

**ON-CALL INSPECTION, TESTING, DESIGN AND ENVIRONMENTAL  
ASSESSMENT AGREEMENT**

**THIS AGREEMENT**, made between the **CITY AND COUNTY OF DENVER**, a municipal corporation of the State of Colorado, hereinafter referred to as the “City”, and **OLSSON ASSOCIATES, INC.**, a Nebraska corporation doing business at 1111 Lincoln Mall, Lincoln, NE 68508, hereinafter referred to as the “Consultant”.

**RECITALS**

**WHEREAS**, the City requires the services of an experienced consultant to perform construction material inspection, testing, design and environmental site assessment services for the City on an “as needed” basis; and

**WHEREAS**, the Consultant is ready, willing, and able to perform the services as specified in this Agreement;

**NOW, THEREFORE**, the parties agree as follows:

**1. AUTHORITY**: The Executive Director of the Department of Public Works (the “Executive Director” or “Manager”) is the official City representative who directs all services under this Agreement. The titles “Executive Director of Public Works” and “Manager of Public Works” are synonymous and may be used interchangeably for purposes of this Agreement. The Executive Director hereby designates the Director of Engineering for the Department of Public Works (the “Director of Engineering”) as the Executive Director’s authorized representative. The Director of Engineering shall direct the services performed under this Agreement, subject to the final authority and decision of the Executive Director. Communication between the Consultant and the City shall be through a Project Manager who will be assigned to each project.

**2. PURPOSE AND INTENT**: The Consultant shall provide to the City material inspection, testing, design and environmental site assessment services on an as-needed basis as requested by written and executed Task Orders issued pursuant to this Agreement. These services will be in addition to, and not a substitute for, inspections or testing performed by contractors, engineering consultants or design consultants unless otherwise specified in the Task Order. The Consultant shall perform such inspection and testing services in strict accordance with the inspection and testing criteria and specifications established in each Task Order. The range of services, service level and time frame requirements applicable to all Task Orders are

contained in the Scope of Work attached as **Exhibit A**. Consultant's Rates, including hourly rates and rates for specific services are attached as **Exhibit B**. Consultant's Certificate of Insurance is attached as **Exhibit C**.

**3. SCOPE OF WORK:** The Consultant's services shall consist of the following services as well as those services listed in **Exhibits A and B**:

**a.** As directed by the City, the Consultant shall perform all inspection and testing necessary to assure the City that the installation and quality of construction materials on City projects are in compliance with construction contract documents.

**b.** Inspection and testing may be performed on-site or off-site, as appropriate.

**c.** Inspection and testing services include those tests identified in this Agreement, including services listed in **Exhibits A and B**.

**d.** The materials required for Consultant's inspection and testing program are to be supplied by City contractors, in quantities necessary to obtain full verification of quality, at no cost to the City or the Consultant.

**e.** If the Consultant becomes aware that the construction materials inspected or tested do not meet the standards described in the applicable construction documents, or if the Consultant becomes aware of any other circumstances or conditions which would, under the provisions of the applicable construction contract, justify rejection, stoppage or suspension of any part of any project, the Consultant shall immediately notify the project design consultant and the City of such conditions of failure, both verbally and in writing.

**f.** The Consultant shall have such additional authority as is specifically conferred or reasonably implied in this Agreement or as may be given to it in writing by the Executive Director. Any discrepancy, ambiguity, variance, or inconsistency in the description or scope of the Consultant's duties shall be resolved solely by the Executive Director.

**g.** In order to accomplish and expeditiously carry out such inspection and testing services for the City, all inspection and testing services of the Consultant shall be scheduled so as to coincide with the phases of applicable construction work in conjunction with the Consultant's work efforts.

**h.** All final test or analysis reports shall be signed, dated and sealed by Consultant's Professional Engineer in charge of the activity.

i. When directed to provide services under this Agreement, the Consultant shall prepare a proposal containing, at a minimum, the following information:

- (1) A detailed description of the services or work that will be provided including deliverables.
- (2) A listing of any work and/or services that are excluded.
- (3) The maximum fee that will be charged for all services and work.
- (4) A price breakdown identifying the Consultant's fee based upon the Rates in **Exhibit B** and any material and Consultant's cost for services provided by any subcontractors.
- (5) A budget for permissible reimbursable expenses described in paragraph 5(b).
- (6) A schedule identifying any major milestones and the date when all work will be completed.
- (7) A listing of any actual or potential conflicts of interest including work the Consultant is performing or anticipates performing for other entities on the same or interrelated projects.
- (8) Consultant's proposal shall not include any terms or conditions that attempt to modify this Agreement which may only be modified by written amendment.

**4. CONFLICT WITH CONSULTANT OR DESIGN CONSULTANT -**

**NOTICE:** The Consultant agrees to perform its services under this Agreement in such a manner and at such times that the City, the project design consultant, and any contractor who has work to perform can do so without unreasonable delay. In the event that a conflict as to scheduling or access arises between the Consultant and any contractor or any project design consultant during the term of this Agreement, which in the opinion of the Consultant prevents it from scheduling or coordinating with the contractor or project design consultant in a timely manner to meet the City's needs hereunder, the Consultant shall verbally inform the City of such dispute within two (2) hours, and confirm such dispute in writing within eight (8) hours from the point in time such conflict becomes apparent. Upon receipt of such notice, the City, through the Director or his representative, shall attempt to resolve such dispute and communicate a decision regarding such dispute, in writing, to any contractor, any project design consultant, and the Consultant.

5. **COMPENSATION**: The Consultant shall provide professional services for various projects, on an as needed basis, in accordance with the terms and conditions of this Agreement and each Task Order. The City shall compensate the Consultant in accordance with the terms and conditions of this Agreement as set out below:

a. **Basic Services**: The City agrees to pay the Consultant, as compensation for any basic services rendered hereunder, either a maximum basic services fee, set forth in an approved Task Order executed by the City prior to commencement of any work, or an amount based on the Consultant's periodic invoices, whichever is less.

b. **Reimbursable Expenses**: All expenses, including but not limited to mileage, copying, reproduction, telephone, postage, and messenger services, are included in the Consultant's hourly rates and test rates set forth in **Exhibit B**. Consultant is not entitled to any additional compensation for expenses unless the City approves the expense in writing in advance of the expense being incurred. Consultant will itemize any expenses not included in the rates established by **Exhibit B** in any proposal to perform services pursuant to this Agreement. Any proposal identifying additional expenses shall contain a statement of the maximum amount of reimbursable expenses, if any, for which the Consultant will seek reimbursement on any individual project.

c. **Surveying**: The Consultant shall be reimbursed for surveying costs it incurs, subject to the terms and conditions set forth herein and any surveying budget for an individual project.

d. **Special Services**: Subject to prior approval of such costs by the Executive Director, the Consultant shall be paid its actual costs for special supplies or services and when applicable for Consultant's actual time spent overseeing work not contemplated by **Exhibit A**.

e. **Invoices**: The Consultant shall invoice and be paid monthly for each assigned project. All invoices shall reflect the Consultant's actual hours, subconsultant costs and reimbursable costs, if any, and be based on the hourly rates or test billing rates for services contained in **Exhibit B**. The Consultant shall maintain hourly records of the time worked by its personnel and subconsultants, records of all claimed reimbursable expenses, and records of expendable supplies and services as necessary to support any audits by the City. The Consultant shall bill the City monthly for fees and costs accrued during the preceding month. The Consultant's invoice shall be separated as necessary to show direct charges to individual projects

assigned and to distinguish fees and expenses. Upon submission of such invoices to the City, and approval by the City, payment shall issue. Final payment to the Consultant, for each assigned project, shall not be made until after the work is accepted, all guarantees, certificates of completion and the duties agreed to in the scope of work for the individual project are otherwise fully performed by the Consultant. No deductions shall be made from the Consultant's compensation on account of penalty, liquidated damages or other sums withheld from payments to any assigned project contractor.

**f. Maximum Contract Amount:** It is understood and agreed by the parties hereto that payment or reimbursement of all kinds to the Consultant, for all work performed under this Agreement, shall not exceed a maximum of **One Million Five Hundred Thousand Dollars and Zero Cents (\$1,500,000.00)**.

**g. Funding:** Notwithstanding any other term, provision, or condition herein, all payment obligations under this Agreement shall be limited to the funds appropriated or otherwise made available by the Denver City Council for the particular projects assigned to the Consultant under this Agreement for the particular year(s) in which this Agreement is in effect.

As of the date of this Agreement, no funds have actually been appropriated for this Agreement. Instead, it is the City's intent to appropriate the funds necessary to compensate the Consultant for the work it performs on any specific project, at the time it appropriates funds for such specific project.

The Executive Director of Public Works, upon reasonable written request, will advise the Consultant in writing of the total amount of appropriated and encumbered funds which are or remain available for payment for all work by the Consultant on a specific project. The issuance of any form of order or directive by the City which would cause the aggregate amount payable to the Consultant for an assigned project to exceed the amount appropriated for the Consultant's work on that project is expressly prohibited.

In no event shall the issuance of any change order or other form of order or directive by the City be considered valid or binding if it requires additional compensable work to be performed, which work will cause the aggregate amount payable for such work to exceed the amount appropriated and encumbered, unless and until such time as the Consultant has been advised in writing by the Executive Director of Public Works that a lawful appropriation sufficient to cover the entire cost of such additional work has been made.

It shall be the responsibility of the Consultant to verify that the amounts already appropriated for the Consultant's work on a specific project are sufficient to cover the entire costs of such work, and any work undertaken or performed in excess of the amount appropriated is undertaken or performed in violation of the terms of this contract, without the proper authorization for such work, and at the Consultant's own risk.

**6. CITY'S RESPONSIBILITY:**

**a.** The City shall provide available information regarding its requirements for any project, including related budgetary information, and shall cooperate with Consultant. However, the City does not guarantee the accuracy of any such information and assumes no liability therefore. The Consultant shall notify City in writing of any information or requirements provided by City which Consultant believes to be inaccurate or inappropriate for the services hereunder.

**b.** The City shall furnish the Consultant, without charge, copies of any project drawings and specifications reasonably necessary, in the Executive Director's opinion, for the execution of inspection and testing requested.

**7. PERSONNEL ASSIGNMENTS:**

**a.** All key professional personnel will be assigned by the Consultant or its subconsultants to perform work under this Agreement.

**b.** In the event the Consultant does not have as part of its regular staff and services certain professional consultants and consulting services which may be required for performance of the services required under this Agreement, then such consulting services shall be performed by practicing professional consultants outside of the employ of the Consultant. All professional consultants must be previously approved by the Executive Director and shall be retained for the life of this Agreement; provided, however, that acceptable replacements may be substituted with prior approval in writing by the City.

**c.** Prior to designating an outside professional consultant to perform any services, the Consultant shall submit the outside consultant's name, together with a resume of training and experience in work of like character and magnitude of any Project herein contemplated, to the City's Executive Director of Public Works and receive approval in writing therefrom.

d. If, during the term of this Agreement, the Executive Director determines that the performance of approved personnel is not acceptable, he shall notify Consultant and give Consultant the time which the Executive Director considers reasonable to correct such performance. Thereafter, he may require the Consultant to reassign or replace such personnel. If the Executive Director notifies the Consultant that certain of its personnel should be replaced, Consultant will use its best efforts to replace such personnel within ten (10) days from the date of the Executive Director's notice.

e. The Consultant shall not retain any subconsultant to perform work under this Agreement if the Consultant is aware, after a reasonable written inquiry has been made, that it is connected with the sale or promotion of equipment or material which is or may be used on any City project, or any other conflict of interest exists.

f. Neither the Consultant nor any subconsultant engaged shall have other interests which conflict with the interests of the City, such as being connected with the sale or promotion of equipment or material, which may be used on any City project. In unusual circumstances and with full disclosure to the City, the City in its sole discretion may grant a written waiver for the particular consultant or subconsultant.

g. Actions taken by the City under this Article 7 shall not relieve the Consultant of its responsibility for deficiencies, errors, or omissions in the work performed hereunder and no approval rights of the City herein shall in any respect be deemed to establish any control or privity of contract relationship between the City and such subconsultants, nor deemed to usurp any control of or responsibility for the actions of the subconsultants by the Consultant, who shall remain fully responsible for the actions of its subconsultants.

8. **PROFESSIONAL RESPONSIBILITY:** All of the work performed by the Consultant under this Agreement shall be performed in accordance with the standards of care, skill and diligence provided by competent professionals who perform work of a similar nature to the work described in this Agreement.

9. **CONSULTANT'S COOPERATION:** The Consultant agrees to perform its services under this Agreement in such a manner and at such times that the City or any consultant who has work to perform, or contracts to execute, can do so without unreasonable delay.

10. **OWNERSHIP OF DOCUMENTS:**

a. All reports, tests, analysis, notes, specifications or other documents prepared by the Consultant under this Agreement shall become the property of the City. The Consultant also agrees to allow the City to review any of the procedures used in performing the work hereunder and to make available for inspection field notes and other documents used in the preparation for and performance of any of the services required hereunder.

b. The City shall have unlimited rights in the ownership of all documents, notes and other work developed in the performance of this Agreement, including the right to use the same on any other City projects without additional cost to City, and with respect thereto the Consultant agrees to and does hereby grant to City an exclusive royalty-free license to all data which the Consultant may cover by copyright and to all designs as to which the Consultant may assert any rights or establish any claim under the patent or copyright laws or any other applicable laws.

c. In the case of future reuse of the documents, the City reserves the right to negotiate with the Consultant for the acceptance of any professional liability.

d. In the event City does not exercise the option to negotiate with Consultant for the Consultant's acceptance of any professional liability, or in the event such negotiations are unsuccessful, it is understood that the Consultant's name and seal shall be removed from the reproduced documents as utilized and that the Consultant will not be liable to City or third parties for the reuse of those documents.

11. **TERM**: The term of this Agreement shall commence as of the date of execution and shall end three years (3) years from that date, unless sooner terminated or extended by written amendment

12. **TERMINATION**:

a. Nothing herein shall be construed as giving the Consultant the right to perform the services contemplated under this Agreement beyond the time when its services become unsatisfactory to the Executive Director.

b. The Executive Director may terminate this Agreement for cause at any time if the Consultant's services become unsatisfactory to him. The City shall have the sole discretion to permit the Consultant to remedy the cause of a contemplated termination for cause without waiving the City's right to terminate the Agreement.



c. In the event of a termination for cause, or in the event the Consultant becomes unable to serve under this Agreement, the City may take over work to be done under this Agreement and prosecute the work to the completion by contract or otherwise, and the Consultant shall be liable to City for all reasonable cost in excess of what the City would have paid the Consultant had there been no termination for cause.

d. The City may, for its convenience, cancel and terminate this Agreement by giving not less than thirty (30) days prior written notice to the Consultant, which notice shall state the date of cancellation and termination.

e. If the Consultant's services are terminated, postponed or revised, or if the Consultant shall be discharged before all the work contemplated has been completed, or if work for any reason shall be stopped or discontinued, the Consultant shall be paid only for the portion of work which has been satisfactorily completed at the time of such dismissal, termination, postponement, revision or stoppage.

f. All documents relating to the administration of work completed or partially completed shall be delivered by the Consultant to the City within fourteen (14) days of any termination.

g. The indemnity and insurance provisions of this Agreement shall survive termination.

**13. EXAMINATION OF RECORDS:** The consultant agrees that any duly authorized representative of the City, including the City Auditor or his representative, shall, until the expiration of three (3) years after the final payment under this Agreement, have access to and the right to examine, any directly pertinent books, documents, papers, and records of the Consultant, involving transactions related to this Agreement.

**14. NO DISCRIMINATION IN EMPLOYMENT:** In connection with the performance of work under this Agreement, the Consultant agrees not to refuse to hire, discharge, promote or demote, or to discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, gender identity, gender expression, marital status, or physical or mental disability. The Consultant agrees to insert the foregoing provision in all subcontracts.

**15. NOTICES:** Notices under this Agreement shall be made by the Consultant to: Executive Director of Public Works, Wellington E. Webb Building, 201 West Colfax Avenue,

Dept 608, Denver, Colorado 80202, and by the City to: City Attorney's Office, 1437 Bannock Street, Room 353, Denver, Colorado 80202. Said notice(s) shall be delivered personally during normal business hours to the appropriate office, above, or by prepaid U.S. Certified Mail, return receipt requested. Mailed notice shall be deemed effective upon deposit with the U.S. Postal Service. The parties may from time to time designate substitute addresses or persons where and to whom such notices are to be mailed or delivered but such substitutions shall not be effective until actual receipt of written notification.

**16. INSURANCE:**

**a. General Conditions:** Consultant agrees to secure, at or before the time of execution of this Agreement, the following insurance covering all operations, goods or services provided pursuant to this Agreement. Consultant shall keep the required insurance coverage in force at all times during the term of the Agreement, or any extension thereof, during any warranty period, and for five (5) years after termination of the Agreement. The required insurance shall be underwritten by an insurer licensed or authorized to do business in Colorado and rated by A.M. Best Company as "A-"VIII or better. Each policy shall contain a valid provision or endorsement requiring notification to the City in the event any of the required policies be canceled or non-renewed before the expiration date thereof. Such written notice shall be sent to the parties identified in the Notices section of this Agreement. Such notice shall reference the City contract number listed on the signature page of this Agreement. Said notice shall be sent thirty (30) days prior to such cancellation or non-renewal unless due to non-payment of premiums for which notice shall be sent ten (10) days prior. If such written notice is unavailable from the insurer, Consultant shall provide written notice of cancellation, non-renewal and any reduction in coverage to the parties identified in the Notices section by certified mail, return receipt requested within three (3) business days of such notice by its insurer(s) and referencing the City's contract number. If any policy is in excess of a deductible or self-insured retention, the City must be notified by the Consultant. Consultant shall be responsible for the payment of any deductible or self-insured retention. The insurance coverages specified in this Agreement are the minimum requirements, and these requirements do not lessen or limit the liability of the Consultant. The Consultant shall maintain, at its own expense, any additional kinds or amounts of insurance that it may deem necessary to cover its obligations and liabilities under this Agreement.

**b. Proof of Insurance:** Consultant shall provide a copy of this Agreement to its insurance agent or broker. Consultant may not commence services or work relating to the Agreement prior to placement of coverages required under this Agreement. Consultant certifies that the certificate of insurance attached as **Exhibit C**, preferably an ACORD certificate, complies with all insurance requirements of this Agreement. The City requests that the City's contract number be referenced on the Certificate. The City's acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Consultant's breach of this Agreement or of any of the City's rights or remedies under this Agreement. The City's Risk Management Office may require additional proof of insurance, including but not limited to policies and endorsements.

**c. Additional Insureds:** For Commercial General Liability, Auto Liability and Excess Liability/Umbrella (if required), Consultant and Subconsultant's insurer(s) shall include the City and County of Denver, its elected and appointed officials, employees and volunteers as additional insured.

**d. Waiver of Subrogation:** For all coverages required under this Agreement, Consultant's insurer shall waive subrogation rights against the City.

**e. Subcontractors and Subconsultants:** All subcontractors and subconsultants (including independent contractors, suppliers or other entities providing goods or services required by this Agreement) shall be subject to all of the requirements herein and shall procure and maintain the same coverages required of the Consultant. Consultant shall include all such subcontractors as additional insured under its policies (with the exception of Workers' Compensation) or shall ensure that all such subcontractors and subconsultants maintain the required coverages. Consultant agrees to provide proof of insurance for all such subcontractors and subconsultants upon request by the City.

**f. Workers' Compensation/Employer's Liability Insurance:** Consultant shall maintain the coverage as required by statute for each work location and shall maintain Employer's Liability insurance with limits of \$100,000 per occurrence for each bodily injury claim, \$100,000 per occurrence for each bodily injury caused by disease claim, and \$500,000 aggregate for all bodily injuries caused by disease claims. Consultant expressly represents to the City, as a material representation upon which the City is relying in entering into this Agreement,

that none of the Consultant's officers or employees who may be eligible under any statute or law to reject Workers' Compensation Insurance shall affect such rejection during any part of the term of this Agreement, and that any such rejections previously effected, have been revoked as of the date Consultant executes this Agreement.

**g. Commercial General Liability:** Consultant shall maintain a Commercial General Liability insurance policy with limits of \$1,000,000 for each occurrence, \$1,000,000 for each personal and advertising injury claim, \$2,000,000 products and completed operations aggregate, and \$2,000,000 policy aggregate.

**h. Business Automobile Liability:** Consultant shall maintain Business Automobile Liability with limits of \$1,000,000 combined single limit applicable to all owned, hired and non-owned vehicles used in performing services under this Agreement

**i. Professional Liability (Errors & Omissions):** Consultant shall maintain limits of \$1,000,000 per claim and \$1,000,000 policy aggregate limit. Policy shall include a severability of interest or separation of insured provision (no insured vs. insured exclusion) and a provision that coverage is primary and non-contributory with any other coverage or self-insurance maintained by the City.

**j. Additional Provisions:**

(1) For Commercial General Liability, the policy must provide the following:

- (a) That this Agreement is an Insured Contract under the policy;
- (b) Defense costs in excess of policy limits;
- (c) A severability of interests, separation of insureds or cross liability provision; and
- (d) A provision that coverage is primary and non-contributory with other coverage or self-insurance maintained by the City.

(2) For claims-made coverage:

- (a) The retroactive date must be on or before the contract date or the first date when any goods or services were provided to the City, whichever is earlier.

(3) Consultant shall advise the City in the event any general aggregate or other aggregate limits are reduced below the required per occurrence limits. At their own

expense, and where such general aggregate or other aggregate limits have been reduced below the required per occurrence limit, the Consultant will procure such per occurrence limits and furnish a new certificate of insurance showing such coverage is in force.

**17. DEFENSE & INDEMNIFICATION:**

**a.** To the fullest extent permitted by law, the Consultant agrees to defend, indemnify, reimburse and hold harmless City, its appointed and elected officials, agents and employees for, from and against all liabilities, claims, judgments, suits or demands for damages to persons or property arising out of, resulting from, or related to the work performed under this Agreement that are attributable to the negligence or fault of the Consultant or the Consultant's agents, representatives, subcontractors, or suppliers ("Claims"). This indemnity shall be interpreted in the broadest possible manner consistent with the applicable law to indemnify the City.

**b.** Consultant's obligation to defend and indemnify may be determined after Consultant's liability or fault has been determined by adjudication, alternative dispute resolution, or otherwise resolved by mutual agreement between the parties. Consultant's duty to defend and indemnify City shall relate back to the time written notice of the Claim is first provided to City regardless of whether suit has been filed and even if Consultant is not named as a Defendant.

**c.** Consultant will defend any and all Claims which may be brought or threatened against City and will pay on behalf of City any expenses incurred by reason of such Claims including, but not limited to, court costs and attorney fees incurred in defending and investigating such Claims or seeking to enforce this indemnity obligation. Such payments on behalf of City shall be in addition to any other legal remedies available to City and shall not be considered City's exclusive remedy.

**d.** Insurance coverage requirements specified in this Agreement shall in no way lessen or limit the liability of the Consultant under the terms of this indemnification obligation. The Consultant shall obtain, at its own expense, any additional insurance that it deems necessary for the City's protection.

**e.** This defense and indemnification obligation shall survive the expiration or termination of this Agreement.

**18. STATUS OF CONSULTANT:** It is understood and agreed that the status of the Consultant shall be that of an independent contractor retained on a contractual basis to perform professional or technical services for limited periods of time as described in Section C5.23-3 of

the Charter of the City and it is not intended, nor shall it be construed, that the Consultant, or any member of its staff or any consultant, is an employee, officer or agent of the City under Chapter 18 of the Denver Revised Municipal Code for any purpose whatsoever.

**19. ASSIGNMENT OR SUBCONTRACTING:** The Consultant agrees not to assign, pledge, transfer, or subcontract its duties and rights in this Agreement, in whole or in part, without first obtaining the written consent of the Executive Director. Any attempt by the Consultant to assign, transfer, or subcontract its rights hereunder without such prior written consent of the Executive Director shall at the option of the Executive Director automatically terminate this Contract and all rights of the Consultant hereunder. Such consent may be granted or denied at the sole and absolute discretion of said Executive Director.

**20. NO WAIVER OF RIGHTS:** No assent, expressed or implied, by the City to any breach of any one or more of the covenants, provisions and agreements of the Agreement by the Consultant shall be deemed or taken to be a waiver by the City of any succeeding or other breach by the Consultant.

**21. TAXES AND LICENSES:** The Consultant shall promptly pay, when they are due, all taxes, excises, license fees and permit fees of whatever nature applicable to the work and services which it performs under this Agreement, and shall take out and keep current all required municipal, county, state or federal licenses required to perform its services under this Agreement. The Consultant shall furnish the Executive Director, upon request, duplicate receipts or other satisfactory evidence showing or certifying to the proper payment of all required licenses and/or registrations and taxes. The Consultant shall promptly pay all owed bills, debts and obligations it incurs performing work under this Agreement and shall not allow any lien, verified claim, mortgage, judgment or execution to be filed against land, facilities or improvements owned or beneficially owned by the City as a result of such bills, debts or obligations.

**22. COMPLIANCE WITH ALL LAWS AND REGULATIONS:** Notwithstanding any other term, provision, or condition herein, the Consultant agrees that all of its services hereunder shall be in compliance with all applicable laws, rules and regulations of the United States and the State of Colorado, and the Charter, ordinances, regulations and executive orders of the City and County of Denver.

**23. SUPPLEMENTARY DOCUMENTS:** The following documents, certain of which are attached hereto, are incorporated herein and made a part of this Contract:

- a. Exhibit A, Scope of Work.
- b. Exhibit B, Consultant's Hourly Rates and Testing Billing Rates.
- c. Exhibit C, Certificate of Insurance.

The terms and conditions of this Agreement shall control over any contradictory or inconsistent terms and conditions that may be found or contained in the above referenced Exhibits. The order of precedence between Exhibits A, B and C, in descending order of precedence, shall be A, B and C.

**24. RIGHTS AND REMEDIES NOT WAIVED:** Payment by the City shall not constitute a waiver of any breach of covenant or default which may then exist on the part of the Consultant. No assent, expressed or implied, to any breach of the Agreement shall be held to be a waiver of any later or other breach.

**25. SUBJECT TO LOCAL LAWS, JURISDICTION, VENUE:** Each and every term, provision or condition in this Agreement is subject to and shall be construed in accordance with the provisions of Colorado law, any applicable federal law, the Charter of the City and County of Denver and the ordinances, regulations and Executive Orders enacted and/or promulgated pursuant thereto. Such applicable law, together with the Charter, Revised Municipal Code, regulations, and Executive Orders of the City and County of Denver, as the same may be amended from time to time, are hereby expressly incorporated into this Agreement as if fully set forth herein by this reference. Venue for any action or proceeding arising out of, or relating in any way to this Agreement, or the breach thereof, shall be in the City and County of Denver, Colorado.

**26. USE, POSSESSION OR SALE OF ALCOHOL OR DRUGS:** The Consultant, its officers, agents and employees shall cooperate and comply with the provisions of Executive Order 94 and Attachment A thereto concerning the use, possession or sale of alcohol or drugs. Violation of these provisions or refusal to cooperate with implementation of the policy can result in the City barring the Consultant from City facilities or participating in City operations.

**27. SURVIVAL OF CERTAIN CONTRACT PROVISIONS:** Unless for terminated convenience, all terms and conditions of this Agreement, together with the exhibits and attachments hereto, which, by reasonable implication, contemplate continued performance or compliance beyond the termination of this Agreement (by expiration of the term or otherwise), shall survive such termination and shall continue to be enforceable as provided herein. Without

limiting the general applicability of the foregoing, the Consultant's obligations for the provision of insurance and to indemnify the City shall survive for a period equal to any and all relevant statutes of limitation, plus the time necessary to fully resolve any claims, matters, or actions begun within that period.

**28. COMPLIANCE WITH M/WBE REQUIREMENTS:**

**a.** This Contract is subject to all applicable provisions of Divisions 1 and 3 of Article III, of Chapter 28, Denver Revised Municipal Code (D.R.M.C.), designated as Sections 28-31 to 29-36 and 28-52 to 28-90 D.R.M.C. and referred to in this Contract as the "M/WBE Ordinance". Without limiting the general applicability of the foregoing, the Consultant acknowledges its continuing duty, pursuant to Sections 28-72, 28-73 and 28-75 of the D.R.M.C., to maintain throughout the duration of this Contract, compliance with the level of minority and Woman business enterprise participation, upon which the City approved the award of this Contract to the Consultant and the Consultant further acknowledges that failure to maintain such participation commitments or otherwise comply with the requirements of the M/WBE Ordinance shall subject the Consultant to sanctions in accordance with Section 28-77 of the D.R.M.C. Nothing contained in this provision or in the M/WBE Ordinance shall negate the City's right to prior approval of subcontractors, or substitutes therefore, under this Contract. The Consultant identified in its Proposal MBE and/or WBE firms with which it intends to subcontract under this Agreement, with a total participation level by such firms of 20%.

**b.** Under § 28-72 D.R.M.C., the Consultant has an ongoing, affirmative obligation to maintain for the duration of this Agreement, at a minimum, compliance with the participation level identified in Paragraph 28(a) above, unless the City initiates a material alteration to the scope of work affecting MBEs or WBEs performing on this Agreement through contract amendment, or as otherwise described in § 28-73 D.R.M.C. The Consultant acknowledges that:

- (1)** It must establish and maintain records and submit regular reports, as required, which will allow the City to assess progress in achieving the M/WBE participation goal.
- (2)** If contract modifications are issued Under the Agreement, the Consultant shall have a continuing obligation to immediately inform



DSBO in writing of any agreed upon increase or decrease in the scope of work of such contract, upon any of the bases discussed in § 28-73, D.R.M.C., regardless of whether such increase or decrease in scope of work has been reduced to writing at the time of notification.

(3) If contract modifications are issued, that include an increase in scope of work of this Agreement, or that increases the dollar value of the contract, whether or not such change is within the scope of work designated for performance by an M/WBE at the time of contract award, such contract modification shall be immediately submitted to DSBO for notification purposes. Those contract modifications that involve a changed scope of work that cannot be performed by existing project subconsultants or by the Consultant shall be subject to a goal for M/WBEs equal to the original goal on the contract which was included in the proposal. The Consultant shall satisfy such goal with respect to such changed scope of work by soliciting new M/WBEs in accordance with § 28-73, D.R.M.C., as applicable, or the Consultant must show each element of modified good faith set out in § 28-75(c) D.R.M.C. The Consultant shall supply to the director the documentation described in § 28-75-(c) D.R.M.C. with respect to the increased dollar value of the contract.

(4) Failure to comply with these provisions may subject the Consultant to sanctions set forth in the M/WBE Ordinance. Should any questions arise regarding specific circumstances, the Consultant must consult the M/WBE Ordinance or contact the Project's designated DSBO representative at (720) 913-1999.

**29. NO EMPLOYMENT OF ILLEGAL ALIENS TO PERFORM WORK UNDER THE AGREEMENT:**

a. This Agreement is subject to Division 5 of Article IV of Chapter 20 of the Denver Revised Municipal Code, and any amendments (the "Certification Ordinance").

b. The Consultant certifies that:

(1) At the time of its execution of this Agreement, it does not knowingly employ or contract with an illegal alien who will perform work under this Agreement.

(2) It will participate in the E-Verify Program, as defined in § 8-17.5-101(3.7), C.R.S., to confirm the employment eligibility of all employees who are newly hired for employment to perform work under this Agreement.

c. The Consultant also agrees and represents that:

(1) It shall not knowingly employ or contract with an illegal alien to perform work under the Agreement.

(2) It shall not enter into a contract with a subconsultant or subcontractor that fails to certify to the Consultant that it shall not knowingly employ or contract with an illegal alien to perform work under the Agreement.

(3) It has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this Agreement, through participation in the E-Verify Program.

(4) It is prohibited from using the E-Verify Program procedures to undertake pre-employment screening of job applicants while performing its obligations under the Agreement, and that otherwise requires the Consultant to comply with any and all federal requirements related to use of the E-Verify Program including, by way of example, all program requirements related to employee notification and preservation of employee rights.

(5) If it obtains actual knowledge that a subconsultant or subcontractor performing work under the Agreement knowingly employs or contracts with an illegal alien, it will notify such subconsultant or subcontractor and the City within three (3) days. The Consultant will also then terminate such subconsultant or subcontractor if within three (3) days after such notice the subconsultant or subcontractor does not stop employing or contracting with the illegal alien, unless during such three-

day period the subconsultant or subcontractor provides information to establish that the subconsultant or subcontractor has not knowingly employed or contracted with an illegal alien.

(6) It will comply with any reasonable request made in the course of an investigation by the Colorado Department of Labor and Employment under authority of § 8-17.5-102(5), C.R.S, or the City Auditor, under authority of D.R.M.C. 20-90.3.

d. The Consultant is liable for any violations as provided in the Certification Ordinance. If Consultant violates any provision of this section or the Certification Ordinance, the City may terminate this Agreement for a breach of the Agreement. If the Agreement is so terminated, the Consultant shall be liable for actual and consequential damages to the City. Any such termination of a contract due to a violation of this section or the Certification Ordinance may also, at the discretion of the City, constitute grounds for disqualifying Consultant from submitting bids or proposals for future contracts with the City.

**30. CONFLICTS OF INTEREST:**

a. The Consultant has a continuing duty to disclose, in writing, any actual or potential conflicts of interest including work the Consultant is performing or anticipates performing for other entities on the same or interrelated projects. In the event that Consultant fails to disclose in writing actual or potential conflicts, the Executive Director, in his sole discretion, may terminate the applicable task order or the Agreement.

b. The Consultant agrees that no official, officer or employee of the City shall have any personal or beneficial interest whatsoever in the services or property described herein and the Consultant further agrees not to hire or contract for services any official, officer, or employee of the City or any other person which would be in violation of the Denver Revised Municipal Code Chapter 2, Article IV, Code of Ethics, or Denver City Charter provisions C5.13 and C5.14.

**31. TIME IS OF THE ESSENCE:** The parties agree that in the performance of terms, conditions, and requirements of this Agreement by the Consultant, time is of the essence.

**32. TAXES, CHARGES AND PENALTIES:** The City shall not be liable for the payment of taxes, late charges or penalties of any nature.

**33. NO THIRD PARTY BENEFICIARY:** It is expressly understood and agreed that enforcement of the terms and conditions of this Agreement, and all rights of action relating to such enforcement, shall be strictly reserved to the City and the Consultant, and nothing contained in this Agreement shall give or allow any such claim or right of action by any other or third person on such Agreement. It is the express intention of the City and the Consultant that any person other than the City or the Consultant receiving services or benefits under this Agreement shall be deemed to be an incidental beneficiary only.

**34. PARAGRAPH HEADINGS:** The captions and headings set forth herein are for convenience of reference only, and shall not be construed so as to define or limit the terms and provisions hereof.

**35. SEVERABILITY:** If any provision, term, or part of this Agreement, except for the provisions of this Agreement requiring prior appropriation and limiting the total amount to be paid by the City, is held to be invalid, illegal, unenforceable, or in conflict with any law of the State of Colorado, the validity, legality, and enforceability of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the particular part, term or provision held to be invalid.

**36. DISPUTES:** Disputes regarding this Agreement shall be resolved by administrative hearing pursuant to Denver Revised Municipal Code 56-106.

**37. INTEGRATION OF ENTIRE AGREEMENT:** The parties acknowledge and agree that the provisions contained herein constitute the entire agreement and that all representations made by any officer, agent or employee of the respective parties unless included herein are null and void and of no effect. No alterations, amendments, changes or modification, shall be valid unless executed by an instrument in writing by all the parties with the same formality as this Agreement. This Agreement shall be binding upon the parties and their successors in interest.

**REMAINDER OF PAGE INTENTIONALLY LEFT BLANK**

**Contract Control Number:**

IN WITNESS WHEREOF, the parties have set their hands and affixed their seals at Denver, Colorado as of

SEAL

**CITY AND COUNTY OF DENVER**

ATTEST:

By \_\_\_\_\_

\_\_\_\_\_

APPROVED AS TO FORM:

REGISTERED AND COUNTERSIGNED:

By \_\_\_\_\_

By \_\_\_\_\_

By \_\_\_\_\_



**Contract Control Number:** PWADM-201841792-00

**Contractor Name:** OLSSON ASSOCIATES, INC.

By: Ryan D Beckman

Name: Ryan D. Beckman  
(please print)

Title: President  
(please print)

**ATTEST: [if required]**

By: \_\_\_\_\_

Name: \_\_\_\_\_  
(please print)

Title: \_\_\_\_\_  
(please print)



**Exhibit A**  
**Scope of Work**

# **EXHIBIT A – SCOPE OF WORK**

## **GENERAL SCOPE OF WORK OVERVIEW**

Through the On-Call Contract/Task Order process, the Consultant will perform various requested Inspection, Materials Testing and Environmental Services to support Capital Projects Management (CPM) – Facilities, CPM – Transportation, CPM – Wastewater and other City Agencies as necessary. These services will include, but are not limited to: Construction Inspection; Geotechnical Engineering investigation, testing and design reports; Foundation Design reports (cast-in-place concrete caissons, footings, piers, walls, columns, abutments, etc.); Pavement Design reports (subgrade, asphalt, concrete); Environmental Inspection; Certified Asbestos Inspector (CABI); Materials Inspection (soils; cast-in-place concrete, precast concrete (plant cast and site cast); asphaltic concrete; wood and timber; masonry and grout; structural steel, miscellaneous metals and erection; fireproofing; plumbing; piping; mechanical; electrical; exterior building wall systems; other general building components both vertical and horizontal as required; structural integrity or capacity analysis; clerical support; environmental assessment; preparation of Materials Management Plans.

## **WORK DESCRIPTION FOR SERVICES**

### **Design Services**

1. Subsurface soils borings and analysis
2. Geotechnical engineering design for foundations or soil related parameters
3. Pavement Designs addressing traffic, subgrade, asphalt, concrete
4. Vehicle classification for pavement design
5. Non-destructive testing (and/or destructive testing as required, i.e. coring) and analysis of pavements for evaluation of design parameters
6. Plan Review and Constructability analysis (occasional)
7. Review of design plans for compliance with City and County of Denver Building Code / ADA Compliance (occasional).
8. Roof design and specifications services for existing Denver owned buildings.
9. Non-destructive testing (or destructive testing as required, i.e. coring) of existing bridge, culvert and retaining wall structures to determine material properties, reinforcement information (ex. using GPR, X-ray), etc.
10. Non-standard Material Review – special backfill or bedding



### **Construction Services**

1. Inspect and verify bearing strata support and design assumptions for foundations; footings, drilled caissons, driven piles.
2. Test and assess soil subgrade preparation and construction for structure backfill, trenches, embankments, and roads; chemical or mechanical stabilization, moisture/compaction and proof-roll. Inspection services may be required.
3. Inspect and/or Test soils, bedding, asphalt, concrete, concrete reinforcing, masonry, timber, steel, welds, structural connections, sewer pipes, cast-in-place-pipes or boxes; Cured-In-Place Pipes, manholes, junctions, drainage structures, or waterproofing. These services typically will be performed before and during placement, and may occur after placement. Testing of pipes and manholes may include pressure test to verify joints and/or video inspection of runs of pipe/boxes.
4. Inspect and/or test water quality media, filter fabric, or geo-fabrics.
5. Inspection observation services may also be required separately from Testing Services.
6. Inspect and/or test fireproofing, piping, mechanical and electrical systems.
7. Forensic testing and analysis on any materials or methods associated with the above mentioned or other construction materials. This may also be needed for rapid analysis of the structural integrity for any damaged or existing structure.
8. Non-destructive testing and analysis of pavements for structural capacity or smoothness (occasional). Also perform supporting destructive testing.
9. Non-destructive testing, analysis, and reporting of welded connections on traffic signal poles.
10. Inspection of traffic signal installations including underground conduit, pull boxes, foundations, and poles and arms.
11. Usually will perform Quality Assurance or Acceptance role in conjunction with City Personal or Project Managers. May provide Independent Assurance Testing role on other projects
12. Inspect Roof Systems or Exterior Insulation Finished Systems for quality control, testing and City of Denver building code compliance.
13. Perform CDOT required ID/IQ Testing for Federally Funded projects.
14. Fill out CDOT required documentation (such as the form 250) on Federally Funded Projects.
15. Create a testing plan to comply with CDOT/FHWA/FTA project requirements.
16. Sampling and testing for lead based paint and asbestos (non-soil) as required

### **Clerical Support**

1. Database development and file maintenance services.
2. Data reporting and report preparation
3. Clerical and data support

## **Environmental Services**

Anticipated Environmental Services include but are not limited to conducting surface and subsurface (UST) including UST removal (as required) Environmental Site Assessments (ESAs) of future construction sites and preparation of project-specific Material Management Plans (MMPs). The Public Works Project Manager will be responsible for ensuring the requested Environmental Service is coordinated with and delivered to the Denver Department of Environmental Health, Division of Environmental Quality (DEQ) Project Manager.

### 1. Environmental Site Assessments (ESAs)

The Environmental Consultant shall provide an experienced and qualified team to perform invasive assessments to determine environmental conditions that could impact project design, project budget, demolition, excavation, construction, and dewatering processes of a project site(s). Consultant could be required to investigate City-owned or managed sites contaminated by material or substances regulated under Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or other regulations. Requested attributes of a limited environmental subsurface investigation follow.

The Environmental Consultant shall perform environmental investigation and assessment of proposed project sites. Samples of water, soil, fill materials, gases, wastes, debris, and construction materials shall be collected and analyzed for their characteristics and contaminants of potential concern in conformity with Environmental Protection Agency (EPA)-approved methodology. Groundwater sampling shall be performed as requested by regulatory agencies or in general accordance with ASTM D6771-02 Low-Flow Purging and Sampling. If requested, the Consultant shall submit a Health and Safety Plan (HASP) when required by the DEQ Project Manager. If requested by the DEQ Project Manager, the HASP should be reviewed and approved by a Certified Industrial Hygienist (CIH) under contract or employed by the Consultant. The HASP must cover all phases of work expected at the site. Where appropriate, the Consultant shall also submit a Sampling and Analysis Plan (SAP), including a brief description of the site, the type of sampling and media to be sampled, the laboratory analysis to be done (including methodology). Prior to any work taking place, a street occupancy permit and a traffic control plan could be required for project sites within City ROWs. Consultant is responsible for obtaining property access agreements, and for notifications and/or obtaining permits needed to perform the work. Any work done on a site contaminated by an illicit drug laboratory must be conducted under the supervision of an Industrial Hygienist (IH) or a CIH.

Upon request, the Environmental Consultant shall review all relevant data for the project site. Data may include, without limitation, construction plans and specifications, Phase I ESAs, Phase II ESAs, subsurface investigation reports, Corrective Action Plans, Corrective Measures Plans, groundwater monitoring reports and/or other data packages.

The environmental investigation and assessment work could include, without limitation, planning and characterizing media for Public Works construction projects including: performing asbestos containing material surveys; conducting hydrogeological (aquifer testing) studies; conducting risk/cost assessments; interfacing with regulatory agencies; and preparing work plans, reports, and similar documents. The work could include surface and subsurface sampling of fill, soil, and rock by hand auguring, direct push, hollow stem auger drilling, test pits, or other drilling

methods; installing, surveying, and sampling of groundwater monitoring wells; sampling of surface waters and sediments; sampling/monitoring of vapors or explosive gases; and evaluation of explosive (methane) gas and vapor migration issues consistent with ASTM, EPA, & CDPHE guidance.

In coordination with the DEQ Project Manager, the Consultant shall ensure that all waste material generated during limited environmental investigation is properly stored, characterized, transported, and either or both disposed or treated.

A report will be prepared to present the data obtained and to document the work performed. A data summary and conclusions regarding the subsurface conditions at the site will be provided. The limited environmental investigation report will include appendices for boring logs, well construction diagrams, and analytical laboratory reports. It is intended that the report could be attached to the project plans and specifications so that bidding contractors would have an opportunity to review the document as they prepare bids for construction. Reports must meet formatting and other requirements as specified by regulatory agencies and the DEQ Project Manager.

## 2. Material Management Plans (MMPs)

The Environmental Consultant shall prepare project-specific Material Management Plans (MMPs) or if requested, Material Management Recommendations Reports (MMRRs), to provide guidance to the future-selected construction contractor regarding handling potentially contaminated media (e.g. soil, fill, and/or groundwater) during construction. The MMP/MMRR will be designed to minimize potential worker exposure to potentially contaminated material, prevent releases to the environment, and ensure proper management and disposal. MMPs/MMRRs shall delineate procedures for monitoring for encounters with contaminants or suspected contaminants and for the management of contaminated water and/or solid, special, and hazardous waste on a future construction project. It is intended that the MMPs/MMRRs would be attached to the project plans and specifications, and that bidding contractors would have an opportunity to review the document as they prepare bids for construction. Requested attributes follow.

Upon request, the Environmental Consultant shall review all relevant data for the project site. Data may include, without limitation, project construction plans and specifications, Phase I ESAs, Phase II ESAs, subsurface investigation reports, site characterization reports, Corrective Action Plans, Corrective Measures Plans, groundwater monitoring reports and/or other data packages.

The delivered MMP/MMRR document shall identify areas and media of concern, summarize data, provide conclusions regarding the subsurface conditions, and provide an overview of the MMP implementation for the project site. The document will outline protocols to properly manage environmentally-impacted fill material, soil, and groundwater during site-specific construction activities. It shall identify project contacts. It shall provide field screening procedures, action levels, material segregation procedures, procedures for management/disposal of environmentally impacted media, and a contingency plan for unanticipated materials. The document shall discuss the need for implementation of storm water BMPs, permits, site security, equipment decontamination, general environmental controls, confirmation samples,

recordkeeping, and reporting. The document shall include exhibits (e.g. topographic map, site map, maps of affected soil and affected groundwater, laboratory analytical results, pertinent reports of investigation/characterization, the City's asbestos in soil management plan; as figures, tables, flowcharts, and appendices) as appropriate. The document must meet formatting and other requirements as specified by regulatory agencies and the DEQ Project Manager.

### 3. Environmental Inspections

The Environmental Consultant may be asked to provide site work as an accredited Certified Asbestos Building Inspector (CABI)/ Air Monitoring Specialist (AMS) to monitor work in accordance with approved plans and State regulation. Work would include but would not be limited to, development of monitoring plans, attendance at meetings, monitoring of site activities, collection of air and debris samples for analysis (e.g., TEM or PCM), analysis results, digital photography documentation, written documentation, and reporting.

#### **Task Orders and Responsibility Levels**

Each task order will require some level of project development with the City Project Manager. Most task orders will be for Construction Services, with some for Design Services, or both. Some task orders may require specialists be involved. The scoping and the development of all the details of the work are critical to the task order's success.

The level of responsibility may range from providing geotechnical and pavement engineering designs, recommendations on design or construction issues, to providing daily quality assurance testing on various construction projects, to performing 3rd party independent assurance testing.

The consultant will be required to communicate fully with the Project Managers in the various departments that originate the Task Orders or those directing the work. The communication and coordination involves:

- Utilizing City design and construction standards, testing and project contract schedules, and specific requirements from the City Project Manager for the project.
- A full understanding of the various specifications used, and the response times for both field scheduling and field and written report needed shall be agreed on.
- Daily communication on scheduling issues,
- Utilizing engineering specialists as needed for a project.
- Providing timely daily verbal information with written reports related to field inspections and testing.
- Providing summary testing reports with graphical representation of test locations.

All work will be completed in English units. The consultant shall provide services to document the design and construction work for each task order.

### **Technical Work and Service Level Requested**

Selected activities will be identified on a task order basis and may include some or all of the following:

1. The Consultant shall provide written design or analysis reports (with related figures or charts or software output) according to determined standards. The Consultant shall produce for the City design report documents in a timely manner to facilitate the City moving a design project quickly to bidding in a form that will enable the City to contract for construction according to regular City procedures.,
2. The Consultant shall provide timely daily verbal information with follow up email or written reports related to field inspections and testing.
3. The Consultant shall provide final construction inspection or testing documents in a timely manner to facilitate the City keeping a high level of construction quality without unreasonably delaying the project contractor in a form that will enable the City to maintain the overall project budget and schedule according to regular City procedures.
4. The Consultant shall provide summary testing reports with graphical representation of test locations. Test values shall be shown compared to the various specifications used on the project, showing pass or fail, in a format agreeable to the applicable City Project Manager.
5. The Consultant shall provide a professional level of geotechnical, construction inspection, materials testing, structure capacity, forensic engineering services.
6. The Consultant shall be prepared to provide sufficient normal professional staff and specialized or clerical staff support as necessary for investigation, design or analysis studies, inspection and materials quality assurance or acceptance testing.
7. The Consultant may be asked to provide review of design plans or documents prepared by others.
8. Consultant shall assist, whenever so directed by the City, with the review, analysis and approval of drawings, materials and schedules which the construction contractor prepares to aid in the construction effort.
9. Upon request by the City, the Consultant shall confer with designated City personnel on matters pertaining to the design and construction effort.
10. The Consultant shall provide technical personnel to supplement City Engineering staff. Personnel may need skills and experience in construction inspection, construction engineering (resident engineer), design engineering review, and material testing on a wide variety and scope of work.

NOTE: Some or all of the above activities may be requested from various areas of Public Works to provide assistance internally, as well as to other City Agencies.

### **Services under NAICS Code 237310 (Construction Management Highway, Road, Street and Bridge)**

The scope of services required may include all or some of the construction aspects of the following list with the exception of any and all Airport work. Please refer to the specific scope of the work above.

Airport runway construction  
Airport runway line painting (e.g., striping)  
Asphalt paving (i.e., highway, road, street, public sidewalk)  
Bridge construction  
Bridge decking construction  
Concrete paving (i.e., highway, road, street, public sidewalk)  
Construction management, highway, road, street and bridge  
Culverts, highway, road and street, construction  
Curbs and street gutters, highway, road and street, construction  
Grading, highway, road, street and airport runway  
Guardrail construction  
Painting lines on highways, streets and bridges  
Parking lot marking and line painting  
Parkway construction  
Pothole filling, highway, road, street or bridge  
Repair, highway, road, street, bridge or airport runway  
Resurfacing, highway, road, street, bridge or airport runway  
Road construction  
Runway, airport, line painting (e.g., striping)  
Sidewalk, public, construction  
Sign erection, highway, roads, street or bridge  
Tarring roads

**Services under NAICS Code 237110 (Construction Management Water and Sewer Line)**

The scope of services required may include all or some of the construction aspects of the following list with the exception of any and all Airport work. Please refer to the specific scope of the work above.

Capping of water wells  
Construction management, water and sewer line  
Distribution line, sewer and water, construction  
Drilling water wells (except water intake wells in oil and gas fields)  
Fire hydrant installation  
Irrigation system construction  
Pumping station, water and sewage system, construction  
Sewer main, pipe and connection, construction  
Storm sewer construction  
Utility line (i.e., sewer, water), construction  
Water main and line construction  
Water pumping or lift station construction  
Water system storage tank and tower construction  
Water treatment plant construction

**Exhibit B**  
**List of Key Personnel**

**CONSULTANT TEAM MEMBERS**  
**Key Personnel**

Prime Consultant: Olsson Associates

(Consultant may copy this page or modify it to conform to the services being offered)

Title/Classification	Responsibilities	Rate/Hr.
<b>Team Leader</b>	Oversees staff and provides overall interaction with the client	<b>\$193</b>
<b>Senior Engineer</b>	Directs work of engineering team & reviews reporting	<b>\$150</b>
<b>Project Engineer</b>	Develops recommendations and completes advanced modelling	<b>\$135</b>
<b>Associate Engineer</b>	Completes calculations and writes reports	<b>\$115</b>
<b>Senior Scientist</b>	Directs work of other scientist and reviews reporting	<b>\$150</b>
<b>Project Scientist</b>	Develops recommendations and writes reports	<b>\$125</b>
<b>Associate Scientist</b>	Performs field work and completes basic reporting	<b>\$98</b>
<b>Administrative Assistant</b>	Perform word processing, submittal of reports, supply chain	<b>\$65</b>
	<b>See attached rates.</b>	

Multiplier, which when multiplied by the direct labor rate yields the above hourly billing rate: <sup>3.1</sup> \_\_\_\_\_

Provide a listing of responsibilities for each of the personnel classifications above. Such responsibilities may include:

- Preparation of Engineering and Inspection Reports
- Project management to include scheduling, supervision, preparation of pay requests and budget management
- Testing materials according to accepted procedures
- Performing Engineering analysis of structure





## 2018 Colorado Rate Schedule

Team Leader	\$193 / Hour	Senior Planner	\$145 / Hour
Office/Practice Leader	\$185 / Hour	Senior Project Planner	\$130 / Hour
Industry Expert	\$180 / Hour	Project Planner	\$110 / Hour
Technical Leader	\$180 / Hour	Associate Planner	\$ 85 / Hour
Senior Engineer	\$173 / Hour	Assistant Planner	\$ 65 / Hour
Senior Project Engineer	\$150 / Hour	CAD Manager	\$130 / Hour
Project Engineer	\$135 / Hour	Design Manager	\$125 / Hour
Associate Engineer	\$115 / Hour	Design Associate	\$ 95 / Hour
Assistant Engineer	\$100 / Hour	Design Technician	\$ 90 / Hour
Senior Scientist	\$150 / Hour	Senior Technician	\$ 85 / Hour
Senior Project Scientist	\$145 / Hour	Associate Technician	\$ 70 / Hour
Project Scientist	\$125 / Hour	Assistant Technician	\$ 60 / Hour
Associate Scientist	\$98 / Hour	Sr. Administrative Assistant	\$100 / Hour
Assistant Scientist	\$88 / Hour	Senior Team Coordinator	\$ 95 / Hour
Senior Landscape Architect	\$135 / Hour	Administrative Assistant	\$ 65 / Hour
Sr. Project Landscape Architect	\$115 / Hour	Team Coordinator	\$ 70 / Hour
Project Landscape Architect	\$115 / Hour	Office Assistant	\$ 50 / Hour
Associate Landscape Architect	\$ 95 / Hour	Student Intern	\$ 55 / Hour
Assistant Landscape Architect	\$ 80 / Hour		
<b>SURVEYING</b>			
Survey Team Leader	\$150 / Hour	Associate Survey Technician	\$ 70 / Hour
Senior Surveyor	\$120 / Hour	Associate Surveyor	\$ 65 / Hour
Surveyor	\$ 90 / Hour	2-Person Survey Crew	\$170 / Hour
Senior Survey Technician	\$ 80 / Hour	1-Person Survey Crew	\$125 / Hour
Associate Surveyor	\$ 80 / Hour	Team Coordinator	\$ 70 / Hour
<b>EQUIPMENT RATES</b>			
<b>Environmental Equipment</b>	<b>Fee / Day</b>	<b>Environmental Equipment</b>	<b>Fee / Day</b>
2" Weighted Disposable Bailer	\$15	Magnetic Locator	\$65
3" Weighted Disposable Bailer	\$25	Noise / Sound Level Meter	\$50
Anemometer	\$60	Oil / Water Interface Probe	\$80
BK Pump	\$50	Peristaltic Sampling Pump	\$60
Dip Sampler	\$10	pH / Cond / Temp Meter	\$35
DO/Cond/Temp/Salinity Meter	\$45	Photoionization Detector	\$95
Five Gas Monitor	\$110	PPE (Tyvek, Respirator, etc)	\$150
Flame Ionization Detector	\$150	Sampling Kit	\$25
FLIR Camera	\$100 / Hour	Tedlar Bag	\$15
Generator	\$85	Teel Pump	\$20
Geiger Mueller	\$25	Trimble GPS - Hand Held Sub-Meter	\$150
Grunfos	\$350	Vacuum / Pressure Station	\$120
Hand Auger Kit	\$25	Van Dorn Sampler	\$25
Handheld GPS	\$20	Water Filter & Tubing	\$25
Level / Tripod / Grade Rod	\$50	Water Level Indicator	\$50
Magnehelic Vacuum/Pressure Gauges	25	Water Quality Meter	\$150

Survey Supplies	Fee	Surveying Equipment	Fee / Day
Flagging Tape	\$1.50 / roll	4 Wheel Drive ATB	\$100 / Day
Nails 60d	\$0.15 / each	Trimble GPS	\$300 / Day
Paint	\$4.40 / can	Trimble Robot	\$300 / Day
Rebar (3/4") with cap	\$7.10 / each	LiDAR Scanner	\$900 / Day
Rebar (5/8")	\$2.30 / each		
Wood Hubs (2x2x8)	\$0.55 / each		
Wood Lath - Various Sizes	\$0.70 / each		
Vehicles	Fee	Mileage at gov. rate.	
Under 150 Miles	IRS Rate		
Over 150 Miles			
Large Format Printing	Fee		
KIP Bond	\$0.20 / sq ft		
KIP Vellum	\$0.70 / sq ft		
KIP Film - Mylar	\$3.00 / sq ft		
HP DesignJet BW - Bond	\$0.20 / sq ft		
HP DesignJet BW - Film-Mylar	\$3.00 / sq ft		
Large Format Print - Color	\$2.50 / sq ft		
Large Format Print - Presentation	\$5.00 / sq ft		

SPECIAL INSPECTIONS/CONSTRUCTION TESTING SERVICES			
For engineering services including site visits, engineering analysis, project management, project meetings, report preparation, consultation, etc. *Technician rates include basic field equipment (field density gague, slump cone, airmeter).			
Field Services Team Leader	\$180 / Hour	Field Project Manager	\$ 90 / Hour
Program Manager	\$165 / Hour	Senior Technician* (Masonry, Subgrades, Rebar Formwork, FF)	\$ 65-85 / Hour
Sr. Project Geotechnical Engineer	\$150 / Hour	Technician* (Concrete, Soil Compaction, Rebar, Asphalt, Vapor Emission)	\$ 55-65 / Hour
Project Manager	\$120 / Hour		
Associate Geotechnical Engineer	\$120 / Hour	Administrative Assistant	\$ 50 / Hour
Assistant Geotechnical Engineer	\$ 95 / Hour		

**Equipment**

On-site project laboratory/trailer (Excluding utilities)

Available Upon Request

**Field Laboratory Testing**

For field and laboratory testing services during construction operations. Below unit fees include time for sample preparation in laboratory.

**Soils**

#200 Wash Analysis	per test	\$45
Atterberg Liquid & Plastic Limits Tests	per test	\$65
Standard Proctor	per test	\$120
Modified Proctor	per test	\$160
Proctor Checkpoint	per test	\$60
Sieve Analysis (Soils)	per test	\$75
Moisture Only	per test	\$10
Density & Moisture	per test	\$15
R-Value	per test	\$340
Relative Density	per test	\$180
CBR, 3 pt	per test	\$420
Swell, One dimensional	per test	\$85
Consolidation, Time Rate (set up and initial load)	per test	\$150
Consolidation, Time Rate (additional loads)	per test	\$50
Soil Corrosion Suite	per test	\$225

**Concrete**

Compressive Strength of Concrete Cylinder	per test	\$15
Compressive Strength of Cores	per test	\$60
Core Lengths	per test	\$18
Trim Cylinders or Cores if Needed	per test	\$30
Coring for Samples (includes 2-person crew, core rig, generator - 2 core)	per test	\$500
Coring Additional Core	per test	\$125

**Masonry**

Compressive Strength of Grout Cylinder	per test	\$40
Compressive Strength of Mortar Tube	per test	\$55
Compressive Strength of Block	per test	\$300
Compressive Strength of Block Prism (8-inch)	per test	\$350
Compressive Strength of Block Prism (10-inch or greater)	per test	\$400
Compressive Strength of Grouted Block Prism (8-inch)	per test	\$450

**Aggregates**

Standard Proctor - Aggregate	per test	\$165
Modified Proctor - Aggregate	per test	\$185
Relative Density	per test	\$180
LA Abrasion (includes needed gradations)	per test	\$180
Sieve Analysis	per test	\$120

**Asphalt**

Core - Thickness	per test	\$18
Maximum Theoretical Specific Gravity Rice Method	per test	\$120
Bulk Specific Gravity (unit weight of core/lab specimen)	per test	\$35
Bitumen Content & Gradation of Extracted Aggregate	per trip	\$150
Coring for samples (includes 2-person crew, core rig, generator - 2 core)	per trip	\$550
Coring Additional Core	per trip	\$125
Asphalt Field Density	Included in Tech Rate	

**Equipment**

Coring Rig	per day	\$150
Field CBR Device	per day	\$400
Dynamic Cone Penetrometer	per day	\$75
IR Camera	per day	\$900
Seismic - 24 channel unit	per day	\$1,500
Sonic Echo Analyzer	per day	\$250
Reimbursable Cost by Others (Drilling Subcontractors)	AT COST	





**Attachment 2**

**SUB-CONSULTANT TEAM MEMBERS**

SUB-CONSULTANT NAME: Entitlement and Engineering Solutions, Inc.

List **ALL** potential firm personnel titles/classification that may be utilized under the Agreement, and their respective hourly rate. Do not list names of personnel, only titles (i.e. Project Manager). Provide additional sheets as necessary.

<b>Title/Classification</b>	<b>Responsibilities</b>	<b>Rate/hr</b>
President	Oversight of technical merit, quality, schedule, and budget for all projects	\$ 184.00
Principal	Oversight of engineering design and quality; technical design direction	\$ 176.00
Senior Project Manager	Technical design direction; oversight of team; performs design tasks and quality reviews	\$ 170.00
Project Manager	Provide design direction; tracking of schedule, budget and project milestones	\$ 165.00
Senior Engineer V	Responsible for design direction and technical merit	\$ 159.00
Senior Engineer IV	Responsible for design direction and technical merit; performs design	\$ 145.00
Engineer III	Performs design and engineering calculations	\$ 139.00
Engineer II	Performs design and engineering calculations	\$ 132.00
Engineer I	Assist with the design and engineering calculations	\$ 126.00
Engineer Intern	Assist with the design and engineering calculations under the supervision of a licensed engineer	\$ 120.00
Scheduler	Create/develop project schedule, maintain schedule real-time	\$ 126.00
Designer	Designing, planning and execution of projects; advanced knowledge of CAD	\$ 126.00
Senior Drafter	Establishes and ensures drafting standards; performs drafting/design	\$ 120.00
CAD Technician	Performs drafting of technical drawings	\$ 107.00
Administrative Support	Support of non-technical tasks	\$ 82.00

Multiplier, which when multiplied by the direct labor rate yields the above hourly billing rate: 2.75

The City will not compensate the Consultant for expenses such as postage, mileage, parking, or telephone costs. Reproduction, if requested by the City, shall be reimbursed at actual cost if approved in advance by Project Manager. Such costs are, in all such instances, included in the hourly rates paid by the City. Reproduction of submittals requested by the City including such items as end-of-phase reports, drawings, bid documents, record drawing reproductions, etc. are not included in the hourly rates, and will be itemized as a not-to-exceed reproducible expense and will be reimbursed at actual cost.

**REIMBURSABLE EXPENSES**

Sub Consultant: Entitlement and Engineering Solutions, Inc.

The additional expenses of the Consultant reimbursable by the City shall include:

- 3. Actual cost of reproduction of drawings and specifications, requested by the city.
- 4. Travel/transportation costs shall not be reimbursable by the City for Prime Consultants.

**Actual Costs**

<u>Item</u>	<u>Charge Rate</u>
Copies (8 1/2 x 11")	\$0.09 / each
Copies (8 1/2 x 14")	\$0.17 / each
Red-line copies	\$ 1.09 / each
Reproducibles	\$ 2.40 / each
Color Prints	\$ 0.75 / each



Infrastructure Engineer's Rate Sheet  
Year: 2018

**INFRASTRUCTURE  
ENGINEERS, INC.**

**ingenuity & agility**

---

<b>Job Classification</b>	<b>Burdened Rate</b>
(Includes Overhead 178.50%, FCCM .16%, and Profit 15%)	
Principal/ Officer	\$ 336.15
Chief Engineer	\$ 288.32
Senior Engineer	\$ 221.90
Project Manager	\$ 215.67
Project Engineer	\$ 163.34
Engineer-in-training	\$ 97.00
PE Diver	\$ 178.34
EI Diver	\$ 90.35
Senior Inspector/ Dive Supervisor	\$ 144.01
Inspector/ Diver	\$ 94.86
Assistant Inspector/ Diver	\$ 62.83
PE Climber	\$ 172.02
SPRAT Climbing Tech	\$ 109.15
CADD Technician	\$ 87.61
Admin/ Clerical/ Pontis Tech	\$ 65.39

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<b>Job Classification</b>	<b>Burdened Rate</b>
(Includes Overhead 107.03%, FCCM .16%, and Profit 15%)	
CEI Principal	\$ 257.68
CEI Project Manager	\$ 136.97
CEI Project Administrator	\$ 117.47
CEI Admin Assistant	\$ 45.27
CEI Contract Support Specialist	\$ 85.22
CEI Assistant Contract Support Specialist	\$ 36.93
CEI Senior Inspector	\$ 72.57
CEI Inspector	\$ 58.65



**SUB-CONSULTANT TEAM MEMBERS**

Firm Name: Martinez Associates, Inc.

List **ALL** potential firm personnel titles/classifications that may be utilized under the Agreement, and their respective hourly rate. Do not list names of personnel, only titles (i.e. Project Manager). Provide additional sheets as necessary.

Title/Classification	Responsibilities	Rate/Hr.
Principal Professional	Principal-in-charge and senior reviewer	\$145.00
Senior Professional	Project management and senior engineer	\$135.00
Project Manager	Construction project management	\$110.00
Project Professional	Project engineering and analysis	\$100.00
Sr. Staff Professional	Field investigation, engineering and analysis	\$90.00
Staff Professional	Field investigation and engineering	\$80.00
Inspector	Construction materials inspection and testing	\$90.00
Sr. Engineering Technician	Construction materials observation and testing	\$60.00
Engineering Technician	Construction materials observation and testing	\$55.00
Administrative Assistant	Report typing, accounting and clerical	\$45.00

Multiplier, which when multiplied by the direct labor rate yields the above hourly billing rate: 3.1.

The City will not compensate the Consultant for expenses such as postage, mileage, parking, or telephone costs. Reproduction costs, if requested by the City, shall be reimbursed at actual cost if approved in advance by Project Manager. Such costs are, in all such instances, included in the hourly rates paid by the City. Reproduction of submittals requested by the City including such items as end-of-phase reports, drawings, bid documents, record drawing reproducibles, etc. are not included in the hourly rates, and will be itemized as a not-to-exceed reproducible expense and will be reimbursed at actual cost.

## Schedule of Fees

### Geotechnical Laboratory and Materials Testing Services

#### SOIL AND AGGREGATE TESTS

Standard Proctor Compaction, ASTM D698, each .....	115.00
Modified Proctor Compaction, ASTM D1557, each .....	130.00
Relative Density, each .....	250.00
R-value, ASTM D2844, each .....	441.00
Particle Size Analysis, ASTM D422	
• Fine Sieve (from #200 to #4), each .....	60.00
• Coarse Sieve (from #200 to 3 in), each .....	95.00
• Coarse Sieve (retained on #4), each .....	68.00
• Hydrometer, each .....	131.00
Percent Passing #200 Sieve, ASTM D1140, each .....	60.00
Specific Gravity	
• Fine (passing #4 sieve), ASTM D854, each .....	57.00
• Coarse (retained on #4 sieve), ASTM C127, each .....	80.00
Atterberg Limits, ASTM D4318	
• Several points, each .....	83.00
• One point, each .....	65.00
Moisture Content	
• Moisture Content & Dry (Bulk) Density, ASTM D2216 & D2937, each .....	18.00
• Moisture Content, ASTM D2216, each .....	25.00
Soil Resistivity (Miller Box), each .....	84.00
Corrosivity (pH, resistivity, sulfates, chlorides), each .....	187.00
Sulfate, each .....	40.00
Organic Content, ASTM D2974, each .....	68.00
Permeability of Undisturbed Sample, up to #4 Sieve, each .....	315.00
Permeability of Disturbed (remolded) Sample, up to #4 Sieve, each .....	383.00
Permeability of Gravel and Sands, each .....	236.00
Unconfined Compression, ASTM 2166, each .....	75.00
Unconfined Compression (remolded), ASTM 2166, each .....	50.00
Direct Shear Undrained (per point), each .....	210.00
Swell/Consolidation, each .....	74.00
Swell/Consolidation, Remolded, each .....	120.00
Specific Gravity & Absorption	
• Coarse Aggregate, ASTM C127, each .....	47.00
• Fine Aggregate, ASTM C128, each .....	42.00
Unit Weight of Aggregate, ASTM C29, each .....	42.00
Los Angeles Abrasion	
• 500 Revolutions, ASTM C131, each .....	168.00
• 1,000 Revolutions, ASTM C535, each .....	194.00
Soundness-Sulfate (5-cycles), ASTM C88, each .....	173.00

#### CONCRETE TESTS

Laboratory Trial Batch, ASTM C192, each .....	By Quote
Laboratory Mix Design, historical data, each .....	By Quote
Compression Test, ASTM C39	
• Compression, each .....	18.00
• Unit Weight, each .....	25.00
Light Weight Concrete, ASTM C39	
• Compression, each .....	18.00
• Unit Weight, each .....	25.00
Flexure Test Beams, ASTM C78, each .....	47.00
Specimen Preparation, Trimming or Coring, each .....	52.00
Core Compression Test, ASTM C12, each .....	45.00
Generator and Coring Machine, day .....	250.00

Splitting Tensile, 6" x 12" cylinders, each .....	52.00
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#### MASONRY TESTS

Moisture Content, as received, each .....	24.00
Absorption, each .....	52.00
Compression, each .....	42.00
Shrinkage (ASTM C426), each .....	94.00
Net Area and Volume, each .....	26.00
Masonry Core Trimming, each .....	42.00
Compression Test,	
• un-grouted prisms, each .....	175.00
• grouted prisms, each .....	250.00
Compression Test	
• 2" x 4" Mortar Cylinder, each .....	25.00
• 3" x 6" Grout Prisms, each .....	52.00
• 2" Cubes, ASTM C109, each .....	23.00
Cast by others .....	23.00
Mortar or Grout Mix Designs .....	By Quote

#### FIREPROOFING TESTS

Oven Dry Density, each .....	52.00
Adhesion Testing, each .....	68.00
Intumescent Thickness Equipment, day .....	57.00

#### MOISTURE EMISSION TEST

Vapor Emission Test Kit .....	26.00
RH Test Probe .....	99.00

#### ASPHALTIC CONCRETE

Complete Asphalt Concrete Mix Design (Hveem or Marshall) .....	By Quote
Asphalt Content with Gradation, each .....	250.00
AC Ignition Oven Calibration, each .....	367.00
Measured Maximum Specific Gravity of Mix, ASTM D2041 (Rice Method), each .....	150.00
Extraction of Asphalt and Gradation ASTM D2172, (Method B), each .....	200.00
Unit Weight of Core or Compacted Sample, each .....	42.00
Generator and Coring Machine, day .....	250.00

#### FIELD EXPLORATION AND TESTING

Floor Flatness Testing, visit .....	By Quote
Percolation Test, each .....	By Quote
Geotechnical/Due Diligence Investigation .....	By Proposal
Phase/I/II Environmental Assessment/Investigation .....	By Proposal

**Conditions:** Unit rates presented on this fee schedule are for routinely performed geotechnical laboratory and construction material tests. Numerous other earth material and construction material physical tests can be performed in our laboratory, including rock core, soil cement and soil lime mixture tests. Tests not listed can be quoted upon request. Prices are based on the assumption that samples are uncontaminated and do not contain heavy metals, acids, carcinogens and/or volatile organics which can be measured by an organic vapor analyzer or photo ionization detector with a concentration greater than 50 parts-per-million (ppm). Test results requiring plots will be presented in a publishable format generated from computer programs. Otherwise, raw test numbers will be presented. The fee for each unit test does not include engineering and/or geologic review and analysis. All geotechnical testing review will be billed separately at the fees presented in this schedule.

2610 S. Garfield Way  
Denver, CO 80210  
o: 720-352-2651  
c: 775-291-9014

email:mayo.thompson@mayogeophysical.com

February 22, 2018

Jeff Edson, Team Leader Field Services  
Olsson Associates  
3990 Fox Street  
303.237.2072  
Denver, CO 80216

Jeff,

Mayo Geophysical Services Limited (MayoGeo) is a subsurface imaging company that applies innovative non-invasive geophysical methods to aid real-world geotechnical, environmental and geologic assessments. MayoGeo is experienced in planning and performing geophysical services for void detection, locating rebar and other buried infrastructure, site classification, delineating subsurface boundaries, depth to bedrock and hydrologic applications. MayoGeo utilizes seismic refraction tomography (SRT), surface wave 1D and 2D profiling, time and frequency domain electromagnetism (TDEM and FDEM) and electrical resistivity tomography (ERT). MayoGeo was established in 2014 and is a certified MWBE/DBE/EBE by the City and County of Denver and a SBE by the Colorado Department of Transportation.

Services provided:

Site Classification (ASCE 7 NEHRP VS30)

Locate Buried Infrastructure

Depth to Bedrock

Estimation of Soil Mechanical Properties

(cost table to follow for above)

Additional services

Void Detection

Mapping subsurface boundaries

Hazard Discovery

<b>Proposed Budget</b>	<b>Site Classification</b>	<b>2/22/2018</b>	<b>Proposal Number -</b>	<b>TBD</b>																					
<table border="1"> <tr> <td>Mobilization Costs</td> <td></td> <td>\$1,985.20</td> </tr> <tr> <td>Data Collection</td> <td>1 day @ \$1,072.39 per day</td> <td>\$1,072.39</td> </tr> <tr> <td>Data Processing</td> <td></td> <td>\$715.14</td> </tr> <tr> <td>Report Generation</td> <td></td> <td>\$715.14</td> </tr> <tr> <td colspan="2"><b>Project Total -</b></td> <td><b>\$4,487.86</b></td> </tr> </table>			Mobilization Costs		\$1,985.20	Data Collection	1 day @ \$1,072.39 per day	\$1,072.39	Data Processing		\$715.14	Report Generation		\$715.14	<b>Project Total -</b>		<b>\$4,487.86</b>	<table border="1"> <tr> <td><b>Comments:</b></td> </tr> <tr> <td>Equipment prep</td> </tr> <tr> <td>Approx. 3 lines</td> </tr> <tr> <td>1 line = ~69m</td> </tr> <tr> <td>Processing per field day</td> </tr> <tr> <td>Reporting per field day</td> </tr> </table>		<b>Comments:</b>	Equipment prep	Approx. 3 lines	1 line = ~69m	Processing per field day	Reporting per field day
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<table border="1"> <tr> <td><b>Scope of work</b></td> <td>Perform Site Characterization for IBC Site Class (Vs30m) along level, flat and cleared soft ground to install equipment with vehicle access and client-provided permits if necessary in local area (&lt;20 miles) with estimated depth of investigation of approx. 30 m . Good weather while on site with nearby roads and/or vehicle traffic. Best results on site where multiple lines will intersect.</td> </tr> </table>					<b>Scope of work</b>	Perform Site Characterization for IBC Site Class (Vs30m) along level, flat and cleared soft ground to install equipment with vehicle access and client-provided permits if necessary in local area (<20 miles) with estimated depth of investigation of approx. 30 m . Good weather while on site with nearby roads and/or vehicle traffic. Best results on site where multiple lines will intersect.																			
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<b>Proposed Budget</b>	<b>GPR Rebar mapping</b>	<b>2/22/2018</b>	<b>Proposal Number -</b>	<b>TBD</b>																					
<table border="1"> <tr> <td>Mobilization Costs</td> <td></td> <td>\$962.80</td> </tr> <tr> <td>Data Collection</td> <td>1 day @ \$2,137.78 per day</td> <td>\$2,137.78</td> </tr> <tr> <td>Data Processing (optional)</td> <td></td> <td>\$1,162.64</td> </tr> <tr> <td>Report Generation (optional)</td> <td></td> <td>\$1,162.64</td> </tr> <tr> <td colspan="2"><b>Project Total -</b></td> <td><b>\$5,425.85</b></td> </tr> </table>			Mobilization Costs		\$962.80	Data Collection	1 day @ \$2,137.78 per day	\$2,137.78	Data Processing (optional)		\$1,162.64	Report Generation (optional)		\$1,162.64	<b>Project Total -</b>		<b>\$5,425.85</b>	<table border="1"> <tr> <td><b>Comments:</b></td> </tr> <tr> <td>Equipment and calibration</td> </tr> <tr> <td>Approximately 200 sq. ft/day</td> </tr> <tr> <td>Processing Optional</td> </tr> <tr> <td>Review of add'l possible anomalies</td> </tr> <tr> <td>Reporting as needed</td> </tr> </table>		<b>Comments:</b>	Equipment and calibration	Approximately 200 sq. ft/day	Processing Optional	Review of add'l possible anomalies	Reporting as needed
Mobilization Costs		\$962.80																							
Data Collection	1 day @ \$2,137.78 per day	\$2,137.78																							
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<table border="1"> <tr> <td><b>Scope of work</b></td> <td>Perform ground penetrating radar acquisition over clear, flat area with client-provided necessary permitting and access site with no noise (radio or electromagnetic) sources.</td> </tr> </table>					<b>Scope of work</b>	Perform ground penetrating radar acquisition over clear, flat area with client-provided necessary permitting and access site with no noise (radio or electromagnetic) sources.																			
<b>Scope of work</b>	Perform ground penetrating radar acquisition over clear, flat area with client-provided necessary permitting and access site with no noise (radio or electromagnetic) sources.																								

<b>Proposed Budget</b>	Depth to bedrock	2/22/2018	<b>Proposal Number -</b>	TBD										
<table border="1"> <tr> <td>Mobilization Costs</td> <td>\$1,985.20</td> </tr> <tr> <td>Data Collection</td> <td>1 day @ \$1,958.78 per day \$1,958.78</td> </tr> <tr> <td>Data Processing</td> <td>\$1,250.42</td> </tr> <tr> <td>Report Generation</td> <td>\$1,250.42</td> </tr> <tr> <td><b>Project Total -</b></td> <td><b>\$6,444.81</b></td> </tr> </table>			Mobilization Costs	\$1,985.20	Data Collection	1 day @ \$1,958.78 per day \$1,958.78	Data Processing	\$1,250.42	Report Generation	\$1,250.42	<b>Project Total -</b>	<b>\$6,444.81</b>	<b>Comments:</b> Equipment and calibration Approx. 3 lines/day 1 line = ~69m Processing per field day Reporting per field day	
Mobilization Costs	\$1,985.20													
Data Collection	1 day @ \$1,958.78 per day \$1,958.78													
Data Processing	\$1,250.42													
Report Generation	\$1,250.42													
<b>Project Total -</b>	<b>\$6,444.81</b>													
<b>Scope of work</b> Perform Seismic Refraction along level, flat and cleared soft ground with vehicle access with client-provided permits if necessary in low noise local area (<20 miles) with estimated depth of investigation of approximately 14 m along seismic lines of 69 m.														

<b>Proposed Budget</b>	UST Locate	2/22/2018	<b>Proposal Number -</b>	TBD										
<table border="1"> <tr> <td>Mobilization Costs</td> <td>\$4,354.39</td> </tr> <tr> <td>Data Collection</td> <td>1 day @ \$1,629.58 per day \$1,629.58</td> </tr> <tr> <td>Data Processing</td> <td>\$1,430.28</td> </tr> <tr> <td>Report Generation</td> <td>\$1,430.28</td> </tr> <tr> <td><b>Project Total -</b></td> <td><b>\$8,844.53</b></td> </tr> </table>			Mobilization Costs	\$4,354.39	Data Collection	1 day @ \$1,629.58 per day \$1,629.58	Data Processing	\$1,430.28	Report Generation	\$1,430.28	<b>Project Total -</b>	<b>\$8,844.53</b>	<b>Comments:</b> Equipment and calibration Acquisition and Basic Field Processing Add'l processing and visualization if requested Reporting costs if requested	
Mobilization Costs	\$4,354.39													
Data Collection	1 day @ \$1,629.58 per day \$1,629.58													
Data Processing	\$1,430.28													
Report Generation	\$1,430.28													
<b>Project Total -</b>	<b>\$8,844.53</b>													
<b>Scope of work</b> Locate geophysical anomalies, if any, associated with UST in clear, flat area with vehicle site access with client-provided permitting if necessary and limited noise (ferrous) sources														

Respectfully,

Mayo Thompson  
Principal  
Mayo Geophysical Services Limited



Analysis	Method	\$/Sample
Polyaromatic Hydrocarbons (PAH)	EPA 8270	\$115.00
SVOCs	EPA 8270	\$215.00
PCBs	EPA 8082	\$115.00
RCRA 8 Metals	EPA 1311/6010/7471	\$95.00
Reactivity/Corrosivity/Ignitability		\$75.00
Anions (per analyte)		\$15.00
pH	9040/9045	\$14.00
Conductivity	9050	\$14.00
Herbicides	EPA 8151	\$150.00
Volatile Organic Carbons (VOCs)	EPA 8260C	\$115.00
Pesticides	EPA 8081	\$115.00
BTEX w/ or w/out MTBE	EPA 8260C	\$45.00
GRO/BTEX	EPA 8260C	\$55.00
GRO or DRO	EPA 8015	\$50.00
GRO/DRO	EPA 8015	\$65.00
TPH (GRO/DRO/ORO)	EPA 8015	\$75.00

Prices are based on a 5 day turn around time.

Same Day turn around time – 200% upcharge – 24 hour turn around time – 100% upcharge  
48 hour turn around time – 50 % upcharge, and 72 hour turn around time – 25% upcharge

Please, let me know if you have any questions, or if I can help with anything at all.

Regards,

Noelle Doyle Mathis  
[ndoyle@originslab.com](mailto:ndoyle@originslab.com)



**SUB-CONSULTANT TEAM MEMBERS**  
**Key Personnel**

Firm Name: Pinyon Environmental, Inc.

Title/Classification	Responsibilities	Rate/Hr.
Principal/Executive Management	Responsible for providing strategic direction, vision, and leadership. Performs senior-level QA/QC and conducts meetings and negotiations with regulatory and oversight agencies.	\$220
Senior Engineer/Scientist	Responsible for technical completeness and competency of all submissions and work performed, including performance of junior- and mid-level planners and scientists. Conduct and supervise professional and technical staff to complete studies focused on engineering, planning, NEPA evaluations, air quality, noise, biology, geology, chemistry and environmental science.	\$201
Project Manager II	Project management, including coordination of multi-disciplinary teams, preparing responses to agency questions, and facilitates project meetings with client and regulators. Develops project requirements, site investigations, facility requirements development, budget and programming support, analyses and project execution.	\$179
Project Specialist	Directs the gathering of data and prepares complex reporting and analysis. Oversight of technical products and development of detailed studies related to NEPA, air quality, noise, environmental justice, biology, geology, chemistry and environmental science.	\$153
Project Engineer/Scientist	Conducts data analysis and input, field data gathering, miscellaneous field services related to engineering, NEPA, air quality, noise, geology, chemistry and environmental science, and writes descriptive technical reports.	\$ 127
Staff II Engineer/Scientist	Conducts the collection and initial interpretation of scientific data, such as soil logging, soil and groundwater sampling, water-level surveying, scientific data, noise or air measurements.	\$117
Staff I Technician/Project Assistant	Data management and administrative support, maintain field equipment; administrative contract control.	\$94
Drafting (Graphics)	AutoCAD, floor plans, elevations, sections, scale drawings, layering and concept design for architects and engineers. Duties may include configuring and maintaining CADD libraries, engineering documentation management systems and CADD computer network systems.	\$98
Field Technician/Project Assistant	Maintain Field Equipment, Data Management	\$86
Clerical	Word Processing, Clerical	\$67

Multiplier, which when multiplied by the direct labor rate yields the above hourly billing rate: 3.01

**Attachment 3**

**REIMBURSABLE EXPENSES**

FIRM: Pinyon Environmental, Inc.

The additional expenses of the Consultant reimbursable by the City shall include:

- (1) Actual cost of transportation and living expenses of the Consultant's personnel traveling outside of the Denver Metropolitan area, when authorized in writing by the City under this Agreement, and subject to City regulations and limitations.
- (2) Actual cost of reproduction of drawings and specifications for the specific Task Order and which are in excess of any required by the terms of the contract.
- (3) Actual cost for expendable supplies and services not normally used on a routine or normal basis in an architectural or engineering office (i.e., aerial photography) and which are provided especially under this Agreement for the benefit of the City.
- (4) Other costs negotiated at the Task Order Level.

EXPENSE OR SERVICE	RATE	BILLING RATE
Dual Interface Probe	day	\$70.00
Groundwater level indicator	day	\$30.00
Photoionization Detector / FID or similar	day	\$75.00
Automated Samplers, Monitors, and Data Loggers	day	\$100
PID / FID / multi gas meter (or similar)	day	\$75.00
Groundwater sampling kit	day	\$201.00
Soil Sampling kit	day	\$315.00
Field Visits (General Projects [e.g., Phase I ESA])	Day	\$40.00
Field Visits (Wetland/Biology)	Day	\$50.00
Soil Logging (During Drilling)	Boring	\$105.00
Monitoring Well Development	Well	\$55.00
Monitoring Well Sampling	Well	\$67.00
Asbestos Sampling Kit (Building Inspections)	Day	\$45.00
Asbestos Air Monitoring Kit	Day	\$110.00
<b>Pass Through Rate – Subcontractor Costs and Management</b>		
All Subcontracted Services	Cost	Cost
Field Sampling and Investigation Supplies and Materials as preapproved by City and County of Denver Project Manager	Cost	Cost
Remediation Supplies and Materials as preapproved by City and County of Denver Project Manager	Cost	Cost
██████████	██████████	



**VINE LABORATORIES**

Group	Description	Rate
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**FIELD AND LABORATORY TESTING SERVICES**

<b>Soil Properties</b>	Standard Proctor (ASTM D-698)	\$185 each
	Modified Proctor (ASTM D-1557)	\$200 each
	One Point Proctor	\$80 each
	Swell/Consolidation (ASTM D-4546)	\$135 each
	Moisture Content (ASTM D-2216)	\$25 each
	Aggregate Gradation (ASTM C-136)	\$125 each
	Gradation (ASTM D-422)	\$125 each
	Atterberg Limits (ASTM D-4318)	\$150 each
	Percent Finer than No. 200 (ASTM D-1140)	\$75 each
	Corrosion Suite	\$240 each

<b>Asphalt Properties</b>	Burn off Asphalt Content	\$235 each
	Maximum Specific Gravity	\$190 each
	Core Density / Lift Thickness	\$125 each
	Gradation after AC Burn	\$235 each
	Ignition Oven Calibration	\$450 each
	SuperPave Volumetric Properties	\$560 each
	Hveem Properties	\$180 each
	Lottman Stripping-TSR	\$500 each

<b>Concrete Properties</b>	Compressive Strength of Cylinders	\$24 each
	Concrete Coring	\$135 each
	Preparation and Testing of Concrete Cores (set of 3)	\$100 per set

<b>Masonry Properties</b>	Prism Tests	\$300 each
	Grout Tests	\$200 each
	Mortar Cube Tests	\$75 per set
	Unit Strength of Brick or CMU's	\$250 each

**REIMBURSABLES**

<b>Expenses</b>	Nuclear Density Gauge	\$35 per day
	Vehicle Trip Charge	\$35 per day

**PERSONNEL**

	Project Manager-Administers the QA/QC programs including staffing, inspections and materials testing requirements. Evaluates the quality control activities including compliance with project specifications.	\$150 per hour
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**Positions**

Project Engineer-Supervises inspection and testing personnel. Coordinates daily inspection and testing activities. Reviews and approves daily material test results. Identifies and documents discrepancies and assists in developing remedial actions. Prepares weekly QA/QC materials testing and inspection reports.	\$125 per hour
Laboratory Technician-Conducts laboratory tests on soils, aggregates, asphalt, concrete and specialized material including lime, flowfill; concrete and asphalt mix designs. Maintains laboratory equipment, calibrations and certifications.	\$75 per hour
Senior Engineering Technician-Conducts specialized testing, performs calculations to evaluate materials test results and documents test data. Tracks and retests unacceptable materials to maintain quality limits.	\$75 per hour
Engineering Technician-Performs routine soils, aggregate, asphalt and concrete field tests. Records test locations, specifications and test data. Maintains field testing equipment and calibrations.	\$60 per hour
Administrative Assistant-Manages all clerical duties as they relate to required project paperwork and documentation.	\$55 per hour

**Attachment 3**  
**REIMBURSABLE EXPENSES**

FIRM: Olsson Associates

The additional expenses of the Consultant reimbursable by the City shall include:

- (1) Actual cost of transportation and living expenses of the Consultant's personnel traveling outside of the Denver Metropolitan area, when authorized in writing by the City under this Agreement, and subject to City regulations and limitations.
- (3) Actual cost of reproduction of drawings and specifications for the specific Task Order and which are in excess of any required by the terms of the contract.
- (4) Actual cost for expendable supplies and services not normally used on a routine or normal basis in an architectural or engineering office (i.e., aerial photography) and which are provided especially under this Agreement for the benefit of the City.
- (5) Other costs negotiated at the Task Order Level.

<b>EXPENSE OR SERVICE</b>	<b>BILLING RATE</b>
Mileage <u>outside</u> the Denver metropolitan area	\$ <u>IRS Rate</u> / mile
Xerographic Copies or Printing (larger format sheets)	\$ <u>2.50</u> / S.F.
Photographic Reproduction on Mylar	\$ <u>3.00</u> / S.F.
Outside Materials / Services / Supplies	Cost

# TAB 4 – TESTING SERVICES

SPECIAL INSPECTIONS/CONSTRUCTION TESTING SERVICES			
For engineering services including site visits, engineering analysis, project management, project meetings, report preparation, consultation, etc. *Technician rates include basic field equipment (field density gague, slump cone, airmeter).			
Field Services Team Leader	\$180 / Hour	Field Project Manager	\$ 90 / Hour
Program Manager	\$165 / Hour	Senior Technician* (Masonry, Subgrades, Rebar Formwork, FF)	\$ 65-85 / Hour
Sr. Project Geotechnical Engineer	\$150 / Hour		
Project Manager	\$120 / Hour	Technician* (Concrete, Soil Compaction, Rebar, Asphalt, Vapor Emission)	\$ 55-65 / Hour
Associate Geotechnical Engineer	\$120 / Hour		
Assistant Geotechnical Engineer	\$ 95 / Hour	Administrative Assistant	\$ 50 / Hour

### Equipment

On-site project laboratory/trailer (Excluding utilities)

Available Upon Request

### Field Laboratory Testing

For field and laboratory testing services during construction operations. Below unit fees include time for sample preparation in laboratory.

#### Soils

#200 Wash Analysis	per test	\$45
Atterberg Liquid & Plastic Limits Tests	per test	\$65
Standard Proctor	per test	\$120
Modified Proctor	per test	\$160
Proctor Checkpoint	per test	\$60
Sieve Analysis (Soils)	per test	\$75
Moisture Only	per test	\$10
Density & Moisture	per test	\$15
R-Value	per test	\$340
Relative Density	per test	\$180
CBR, 3 pt	per test	\$420
Swell, One dimensional	per test	\$85
Consolidation, Time Rate (set up and initial load)	per test	\$150
Consolidation, Time Rate (additional loads)	per test	\$50
Soil Corrosion Suite	per test	\$225

#### Concrete

Compressive Strength of Concrete Cylinder	per test	\$15
Compressive Strength of Cores	per test	\$60
Core Lengths	per test	\$18
Trim Cylinders or Cores if Needed	per test	\$30
Coring for Samples (includes 2-person crew, core rig, generator - 2 core)	per test	\$500
Coring Additional Core	per test	\$125

#### Masonry

Compressive Strength of Grout Cylinder	per test	\$40
Compressive Strength of Mortar Tube	per test	\$55
Compressive Strength of Block	per test	\$300
Compressive Strength of Block Prism (8-inch)	per test	\$350
Compressive Strength of Block Prism (10-inch or greater)	per test	\$400
Compressive Strength of Grouted Block Prism (8-inch)	per test	\$450

#### Aggregates

Standard Proctor - Aggregate	per test	\$165
Modified Proctor - Aggregate	per test	\$185
Relative Density	per test	\$180
LA Abrasion (includes needed gradations)	per test	\$180
Sieve Analysis	per test	\$120

#### Asphalt

Core - Thickness	per test	\$18
Maximum Theoretical Specific Gravity Rice Method	per test	\$120
Bulk Specific Gravity (unit weight of core/lab specimen)	per test	\$35
Bitumen Content & Gradation of Extracted Aggregate	per trip	\$150
Coring for samples (includes 2-person crew, core rig, generator - 2 core)	per trip	\$550
Coring Additional Core	per trip	\$125
Asphalt Field Density	Included in Tech Rate	

**Exhibit C**  
**Insurance**

