Consultant is not successful in obtaining formal or informal approvals, the Consultant shall promptly notify the City in writing, and the City will assist in resolving the matter.

The appropriate agencies, the public and other interested groups will be contacted to insure that the community and governmental concerns are identified and considered for inclusion in the study and design development of the project. The Consultant shall be responsible for all coordination that is required to provide a satisfactory public involvement plan and environmental document, as necessary.

In addition to the above, the Consultant shall be responsible for:

- Scheduling all design reviews
- Writing design review reports
- Writing design team meeting reports (minutes)
- Distributing all reports, plans and documents
- Performing property owner interviews and documenting the interviews
- Providing monthly progress reports for design, utilities, environmental, right-of-way, and construction
- Providing periodic progress presentations to the City and local elected officials (i.e. Public Works Director, Engineering Division Director, City Council, City Committees, MPO, RPA, etc.)

#### **4. Public Involvement**

The Consultant shall be responsible for the implementation and cost of all public meeting (or public hearing) coordination including advertisement of the meetings, arrangement and cost for required recording equipment; news media coordination; providing and arranging for the meeting facilities; responding to agency and public comments; preparation of handouts, exhibits and displays; coordination of meetings; preparation of reports of all meetings and contacts; preparation of transcripts and summaries of public meetings; and any coordination with the general public, property owners, or agency involvement that may be required before or after the public meetings.

Property owner contacts shall be conducted in the field by arranging to meet with owners at their respective parcels. An overview of the project will be discussed and include preliminary access, drainage, fencing or other issues as applicable. Also, the specifics on how the property owner's access, fencing, gates, drainage, etc., will be affected by the project are to be discussed.

If applicable, the Consultant shall be responsible for following City development code, Chapter 14-3.1(f), Early Neighborhood Notification (ENN) Procedures (i.e. notice of public meetings).

#### **5. Construction Bid Documents**

The Consultant shall submit the completed *final design plans, specifications and estimates* and all related documents to the City of Santa Fe. The final design package may include the following:

- i. Two (2) full-size copies of final design plans (36"x 24"); signed by the City's Public Works Director, Engineering Division Director, ADA Coordinator and Historic Preservation Division Director
- ii. ONE (1) half-size copies of final design plans (12"x18" or 11"x17");
- iii. One (1) electronic copy of the final design plans.
- iv. One (1) paper and electronic copy of the final cost estimate.

- v. One (1) electronic copy and one (1) bound final sets of complete bidding documents, including wage rates and signed advertisements
- vi. Review of contractor submitted "As-Built plans", preparation and submittal of "As-Built" drawings" two (2) 36" x 24" paper copy and on CD in AutoCAD format (version 2013 or more current).

## **PHASE IV – CONSTRUCTION SERVICES**

### **1. Construction Engineering and Management**

The City may require Construction Engineering and Management Services during construction. If required, a portion or all of the services listed below will be negotiated.

The construction phase will commence with the award of the construction contract and continues until the one-year warranty inspection and report is submitted by the Consultant and approved by the City. The Consultant shall be the representative of the City during the construction phase and shall advise and consult with the City Project Manager regarding construction activities for the duration of the construction phase. Construction phase services will include the resolution of problems encountered during construction. Any additional design services not caused by errors and/or omissions, and requested by the City will be authorized by an amendment to the agreement. Any amendments to the agreement shall establish the additional work requirements, amend the contract as required and adjust the time schedules.

The Consultant shall fully execute and participate in the following tasks to implement the construction of the Project in conformance with the plans and specifications:

1. Preconstruction meeting with the Construction Contractor, Owner, Utilities;
2. Daily construction observation, oversight, inspection and daily diary entry;
3. Construction management basic services including:
  - Construction Engineering Technical Support;
  - Review of Construction Contractor material submittals or shop drawings;
  - General project review and response to Construction Contractor's requests for information and clarification;
  - Change order review and preparation;
  - Claims review, documentation, and correspondence;
  - Provide As-Constructed Quantities;
  - Receive, review and approve progress payments (to be forwarded to the City);
  - Preparation and authorization of field inspections and punch lists; and
  - One-year warranty inspection and report

EXHIBIT

B

# City of Santa Fe On Call Professional Design Services

## Unit Rate Schedule

## EXHIBIT B

## CITY OF SANTA FE, NEW MEXICO PUBLIC WORKS DEPARTMENT

## COST SUMMARY PART 1 - GENERAL

1. NAME OF PROJECT: On-Call Professional Design Services		2. CIP #: RFP #19/41P	
3. NAME OF CONTRACTOR: Miller Engineering, Inc. d/b/a Souder, Miller & Associates		4. DATE OF PROPOSAL: June 10, 2019	
5. ADDRESS OF CONTRACTOR: 2904 Rodeo Park Drive E, Bldg 100 Santa Fe, NM 87505		6. TYPE OF SERVICE TO BE FURNISHED: Professional Engineering Services A. WORK ELEMENT: On-call Engineering Services Rate Schedule	

## PART 2 - COST SUMMARY BASIC SERVICES

7. DIRECT LABOR (specify categories)	ESTIMATED HOURS	HOURLY RATE	ESTIMATED COST	TOTALS
Principal In Charge		\$68.97	\$0.00	
Senior Design Manager		\$59.56	\$0.00	
Senior Engineer II		\$51.72	\$0.00	
Senior Engineer I		\$45.45	\$0.00	
Project Engineer II		\$39.18	\$0.00	
Project Engineer I		\$34.48	\$0.00	
Staff EIT/Scientist/LSIT II		\$31.35	\$0.00	
Staff EIT/Scientist/LSIT I		\$28.21	\$0.00	
Senior Engineering/Design/Survey Tech V		\$37.62	\$0.00	
Senior Engineering/Design/Survey Tech IV		\$32.92	\$0.00	
Engineering/CAD/Design/Survey/Field Tech III		\$28.21	\$0.00	
Engineering/CAD/Design/Survey/Field Tech II		\$23.51	\$0.00	
Engineering/CAD/Design/Survey/Field Tech I		\$20.38	\$0.00	
Construction Observer III		\$28.21	\$0.00	
Construction Observer II		\$23.51	\$0.00	
Construction Observer I		\$18.81	\$0.00	
<b>DIRECT LABOR TOTAL:</b>				<b>\$0.00</b>
8. OVERHEAD (specify cost pool)	RATE	X BASE	ESTIMATED COST	
Overhead	1.93	\$0.00	\$0.00	
Full Multiplier (Incl. OH+Fee) = (2.93x1.1) = 3.19	3.19			
<b>OVERHEAD TOTAL:</b>				<b>\$0.00</b>
9. FEE OR PROFIT (show rate and base)				
SUPPLEMENTAL SERVICES				
10. SUBCONTRACTS (Identify & purpose)			ESTIMATED COST	
See attached rate schedules per Subconsultants			\$0.00	
			\$0.00	
			\$0.00	
<b>SUBCONTRACTOR TOTAL:</b>				<b>\$0.00</b>
11. SPECIAL EQUIPMENT	RATE	ESTIMATED HOURS	ESTIMATED COST	
GPS/Total Station	\$20/day		\$0.00	
Terrestrial Laser Scanner	\$30/hr		\$0.00	
UAV (Camera Equipped)	\$325/day		\$0.00	
<b>EQUIPMENT TOTAL:</b>				<b>\$0.00</b>
12. TRAVEL			ESTIMATED COST	
A. transportation: Mileage @\$0.58 per mile (or current IRS rate)			\$0.00	
B. per diem: \$149.00 per day (or max per diem rate per USGSA)			\$0.00	
<b>TRAVEL TOTAL:</b>				<b>\$0.00</b>
13. OTHER REIMBURSABLE COST			ESTIMATED COST	
<b>OTHER REIMBURSABLE TOTAL:</b>				<b>\$0.00</b>
<b>SUBTOTAL ITEMS 7-12:</b>				<b>\$0.00</b>
14. GROSS RECEIPTS				\$0.00
15. TOTAL PRICE				\$0.00
16. SIGNATURE OF PREPARER <i>Raymond J. Smith</i>		OWNER'S REVIEW BY		ENGINEERING PROJECT MANAGEMENT DIVISION



## 2019 Standard Rate Schedule

Senior Engineer V or Principal.....	\$290.00/HR
Senior Engineer IV or Project Manager V.....	\$270.00/HR
Senior Engineer III or Project Manager IV.....	\$235.00/HR
Senior Engineer II or Project Manager III.....	\$220.00/HR
Senior Engineer I or Project Manager II.....	\$195.00/HR
Engineer III or Project Manager I.....	\$170.00/HR
Engineer II.....	\$150.00/HR
Engineer I.....	\$125.00/HR
Senior Technician III (GIS, Telecom, Utility, CAD, Field).....	\$165.00/HR
Senior Technician II (GIS, Telecom, Utility, CAD, Field).....	\$145.00/HR
Senior Technician I (GIS, Telecom, Utility, CAD, Field).....	\$125.00/HR
Technician III (GIS, Telecom, Utility, CAD, Field).....	\$100.00/HR
Technician II (GIS, Telecom, Utility, CAD, Field).....	\$80.00/HR
Technician I (GIS, Telecom, Utility, CAD, Field).....	\$60.00/HR
Licensed State Land Surveyor.....	\$235.00/HR
Registered Professional Land Surveyor.....	\$170.00/HR
4 Person Survey Crew.....	\$190.00/HR
3 Person Survey Crew.....	\$170.00/HR
2 Person Survey Crew.....	\$145.00/HR
1 Person Survey Crew.....	\$105.00/HR
2 Person Hy-Drone Crew.....	\$340.00/HR
2 Person UAV Drone Crew.....	\$235.00/HR
Construction Manager III.....	\$280.00/HR
Construction Manager II.....	\$230.00/HR
Construction Manager I.....	\$185.00/HR
Construction Observer III.....	\$155.00/HR
Construction Observer II.....	\$130.00/HR
Construction Observer I.....	\$110.00/HR
Sr. Right-of-Way Agent III or ROW Project Manager III.....	\$250.00/HR
Sr. Right-of-Way Agent II or ROW Project Manager II.....	\$200.00/HR
Sr. Right-of-Way Agent I or ROW Project Manager I.....	\$180.00/HR
Right-of-Way Agent III or ROW Attorney.....	\$160.00/HR
Right-of-Way Agent II.....	\$140.00/HR
Right-of-Way Agent I.....	\$110.00/HR
Administrative.....	\$105.00/HR
Clerical.....	\$80.00/HR
Field Data Device.....	\$40.00/HR/unit



# CobbFendley

## 2019 Standard Rate Schedule (Continued)

### **SUBSURFACE UTILITY ENGINEERING**

Two-Man Designating Crew (4-Hour Minimum).....	\$170/HR
One-Man Designating Crew (4-Hour Minimum).....	\$110/HR
Vacuum Excavation Truck with 2 Technicians (Vac 6000) (4-Hour Minimum).....	\$315/HR
Vacuum Excavation Truck with 2 Technicians (Vac 3000 & 4000) (4-Hour Minimum).....	\$295/HR
Ground Penetrating Radar with 1 Technician (4-Hour Minimum).....	\$260/HR
Traffic Control Officer.....	@ Cost + 10%
Traffic Control (Lane Closures, etc.).....	To Be Negotiated
Permits (Local, State, etc.).....	@ Cost + 10%
Designation, Location & Traffic Control Vehicles.....	\$6.50/Mile

### **REIMBURSABLE EXPENSES**

Technology Fee (*) .....	\$3.75/HR
Consultant or Specialty Contractor (Outside Firm) .....	@ Cost + 10%
Courier, Special Equipment Rental.....	@ Cost + 10%
Reasonable Out of Town Travel Expenses (Air, Hotel, Rental, etc.).....	@ Cost
Mileage (Standard Car or Truck) .....	IRS Approved Rate
Per Diem for Out of Town Travel (Per Day/Person) .....	GSA Standard Rate/Day
Title Plant Charges .....	@ Cost + 10%
Other Misc. Expenses Related to the Project .....	@ Cost + 10%

#### **In-House Reproduction:**

➤ Copies (Up to 11" x 17") .....	\$0.15/Each
➤ Color Prints (Up to 11" x 17").....	\$1.50/Each
➤ Color Prints (Larger than 11" x 17").....	\$3.00/Sq. Ft.
➤ Bluelines (All Sizes).....	\$1.00/Each
➤ Bond Prints (All Sizes).....	\$2.00/Each
➤ Mylar Prints .....	\$12.00/Each
➤ Vellum Prints .....	\$9.00/Each

(\*) Technology charges added to each billable man-hour.

**ATTACHMENT 1**  
**Staewide Contracts**  
**Cost Summary**  
**(Unit Rate Schedule)**

**Consulting Firm**

**Ecosphere Environmental Services, Inc.**

1. Staff Allocations for Labor	Direct Labor	Overhead Rate	Fee	Fully Loaded Rate	
				12%	\$
		172.5%			-
Senior NEPA Specialist	\$ 69.15	\$ 119.31	\$ 22.62	\$	211.08
Senior CWA Specialist	\$ 84.05	\$ 145.02	\$ 27.49	\$	256.56
Socioeconomics Specialist	\$ 50.00	\$ 86.27	\$ 16.35	\$	152.62
Public Participation Specialist	\$ 50.40	\$ 86.96	\$ 16.48	\$	153.84
Visual Resources Specialist	\$ 44.14	\$ 76.16	\$ 14.44	\$	134.74
Communications Specialist	\$ 47.20	\$ 81.44	\$ 15.44	\$	144.08
Principal	\$ 84.05	\$ 145.02	\$ 27.49	\$	256.56
Senior Project Managers	\$ 49.97	\$ 86.22	\$ 16.34	\$	152.53
Project Financial Manager	\$ 33.65	\$ 58.06	\$ 11.01	\$	102.71
Project Manager	\$ 41.39	\$ 71.41	\$ 13.54	\$	126.34
Hydrologist	\$ 36.54	\$ 63.05	\$ 11.95	\$	111.54
Biologist IV	\$ 41.39	\$ 71.41	\$ 13.54	\$	126.34
Biologist III	\$ 34.52	\$ 59.56	\$ 11.29	\$	105.37
Biologist II	\$ 25.00	\$ 43.14	\$ 8.18	\$	76.31
Biologist I	\$ 22.84	\$ 39.41	\$ 7.47	\$	69.72
Botanist III	\$ 34.52	\$ 59.56	\$ 11.29	\$	105.37
Botanist II	\$ 25.00	\$ 43.14	\$ 8.18	\$	76.31
Botanist I	\$ 22.84	\$ 39.41	\$ 7.47	\$	69.72
Ecologist III	\$ 45.00	\$ 77.64	\$ 14.72	\$	137.36
Ecologist II	\$ 36.54	\$ 63.05	\$ 11.95	\$	111.54
Ecologist I	\$ 26.08	\$ 45.00	\$ 8.53	\$	79.61
Forester	\$ 25.48	\$ 43.96	\$ 8.33	\$	77.78
Wetland Scientist III	\$ 36.54	\$ 63.05	\$ 11.95	\$	111.54
Wetland Scientist II	\$ 26.08	\$ 45.00	\$ 8.53	\$	79.61
Wetland Scientist I	\$ 22.84	\$ 39.41	\$ 7.47	\$	69.72
Environmental Scientist III	\$ 45.00	\$ 77.64	\$ 14.72	\$	137.36
Environmental Scientist II	\$ 36.54	\$ 63.05	\$ 11.95	\$	111.54
Environmental Scientist I	\$ 26.08	\$ 45.00	\$ 8.53	\$	79.61
Environmental Planner III	\$ 33.00	\$ 56.94	\$ 10.79	\$	100.73
Environmental Planner II	\$ 27.75	\$ 47.88	\$ 9.08	\$	84.71
Environmental Planner I	\$ 25.90	\$ 44.69	\$ 8.47	\$	79.06
GIS Specialist III	\$ 32.00	\$ 55.21	\$ 10.47	\$	97.68
GIS Specialist II	\$ 25.48	\$ 43.96	\$ 8.33	\$	77.78
GIS Specialist I	\$ 24.04	\$ 41.48	\$ 7.86	\$	73.38
Technical Editor II	\$ 44.00	\$ 75.92	\$ 14.39	\$	134.31
Technical Editor I	\$ 25.90	\$ 44.69	\$ 8.47	\$	79.06
Administrative II	\$ 21.75	\$ 37.53	\$ 7.11	\$	66.39
Administrative I	\$ 13.00	\$ 22.43	\$ 4.25	\$	39.68

## 2. Subconsultants

### Hourly Rates

#### Okun Consulting Solutions LLC

Principal Investigator/Project Manager	\$	85.00
Historian/Bridge Expert	\$	85.00
GIS Specialist	\$	70.00
Archeological Field Director	\$	62.00
Production/Formating Specialist	\$	55.00
Archeological Technician	\$	44.00

## 3. Direct Expenses (At Cost)

Printing/Photocopies	included in fully loaded rates	
Personal Computer	included in fully loaded rates	
Equipment - ATV	\$	100.00 per day
Equipment - Hand Auger	\$	75.00 per day
Equipment - Bailer 3.5 inch	\$	25.00 per day
Equipment - Field Computer	\$	25.00 per day
Equipment - Digital Camera	\$	10.00 per day
Equipment - Easel	\$	10.00 per day
Equipment - Generator - 6500W	\$	80.00 per day
Equipment - GPS Handheld	\$	10.00 per day
Equipment - Juno	\$	25.00 per day
Equipment - Submeter/Trimble	\$	100.00 per day
Equipment - GPS Units	\$	10.00 per day
Equipment - Multi Parameter H2O Met	\$	100.00 per day
Equipment - Projector	\$	25.00 per day
Equipment - Probe Camera	\$	25.00 per day
Equipment - Grundfos Sub Pump-3in	\$	320.00 per day
Equipment - Survey Rod	\$	20.00 per day
Equipment - Sound Level Meter	\$	25.00 per day
Equipment - Spotting Scope	\$	25.00 per day
Equipment - Traps - Sherman	\$	20.00 per day
Equipment - Traps - Tomahawk	\$	20.00 per day
Equipment - Visual Field Kit	\$	100.00 per day
Equipment - Water Level Meter	\$	20.00 per day
Equipment - Well Sounder	\$	20.00 per day
Per Diem (standard area)	\$	85.00 per day
Per Diem (high cost area-Santa Fe)	\$	135.00 per day
Mileage (Federally Funded Contracts)	\$	0.580 per mile

**GEO - TEST, INC.**  
**UNIT FEE SCHEDULE**  
 September 2015

**PERSONNEL**

Charges will be made based on the following unit rate for project rated time including travel to and from the project site.

Principal Engineer.....	\$165.00/hour
Registered Professional Engineer/Geologist.....	\$130.00/hour
Staff Eng./Geologist.....	\$100.00/hour
Senior Engineering Technician .....	\$ 65.00/hour
Engineering Technician .....	\$ 55.00/hour
Draftsman.....	\$ 60.00/hour
Typist.....	\$ 45.00/hour
Field Engineer .....	\$ 65.00/hour
Per Diem .....	\$ 95.00/ day

Overtime (1.50 X hourly rates)

**EQUIPMENT**

Charges will be made on an hourly, mileage, or daily rate where applicable.

Vehicle (1/2 ton pickup - Over 30 miles) .....	\$ 0.75/mile
Copies - 2 No Charge, Over 2.....	\$ 0.25/page

**SPECIAL SERVICE AND INSPECTION**

Soil & Foundation Investigation - Quoted based on project scope

Caisson Inspection .....	\$ 55.00/hour
Compaction Control of Engineered Structural Fill.....	\$ 55.00/hour
Concrete Inspection and Control.....	\$ 55.00/hour
Bituminous Plant Calibration.....	\$ 55.00/hour
Concrete or Asphalt coring .....	\$ 100.00/hour
Outside Services and Material .....	cost + 20%
Floor Relative Humidity Probe .....	\$50.00/ea
Floor Vapor Emission Rate .....	\$25.00/ea
Windsor Probe.....	\$ 125.00/Set of 3
Fire Proofing Testing Onsite .....	\$ 65.00/hour
Special Inspection.....	\$65.00/hour
Structural Steel Special Inspection .....	\$80.00/hour

GEO-TEST, INC.  
 3204 RICHARDS LANE  
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 FAX (505) 471-2245

8528 CALLE ALAMEDA  
 ALBUQUERQUE,  
 NEW MEXICO  
 87113  
 (505) 857-0933  
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2805-A LAS VEGAS CT  
 LAS CRUCES,  
 NEW MEXICO  
 88007  
 (575) 526-6260  
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**LABORATORY TESTS**
Soils:

Moisture - Density Relation Test	
Unit Cost (ASTM D-698) .....	\$ 95.00
Unit Cost (ASTM D-1557) .....	\$ 110.00
Sieve Analysis (3" - #200)(ASTM C-136) .....	\$ 45.00
Plasticity Index (Atterberg Limits)(ASTM D-4318) .....	\$ 45.00
Hydrometer Analysis (ASTM D-422) .....	\$ 200.00
Moisture Content .....	\$ 25.00
Expansion (Swell, Constant surcharge) .....	\$ 90.00
FHA Soil Volume Change Meter .....	\$ 90.00
Percent Consolidation .....	\$ 100.00
Time Rated Consolidation (ASTM D-2435) .....	\$ 350.00
Direct Shear (ASTM D-3080) .....	\$ 175.00
Permeability (Constant or Falling Head), Undisturbed .....	\$ 180.00
Permeability (Constant or Falling Head), Remolded .....	\$ 200.00
Unconsolidated Undrained Triaxial Shear (ASTM D-2850) .....	\$ 375.00/pt.
Unconfined Compression, Undisturbed (ASTM D-2166) .....	\$ 75.00
Unconfined Compression, Remolded (ASTM D-2166) .....	\$ 100.00
Density of Undisturbed Ring Sample .....	\$ 35.00
California Bearing Ratio (CBR) (ASTM D1883) .....	\$ 375.00
Specific Gravity - #10 Fraction) (ASTM D-854) .....	\$ 50.00
Sample Prep (Laboratory) .....	\$ 55.00/hour
Soil pH (ASTM G-51) .....	\$50.00
Soil Resistivity (ASTM G-57) .....	\$50.00
One Dimensional Swell (ASTM 4546) .....	\$375.00
Floor Moisture Test Kits .....	\$25.00/ea

**CONCRETE**

Compressive Strength Tests (Curing & Capping)	
Concrete Cylinders & Cubes (ASTM C-39) .....	\$ 20.00
Hold Cylinders not Tested .....	\$ 20.00
Flexural Strength (Beams) (ASTM C-78) .....	\$ 30.00
Concrete Cores (ASTM C-39) .....	\$ 25.00
Single use Cylinder Molds .....	\$ 2.00
Concrete Mix Design .....	\$ 2,500.00
Less Aggregate Tests/negotiable .....	\$ 2,000.00
CTB Mix Design .....	\$ 1,500.00

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**ASPHALT**

Asphaltic Concrete Pavement Analysis (includes extraction, gradation, gyratory specimens, and voids analysis) .....	\$335.00
Asphaltic Concrete Mix Design .....	\$ 2,500.00
Lab Verification of Asphalt Mix Design .....	\$ 700.00
Retained Stability of Bituminous Mixture (ASTM D-1075) .....	\$ 300.00
Asphalt Content & Gradation of Bituminous Mixture .....	\$ 100.00
Unit Weight, Stability & Flow (ASTM D-1559) .....	\$ 80.00
Asphalt Core Density and Length (ASTM D-2726) .....	\$ 30.00
Maximum Theoretical Specific Gravity (ASTM D-2041) .....	\$ 60.00
OGFC Mix Design .....	\$ 500.00
Superpave Mix Design .....	\$5,000.00
Gyratory Specimens (AASHTO T-312) .....	\$175.00

**AGGREGATE**

Clay Lumps - Friable Particles (ASTM C-142) .....	\$ 50.00
Organic Impurities (ASTM C-40) .....	\$ 75.00
Sand Equivalent (ASTM D-2419) .....	\$ 50.00
Fractured Face Count + #4 .....	\$ 30.00
Fractured Face Count + #10 .....	\$ 35.00
Los Angeles Abrasion (ASTM C-131) .....	\$200.00
Magnesium or Sodium Sulfate Soundness (ASTM C-88) .....	\$250.00
Specific Gravity & Absorption (Coarse or Fine Aggregate) (ASTM C-127, C-128) .....	\$ 70.00
Unit Weight (ASTM C-29) .....	\$ 40.00
Lightweight Pieces (ASTM C123) .....	\$120.00
Flat and Elongated pieces .....	\$ 50.00
Aggregate Correction Factor (ASTM C-231) .....	\$ 30.00
Uncompacted Void Content (Fine Agg.) (ASTM C-1252) .....	\$50.00
Aggregate Soundness by Freeze/Thaw .....	\$250.00

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