AGREEMENT

THIS AGREEMENT between the CITY AND COUNTY OF DENVER, a municipal corporation of the State of Colorado (the "City") and STANTEC CONSULTING SERVICES, INC., a New York corporation duly registered and authorized to do business in Colorado, with its principal place of business at 2000 S. Colorado Boulevard, Suite 2-300 Denver, CO 80222 (the "Consultant"), collectively "the parties".

The parties agree as follows:

1. <u>COORDINATION AND LIAISON</u>: The City's Manager of Public Works ("Manager") is the City's representative responsible for authorizing and approving the work performed under this Agreement. The Manager hereby designates the Public Works' City Engineer as the Manager's authorized representative for the purpose of designating a Project Manager, issuing a written Notice to Proceed, and administering, coordinating and reviewing and approving the work performed and services provided by the Consultant under this Agreement. The Consultant shall fully coordinate all services under the Agreement with the Manager of Public Works, ("Manager") or, if directed, with the Project Manager. The Consultant shall submit work orders, correspondence, pay requests, and other submissions to the Project Manager.

2. <u>SERVICES TO BE PERFORMED</u>:

a. As the Manager generally directs, the Consultant shall diligently undertake, perform, and complete all of the services set forth on attached **Exhibit A** (the "Scope of Work"), to the City's satisfaction.

b. Consultant is ready, willing, and able to provide the services required by the Agreement.

c. The Consultant shall faithfully perform the services in accordance with the standards of care, skill, training, diligence, and judgment provided by competent individuals in the Consultant's profession performing services of a similar nature to those described in the Agreement and in accordance with the terms of the Agreement.

3. <u>TERM</u>: The Agreement will commence on **November 1, 2013**, and will expire on **December 31**, **2015** (the "Term"). Subject to the Manager's prior written authorization, the Consultant shall complete any work in progress as of the expiration date and the Term of the Agreement will extend until the work is completed or earlier terminated by the Manager.

4. <u>COMPENSATION AND PAYMENT</u>:

a. <u>Fee</u>: The Consultant's sole compensation for services rendered and costs incurred under the Agreement is \$633,374.00 and amounts billed may not exceed the rates set forth in **Exhibit B**.

b. <u>Reimbursement Expenses</u>: There are no reimbursable expenses allowed under the Agreement, except as itemized in Exhibit B, and included in the Maximum Contract Amount set forth below.

c. <u>Invoicing</u>: Consultant shall provide the City with a monthly invoice in a format and with a level of detail acceptable to the City including all supporting documentation required by the City. The City's Prompt Payment Ordinance, §§ 20-107 to 20-118, D.R.M.C., applies to invoicing and payment under the Agreement.

d. Maximum Contract Amount:

(1) Notwithstanding any other provision of the Agreement, the City's maximum payment obligation will not exceed \$720,315.00 (the "Maximum Contract Amount"). The City is not obligated to execute an Agreement or any amendments for any further services, including any services performed by Consultant beyond that specifically described in Exhibit A. Any services performed beyond those set forth therein are performed at Consultant's risk and without authorization under the Agreement.

(2) The City's payment obligation, whether direct or contingent, extends only to funds appropriated annually by the Denver City Council, paid into the Treasury of the City, and encumbered for the purpose of the Agreement. The City does not by the Agreement irrevocably pledge present cash reserves for payment or performance in future fiscal years. The Agreement does not and is not intended to create a multiple-fiscal year direct or indirect debt or financial obligation of the City.

5. COMPLIANCE WITH DBE AND EQUAL OPPORTUNITY REQUIREMENTS:

a. The Consultant agrees to comply with all requirements of the City's Equal Employment Opportunity program and the Federal Disadvantaged Business Enterprise Participation program as set out in Article III, Division 2, Chapter 28 of the Denver Revised Municipal Code, 49 C.F.R. Part 26, and any rules, regulations, and guidelines set forth thereunder for such programs. This compliance shall include the obligation to maintain throughout the term of the contract that level of DBE participation upon which the Agreement was initially awarded, unless otherwise authorized by the law or any rules, regulations, or guidelines. The Consultant identified in its Proposal DBE firms with which it intends to subcontract under this Agreement, with a total participation level by such firms of 10%. The project goal for DBE participation established for this Agreement by the Division of Small Business Opportunity (DSBO) is 10%.

6. <u>STATUS OF CONSULTANT</u>: The Consultant is an independent contractor retained to perform professional or technical services for limited periods of time. Neither the Consultant nor any of its employees are employees or officers of the City under Chapter 18 of the Denver Revised Municipal Code, or for any purpose whatsoever.

7. <u>TERMINATION</u>:

a. The City has the right to terminate the Agreement with cause upon written notice effective immediately, and without cause upon twenty (20) days prior written notice to the Consultant. However, nothing herein shall be construed as giving the Consultant the right to perform services under the Agreement beyond the time when its services become unsatisfactory to the Manager.

b. Notwithstanding the preceding paragraph, the City may terminate the Agreement if the Consultant or any of its officers or employees are convicted, plead *nolo contendere*, enter into a formal agreement in which they admit guilt, enter a plea of guilty or otherwise admit culpability to criminal offenses of bribery, kick backs, collusive bidding, bid-rigging, antitrust, fraud, undue influence, theft, racketeering, extortion or any offense of a similar nature in connection with Consultant's business. Termination for the reasons stated in this paragraph is effective upon receipt of notice.

c. If the Agreement is terminated without cause, the Consultant will be compensated for work requested and satisfactorily performed. Upon termination of the Agreement by the City, with or without cause, the Consultant will not have any claim against the City by reason of, or arising out of, incidental or relating to termination, except for compensation for work requested and satisfactorily performed as described in the Agreement.

d. If the Agreement is terminated, the City is entitled to and will take possession of all materials, equipment, tools and facilities it owns that are in the Consultant's possession, custody, or control by whatever method the City deems expedient. The Consultant shall deliver all documents in any form that were prepared under the Agreement and all other items, materials and documents that have been paid for by the City to the City. These documents and materials are the property of the City. The Consultant shall mark all copies of work product that are incomplete at the time of termination "DRAFT-INCOMPLETE".

8. EXAMINATION OF RECORDS: Any authorized agent of the City, including the City Auditor or his or her representative, has the right to access and the right to examine any pertinent books, documents, papers

and records of the Consultant, involving transactions related to the Agreement until the latter of three (3) years after the final payment under the Agreement or expiration of the applicable statute of limitations.

9. WHEN RIGHTS AND REMEDIES NOT WAIVED: In no event will any payment or other action by the City constitute or be construed to be a waiver by the City of any breach of covenant or default that may then exist on the part of the Consultant. No payment, other action, or inaction by the City when any breach or default exists will impair or prejudice any right or remedy available to it with respect to any breach or default. No assent, expressed or implied, to any breach of any term of the Agreement constitutes a waiver of any other breach.

10. <u>INSURANCE</u>:

a. General Conditions: Consultant agrees to secure, at or before the time of execution of the Agreement, the following insurance covering all operations, goods or services provided pursuant to the 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 three (3) 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 the Agreement. Such notice shall reference the City contract number listed on the signature page of the Agreement. This 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 Consultant. Consultant shall be responsible for the payment of any deductible or self-insured retention. The insurance coverages specified in the Agreement are the minimum requirements, and these requirements do not lessen or limit the liability of Consultant. 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 the Agreement.

b. <u>Proof of Insurance</u>: Consultant shall provide a copy of the Agreement to its insurance agent or broker. Consultant may not commence services or work relating to the Agreement prior to placement of coverage. Consultant certifies that the certificate of insurance attached as **Exhibit C**, preferably an ACORD certificate, complies with all insurance requirements of the 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 the Agreement shall not act as a waiver of Consultant's breach of the Agreement or of any of the City's rights or remedies under the Agreement. The City's Risk Management Office may require additional proof of insurance, including but not limited to policies and endorsements.

c. <u>Additional Insureds</u>: For commercial general liability and auto liability, Consultant and subcontractor's insurer(s) shall name the City and County of Denver, its elected and appointed officials, employees and volunteers as additional insured.

d. <u>Waiver of Subrogation</u>: For all coverages, Consultant's insurer shall waive subrogation rights against the City.

e. <u>Subcontractors and Sub-consultants</u>: All subcontractors and subconsultants (including independent contractors, suppliers, or other entities providing goods or services required by the Agreement) shall be subject to all of the requirements herein and shall procure and maintain the same coverages required of 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. <u>Workers' Compensation/Employer's Liability Insurance</u>: 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 claim, \$100,000 per occurrence for each bodily injury claim, the city is relying in entering into the Agreement, that none of Consultant's officers or employees who may be eligible under any statute or law to reject workers' compensation insurance shall effect such rejection during any part of the term of the Agreement, and that any such rejections previously effected, have been revoked as of the date Consultant executes the Agreement.

g. <u>Commercial General Liability</u>: 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. <u>Business Automobile Liability</u>: 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 the Agreement

i. <u>Professional Liability (Errors & Omissions)</u>: Consultant shall maintain limits of \$1,000,000 per claim and \$1,000,000 policy aggregate limit. Policy shall include a provision that coverage is primary and non-contributory with any other coverage or self-insurance maintained by the City.

j. <u>Additional Provisions</u>:

- (1) For commercial general liability, the policies must provide the following:
 - (A) That the Agreement is an Insured Contract under the policy;
 - (B) Defense costs in excess of policy limits;
 - (C) A severability of interests or separation of insureds provision (no insured vs. insured exclusion); 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
 - (B) 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, Consultant will procure such per occurrence limits and furnish a new certificate of insurance showing such coverage is in force.

11. <u>DEFENSE AND INDEMNIFICATION</u>:

a. Consultant hereby 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 relating to the work performed under the Agreement ("Claims"), unless such Claims have been specifically determined by the trier of fact to be the sole negligence or willful misconduct of the City. This indemnity shall be interpreted in the broadest possible manner to indemnify City for any acts or omissions of Consultant or its subcontractors and sub-consultants either passive or

active, irrespective of fault, including City's concurrent negligence whether active or passive, except for the sole negligence or willful misconduct of City.

b. Consultant's duty to defend and indemnify City shall arise at the time written notice of the Claim is first provided to City regardless of whether Claimant has filed suit on the Claim. Consultant's duty to defend and indemnify City shall arise even if City is the only party sued by claimant and/or claimant alleges that City's negligence or willful misconduct was the sole cause of claimant's damages.

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 the Agreement shall in no way lessen or limit the liability of Consultant under the terms of this indemnification obligation. 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 the

Agreement.

12. <u>COLORADO GOVERNMENTAL IMMUNITY ACT</u>: In relation to the Agreement, the City is relying upon and has not waived the monetary limitations and all other rights, immunities and protection provided by the Colorado Governmental Act, C.R.S. § 24-10-101, *et seq*.

13. <u>TAXES, CHARGES AND PENALTIES</u>: The City is not liable for the payment of taxes, late charges or penalties of any nature, except for any additional amounts that the City may be required to pay under the City's prompt payment ordinance D.R.M.C. § 20-107, *et seq*. Consultant shall promptly pay when due, all taxes, bills, debts and obligations it incurs performing the services under the Agreement and shall not allow any lien, mortgage, judgment or execution to be filed against City property.

14. ASSIGNMENT: SUBCONTRACTING: The Consultant shall not voluntarily or involuntarily assign any of its rights or obligations under the Agreement or subcontract performance obligations without obtaining the Manager's prior written consent. Any attempt by the Consultant to assign its rights or obligations or subcontract performance obligations without the Manager's prior written consent will be void and, at the Manager's option, automatically terminates the Agreement. The Manager has sole and absolute discretion whether to consent to any assignment of rights or obligations and subcontracting of performance obligations under the Agreement. In the event of any subcontracting or unauthorized assignment: (i) the Consultant shall remain responsible to the City; and (ii) it shall not create a contractual relationship between the City and sub-consultant or subcontractor or assignee.

15. <u>INUREMENT</u>: The rights and obligations of the parties to the Agreement inure to the benefit of and shall be binding upon the parties and their respective successors and assigns, provided assignments are consented to in accordance with the terms of the Agreement.

16. <u>NO THIRD PARTY BENEFICIARY</u>: Enforcement of the terms of the Agreement and all rights of action relating to enforcement are strictly reserved to the parties. Nothing contained in the Agreement gives or allows any claim or right of action to any third person or entity. Any person or entity other than the City or the Consultant receiving services or benefits pursuant to the Agreement is an incidental beneficiary only.

17. <u>NO AUTHORITY TO BIND CITY TO CONTRACTS</u>: The Consultant lacks any authority to bind the City on any contractual matters. Final approval of all contractual matters that purport to obligate the City must be executed by the City in accordance with the City's Charter and the D.R.M.C.

18. <u>SEVERABILITY</u>: Except for the provisions of the Agreement requiring appropriation of funds and limiting the total amount payable by the City, if a court of competent jurisdiction finds any provision of the Agreement or any portion thereof to be invalid, illegal, or unenforceable, the validity of the remaining portions or provisions will not be affected, if the intent of the parties can be fulfilled.

19. <u>CONFLICT OF INTEREST</u>:

a. No employee of the City shall have any personal or beneficial interest in the services or property described in the Agreement. The Consultant shall not hire, or contract for services with, any employee or officer of the City that would be in violation of the City's Code of Ethics, D.R.M.C. §2-51, et seq. or the Charter §§ 1.2.8, 1.2.9, and 1.2.12.

b. The Consultant shall not engage in any transaction, activity or conduct that would result in a conflict of interest under the Agreement. The Consultant represents that it has disclosed any and all current or potential conflicts of interest. A conflict of interest shall include transactions, activities or conduct that would affect the judgment, actions or work of the Consultant by placing the Consultant's own interests, or the interests of any party with whom the Consultant has a contractual arrangement, in conflict with those of the City. The City, in its sole discretion, will determine the existence of a conflict of interest and may terminate the Agreement in the event it determines a conflict exists, after it has given the Consultant written notice describing the conflict.

20. <u>NOTICES</u>: Notices concerning termination of the Agreement, alleged or actual violations of the terms of the Agreement, and matters of similar importance must be hand delivered, sent by overnight courier service, mailed by certified mail, return receipt requested, or mailed via United States mail, postage prepaid, if to Consultant at the address first above written, and if to the City at:

Manager of Public Works 201 West Colfax Avenue, Dept. 610 Denver, Colorado 80202

With a copy of any such notice to:

Attn: Assistant City Attorney Denver City Attorney's Office 201 West Colfax Avenue, Department 1207 Denver, Colorado 80202

Notices hand delivered or sent by overnight courier are effective upon delivery; notices sent by certified mail are effective upon receipt; and notices sent by mail are effective upon deposit with the U.S. Postal Service. The parties may designate substitute addresses where or persons to whom notices are to be mailed or delivered; however, these substitutions will not become effective until actual receipt of written notification.

21. <u>NO EMPLOYMENT OF ILLEGAL ALIENS TO PERFORM WORK UNDER THE</u> <u>AGREEMENT</u>:

a. The 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. Consultant certifies that:
- (1) At the time of its execution of the Agreement, it does not knowingly employ or contract with an illegal alien who will perform work under the 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 the Agreement.
 - c. 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 sub-consultant or subcontractor that fails to certify to 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 the Agreement, through participation in either the E-Verify Program.
- (4) It is prohibited from using either the E-Verify Program procedures to undertake preemployment screening of job applicants while performing its obligations under the Agreement, and that otherwise requires 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 sub-consultant or subcontractor performing work under the Agreement knowingly employs or contracts with an illegal alien, it will notify such sub-consultant or subcontractor and the City within three (3) days. Consultant will also then terminate such sub-consultant or subcontractor if within three (3) days after such notice the sub-consultant or subcontractor does not stop employing or contracting with the illegal alien, unless during such three-day period the sub-consultant or subcontractor provides information to establish that the sub-consultant 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. 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 the Agreement for a breach of the Agreement. If the Agreement is so terminated, 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.

22. <u>DISPUTES</u>: All disputes between the City and Consultant arising out of or regarding the Agreement will be resolved by administrative hearing pursuant to the procedure established by D.R.M.C. § 56-106(b)-(f). For the purposes of that administrative procedure, the City official rendering a final determination shall be the Manager as defined in the Agreement.

23. <u>GOVERNING LAW; VENUE</u>: The Agreement will be construed and enforced in accordance with applicable federal law, the laws of the State of Colorado, and the Charter, Revised Municipal Code, ordinances, regulations and Executive Orders of the City and County of Denver, which are expressly incorporated into the Agreement. Venue for any legal action relating to the Agreement will be in the District Court of the State of Colorado, Second Judicial District.

24. <u>NO DISCRIMINATION IN EMPLOYMENT</u>: In connection with the performance of work under the Agreement, the Consultant may not refuse to hire, discharge, promote or demote, or 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 variance, marital status, or physical or mental disability. The Consultant shall insert the foregoing provision in all subcontracts hereunder.

25. <u>COMPLIANCE WITH ALL LAWS</u>: Consultant shall perform or cause to be performed all services in full compliance with all applicable laws, rules, regulations and codes of the United States and State of Colorado; and with the Charter, ordinances, rules, regulations and Executive Orders of the City and County of Denver.

26. **LEGAL AUTHORITY**: Consultant represents and warrants that it possesses the legal authority, pursuant to any proper, appropriate and official motion, resolution or action passed or taken, to enter into the Agreement. Each person signing and executing the Agreement on behalf of Consultant represents and warrants that he has been fully authorized by Consultant to execute the Agreement on behalf of Consultant and to validly and legally bind Consultant to all the terms, performances and provisions of the Agreement. The City shall have the right, in its sole discretion, to either temporarily suspend or permanently terminate the Agreement if there is a dispute as to the legal authority of either Consultant or the person signing the Agreement to enter into the Agreement.

27. <u>NO CONSTRUCTION AGAINST DRAFTING PARTY</u>: The parties and their respective counsel have had the opportunity to review the Agreement, and the Agreement will not be construed against any party merely because any provisions of the Agreement were prepared by a particular party.

28. <u>ORDER OF PRECEDENCE</u>: In the event of any conflicts between the language of the Agreement and the exhibits, the language of the Agreement controls.

29. <u>ORDER OF PRECEDENCE</u>: In the event of any conflicts between the language of the Agreement and the exhibits, the language of the Agreement controls.

30. INTELLECTUAL PROPERTY RIGHTS: The City and Consultant intend that all property rights to any and all materials, text, logos, documents, booklets, manuals, references, guides, brochures, advertisements, music, sketches, plans, drawings, prints, photographs, specifications, software, data, products, ideas, inventions, and any other work or recorded information created by the Consultant and paid for by the City pursuant to this Agreement, in preliminary or final form and on any media whatsoever (collectively, "Materials"), shall belong to the City. The Consultant shall disclose all such items to the City. To the extent permitted by the U.S. Copyright Act, 17 USC § 101, *et seq.*, the Materials are a "work made for hire" and all ownership of copyright in the Materials shall vest in the City at the time the Materials are created. To the extent that the Materials are not a "work made for hire," the Consultant hereby sells, assigns and transfers all right, title and interest in and to the Materials to the City, including the right to secure copyright, patent, trademark, and other intellectual property rights throughout the world and to have and to hold such rights in perpetuity.

31. <u>SURVIVAL OF CERTAIN PROVISIONS</u>: The terms of the Agreement and any exhibits and attachments that by reasonable implication contemplate continued performance, rights, or compliance beyond expiration or termination of the Agreement survive the Agreement and will continue to be enforceable. Without limiting the generality of this provision, the Consultant's obligations to provide insurance and to indemnify the City will 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.

32. <u>ADVERTISING AND PUBLIC DISCLOSURE</u>: The Consultant shall not include any reference to the Agreement or to services performed pursuant to the Agreement in any of the Consultant's advertising or public relations materials without first obtaining the written approval of the Manager. Any oral presentation or written materials related to services performed under the Agreement will be limited to services that have been accepted by the City. The Consultant shall notify the Manager in advance of the date and time of any presentation. Nothing in this provision precludes the transmittal of any information to City officials.

33. <u>CITY EXECUTION OF AGREEMENT</u>: The Agreement will not be effective or binding on the City until it has been fully executed by all required signatories of the City and County of Denver, and if required by Charter, approved by the City Council.

34. <u>AGREEMENT AS COMPLETE INTEGRATION-AMENDMENTS</u>: The Agreement is the complete integration of all understandings between the parties as to the subject matter of the Agreement. No prior or contemporaneous addition, deletion, or other modification has any force or effect, unless embodied in the Agreement in writing. No subsequent novation, renewal, addition, deletion, or other amendment will have any force or effect unless embodied in a written amendment to the Agreement properly executed by the parties. No oral representation by any officer or employee of the City at variance with the terms of the Agreement or any written amendment to the Agreement will have any force or effect or bind the City. The Agreement is, and any amendments will be, binding upon the parties and their successors and assigns.</u>

35. <u>USE, POSSESSION OR SALE OF ALCOHOL OR DRUGS</u>: Consultant shall cooperate and comply with the provisions of Executive Order 94 and its Attachment A 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 contract personnel being barred from City facilities and from participating in City operations.

36. <u>COUNTERPARTS OF THE AGREEMENT</u>: The Agreement may be executed in counterparts, each of which is an original and constitute the same instrument.

37. ELECTRONIC SIGNATURES AND ELECTRONIC RECORDS: Consultant consents to the use of electronic signatures by the City. The Agreement, and any other documents requiring a signature hereunder, may be signed electronically by the City in the manner specified by the City. The Parties agree not to deny the legal effect or enforceability of the Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Agreement in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

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Contract Control Number:

Contractor Name:

PWADM-201312883-00

STANTEC CONSULTING SERVICES INC.

By

oare Name (please print)

Title: Vice President Transportation (please print)



ATTEST: [if required]

By: 🔇

Name: Chair fractional formula (please print)-Leonard

Title: Corporate Course (please print)



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:
	D
Dv	By
By	

By_____



Exhibit A

SCOPE OF WORK

2013 TIP Signal Retiming

General Scope

The City and County of Denver requested a scope of services to retime approximately 225 signals. This scope of work details the effort required to accomplish this task and establishes milestones, necessary data to be provided by the City and expected deliverables. As requested in the City's RFP, this project will develop timing plans for traffic signal retiming in order to optimize travel time for vehicles while updating timing for slower pedestrian crossing speeds and updated vehicular clearances. The project is for signal retiming of 225 traffic signals over two years, 2013 and 2014. Areas included are South of Downtown (SoD) (bounded by 12th Ave, Lincoln St, I-25, Kalamath St), East of Downtown (EoD) (bounded by Park Ave West, 18th Ave, Gaylord St, 13th Ave, Downing St, 6th Ave, Grant St), and includes the following corridors: Evans Ave, 1st Ave/University (Cherry Creek Area), Hampden Ave. The specific signalized intersections included as part of this scope are listed in Attachment A of this scope of services.

Detailed Scope of Services

The following sections are detailed task descriptions for the scope of services.

1.0 Project Management

- 1.1 This task entails the effort required to set up, administer, coordinate and generally manage the overall project. Efforts include project set up, internal staff communications, coordination and meetings with the City Project Manager, invoicing and project close out.
- 1.2 TEAMS database administration. This task will include the programming and database administration efforts necessary to support the consultant team's use of TEAMS functionality. This includes all coordination and programming efforts necessary to maintain functionality and compatibility with Denver's live database.
- 1.3 Video/GPS setup and training The consultant team will assist the City in setting up the ESRI provided ArcGIS Explorer application (free from ESRI) and provide an initial training in the use and support of the application. This will allow Denver to fully utilize the consultant provided video travel time data.

1.4 Deliverables

- 1.4.1 Bi-weekly meeting agendas and minutes, monthly progress reports, invoicing.
- 1.5Approximate Task Budget:\$63,000

2.0 Existing Data Collection

- 2.1 Coordination The consultant team and Denver's project management team will determine specific data collection needs. The field data collection will include:
 - 2.1.1 Peak Hour Turning Movement Counts (TMC)
 - 2.1.2 24 hour directional volume counts
 - 2.1.3 Existing video/gps travel time collection
 - 2.1.4 City provided Accident records
 - 2.1.5 Field geometric data collection
 - 2.1.6 Approach Grades
 - 2.1.7 Bicycle Travel Time
- 2.2 Peak Hour Turning Movement Counts At agreed to intersections 1 hour turning movement counts will be collected for AM/midday/PM periods. By analyzing 24 hour counts and specifying exact hours to be counted, cost savings per count can be achieved compared to the standard 2 hour period counted and peak hour reported. Cost per intersection for three periods (AM/off peak/PM) = \$300. Cost for two periods = \$250

2.3 24 hour tube counts – At agreed to locations within each retiming area, 24 hour directional volume counts will be collected. At specific locations vehicle classification counts will be collected. Tubes will be placed so as to collect mid-week traffic volumes (Tuesday, Wednesday, or Thursday).

Cost per directional 24 hour count = 100.

- 2.4 Travel Time Travel time data collection will also be coordinated with Denver Staff. Each area will have one or more routes identified for comparison of before and after travel time data. The data collection will utilize GPS coded video data allowing for detailed review of before and after run comparisons.
- 2.5 Accident Records Existing accident records will be provided by the City for review to inform the signal timing revisions.
- 2.6 Field Geometric Data Pedestrian crossing distances will be measured in the field per City requirements. Intersection widths required for calculation of clearance intervals will be measured from the City's aerial photography. Field personnel will carry handheld basic gps units in addition to collecting field notes.
- 2.7 Approach Grade Information Approach grades necessary for clearance interval calculations will be estimated from City provided 2 foot contour topographic mapping.
- 2.8 Bicycle Travel Time Bicycle travel time runs will be collected on 16th Avenue, 12th Avenue, Washington Street, and Clarkson Street. For each route, 4 bicycle travel time data collection runs will be performed for each direction of travel. Data will only be collected for the AM and PM peak hours. Three riders will perform the travel time runs obeying all traffic control devices. Because of the variability in rider performance, the confidence interval of the runs will possibly not be the same as vehicle travel times where speed is more easily controlled. Before and after bicycle travel times will be recorded for the agreed to corridors.

2.9 City Provided Information:

- 2.9.1 TMC pre-empt and malfunction logs during travel time runs (used for calibration purposes. Additional travel time runs due to pre-empts or signal malfunctions are beyond the scope of services provided herein, but can be provided at the same additional cost as the initial travel time run).
- 2.9.2 Intersection aerial photography sufficient for scaling intersection widths and left turn clearance distances.
- 2.9.3 Two-foot contour mapping sufficient for determining approach grades.
- 2.9.4 Existing Signal Timing.
- 2.9.5 Clearance Interval Calculation Spreadsheet.

2.10 Deliverables

- 2.10.1 Peak period Turning Movement Counts at agreed to locations.
- 2.10.2 24 hour volume counts at agreed to locations.
- 2.10.3 Travel Time data similar to DRCOG reported performance metrics.
- 2.10.4 Documentation of measured Pedestrian Crossing distances
- 2.10.5 Documentation of scaled intersection widths (including left turn clearance distances).
- 2.10.6 Documentation of calculated approach grades.
- 2.11 Area Specific Data Collection
 - 2.11.1 SoD Broadway and Lincoln Street from Speer Boulevard north is being retimed currently by others. This project will time all signals on Broadway and Lincoln Street south of Speer Boulevard to the City boundary. The Evans and Broadway intersection will be reviewed as both SoD and Evans Areas are retimed.
 - 2.11.2 EoD Park Avenues geometry relative to the other streets in this timing area causes unique intersection configurations and closely spaced intersections. Any questions about defining movements, direction of pedestrian crossings etc. will be coordinated with City Staff before being finalized. Bicycle Travel time will be collected on up to two corridors in this area.

- 2.11.3 Cherry Creek Weekend 24 hour counts will be collected to cover Saturday or Sunday traffic. TMC's will be collected during two periods of the Weekend.
- 2.11.4 Evans Avenue No special Data Collection Requirements.
- 2.11.5 Hampden Avenue No special Data Collection Requirements.

2.12 Approximate Task Budget

- 2.12.1 TMC and Tube Counts: \$82,000
- 2.12.2 Bicycle Travel Time \$2,250
- 2.12.3 All Else: \$66,000

3.0 Model Development and Calibration

- 3.1 Coordination All areas will be modeled in Synchro/SimTraffic. Time Space diagrams will be reviewed using TruTraffic (formerly TSPPDraft).
- 3.2 Consultant will review City provided existing models (where applicable) and update existing roadway geometry as necessary. City staff will provide any standard modeling parameters (assumed lane capacity, parking factors, etc.).
- 3.3 Area models will be updated to include collected traffic information.
- 3.4 Area models will be calibrated to match observed travel time and delay. Use of the model for other purposes may or may not be applicable.
- 3.5 This task assumes one meeting per area to review model calibration.

3.6 City Provided Information

- 3.6.1 Standard modeling conventions/assumptions
- 3.6.2 Calibrated model review
- 3.6.3 Existing models where existing

3.7 Deliverables

- 3.7.1 Calibrated Existing model.
- 3.8 Area Specific Modeling
 - 3.8.1 SoD The scope and fee assumes that the current retiming effort for Speer Boulevard and north is complete. It also assumes that the construction currently on-going at Broadway and Evans and Evans and Santa Fe will be complete. If current traffic data (TMC's and travel time for calibration) cannot be collected additional effort will be required to utilize old traffic data. This increases both the effort to create a usable existing model and additional field effort adjusting installed signal timing. Additional time and fee will be negotiated should construction interfere with signal timing efforts.
 - 3.8.2 EoD Synchro/SimTraffic does not handle closely spaced intersections well. Some simplifications of the model geometry may be necessary to effectively use the model. Simplifications will be discussed and agreed to with City Staff.
 - 3.8.3 Cherry Creek Synchro/SimTraffic does not handle closely spaced intersections well. Some simplifications of the model geometry may be necessary to effectively use the model. Simplifications will be discussed and agreed to with City Staff. Special attention will be paid to pedestrian crossing volumes in this area. Additional walk time may be necessary during peak pedestrian activity periods.
 - 3.8.4 Evans Special attention will be paid to pedestrian crossing volumes in the University of Denver area. Additional walk time may be necessary during peak pedestrian activity periods. This scope assumes that the construction currently on-going at Broadway and Evans and Evans and Santa Fe will be complete. If current traffic data (TMC's and travel time for calibration) cannot be collected additional effort will be required to utilize old traffic data. This increases both the effort to create a usable existing model and additional field effort adjusting installed signal timing. Additional time and fee will be negotiated should construction interfere with signal timing efforts.
 - 3.8.5 Hampden Special attention will be paid to the Hampden and Monaco intersection and the pre-emption sequence required by the fire station south of

Hampden. Pre-emption logs from the TMC will be necessary to calibrate the model in this area.

3.9 Approximate Task Budget: \$76,000

4.0 Cycle Length Selection

- 4.1 Consultant will update existing models to include calculated clearance intervals for pedestrians and vehicles.
- 4.2 Using updated clearance intervals and current traffic volumes, consultant will provide cycle length analysis for each area and sub area as agreed to with City staff.
- 4.3 Assumes one meeting per area to determine cycle lengths within the area. Cycle breaks will be incorporated where agreed to by City Staff.

4.4 City Provided Information

- 4.4.1 Cycle length/break constraints prior to Cycle analysis
- 4.4.2 Concurrence on final Cycle length decisions.

4.5 Deliverables

- 4.5.1 Cycle length analysis graphs as appropriate
- 4.5.2 Documentation of agreed to Cycle length/breaks.
- 4.6 Area Specific Cycle Length Selection
 - 4.6.1 SoD Cycle length selection and cycle length breaks will be determined in conjunction with City Staff. No special assumptions are made as part of this scope. Multiple cycle lengths/breaks can be accommodated.
 - 4.6.2 EoD Cycle length selection and cycle length breaks will be determined in conjunction with City Staff. No special assumptions are made as part of this scope. Multiple cycle lengths/breaks can be accommodated.
 - 4.6.3 Cherry Creek Cycle length selection and cycle length breaks will be determined in conjunction with City Staff. No special assumptions are made as part of this scope. Multiple cycle lengths/breaks can be accommodated.
 - 4.6.4 Evans Cycle length selection and cycle length breaks will be determined in conjunction with City Staff. No special assumptions are made as part of this scope. Multiple cycle lengths/breaks can be accommodated.
 - 4.6.5 Hampden Cycle length selection and cycle length breaks will be determined in conjunction with City Staff. No special assumptions are made as part of this scope. Multiple cycle lengths/breaks can be accommodated.

4.7 Approximate Task Budget: \$30,000

5.0 Timing Plan Preparation

- 5.1 Consultant will prepare suggested timing plans based on updated area information prepared in previous tasks. Timing plans will include review of progression bandwidths with TruTraffic (or other output as requested by Denver).
- 5.2 Task assumes one review meeting with City Staff and subsequent modeling revisions.

5.3 City Provided Information

5.3.1 Concurrence on final modeled timing plans

5.4 Deliverables

- 5.4.1 Area models showing revised timing plans
- 5.4.2 Documentation of comment tracking and model revisions.
- 5.5 Area Specific Timing Plans
 - 5.5.1 SoD Standard AM/mid-day/PM plans will be developed. Overnight or floating operations can be accommodated and developed but will not be modeled to the same detail as the other three plans.
 - 5.5.2 EoD– Standard AM/mid-day/PM plans will be developed. Overnight or floating operations can be accommodated and developed but will not be modeled to the same detail as the other three plans.
 - 5.5.3 Cherry Creeek– Standard AM/mid-day/PM plans will be developed for weekday operations. Overnight or floating operations can be accommodated and

developed but will not be modeled to the same detail as the other three plans. Two weekend period plans will be developed as part of this scope. 24 hour count information will be reviewed in conjunction with City Staff to determine these two weekend period plans and their hours of operation.

- 5.5.4 Evans– Standard AM/mid-day/PM plans will be developed. Overnight or floating operations can be accommodated and developed but will not be modeled to the same detail as the other three plans.
- 5.5.5 Hampden– Standard AM/mid-day/PM plans will be developed. Overnight or floating operations can be accommodated and developed but will not be modeled to the same detail as the other three plans.

5.6 Approximate Task Budget: \$64,000

6.0 Work Order Generation

- 6.1 Using the consultant copy of TEAMS, work orders will be electronically generated for all intersections to be retimed.
- 6.2 Using TEAMS functionality all work orders will be review, revised, and approved for submittal to Denver.
- 6.3 Assumes one meeting per signal timing area to review and revise draft work orders before electronic submittal to Denver's live TEAMS database.
- 6.4 Once Denver agrees to submittal of work orders, Consultant will electronically transfer draft work orders to Denver's live TEAMS database.
- 6.5 During Denver's review of work orders, revisions will be red lined on hard copies for Denver to revise (per Denver's current live TEAMS database structure.)

6.6 City Provided Information

6.6.1 Formal Work Order review and approval for implementation

6.7 Deliverables

- 6.7.1 Electronic Transfer of Draft Work Orders.
- 6.7.2 Red-lined revisions to address City formal review comments.
- 6.8 Area Specific Work Order efforts
 - 6.8.1 SoD No special requirements of this area for Work Order review/approval.
 - 6.8.2 EoD No special requirements of this area for Work Order review/approval.
 - 6.8.3 Cherry Creek Weekend plan review will require additional effort per signal.
 - 6.8.4 Evans No special requirements of this area for Work Order review/approval.
 - 6.8.5 Hampden No special requirements of this area for Work Order review/approval.

6.9 Approximate Task Budget: \$130,000

7.0 Field Implementation

- 7.1 Meeting with Denver staff to coordinate signal shop controller programming, testing, and field implementation date.
- 7.2 Field meeting with Denver staff to review and field adjust timing.
- 7.3 Consultant will document field changes.

7.4 City Provided Information

7.4.1 During field implementation, City to provide at least one signal technician to make field controller programming changes.

7.5 Deliverables

- 7.5.1 Documentation of field revisions.
- 7.6 Area Specific Field Requirements
 - 7.6.1 SoD Focus will be on the Broadway/Lincoln corridor, 6th/8th, and 13th/14thcoordination. Depending on City Staff availability, this could be implemented with EoD to facilitate coordination East/West Corridors. This scope assumes separate implementation.
 - 7.6.2 EoD This area has multiple one way couplet corridors and Park Avenue. Consultant will provide sufficient manpower and communications to observe

operations of multiple corridors. This scope assumes the City will provide TMC based support as well as field support. Multiple signal technicians would facilitate field changes.

- 7.6.3 Cherry Creek Weekend plan implementation will require City TMC and field personnel in the field on the weekend when field reviewing weekend operations.
- 7.6.4 Evans No special field review requirements.
- 7.6.5 Hampden No special field review requirements.
- 7.7 Approximate Task Budget: \$134,000

8.0 Post-Implementation Data Collection

- 8.1 Travel Time Travel time data collection will also be coordinated with Denver Staff. The same routes used for before data collection will be recollected in the after condition. The data collection will utilize GPS coded video data allowing for detailed review of before and after run comparisons.
- 8.2 Bicycle Travel Time For the corridors where existing travel time data was collected, post implementation bicycle travel time data will be collected in the same manner as the existing data was collected.
- 8.3 Consultant will prepare travel time statistic documentation in a format similar to that used by DRCOG. Performance metrics compared will be the DRCOG reported statistics.

8.4 City Provided Information

8.4.1 TMC pre-empt and malfunction logs. (Additional travel time runs due to preempts or signal malfunctions are beyond the scope of services provided herein, but can be provided at the same additional cost as the initial travel time run).

8.5 Deliverables

- 8.5.1 Travel Time data similar to DRCOG reported performance metrics.
- 8.5.2 Bicycle Travel time comparison
- 8.5.3 Documentation of comment tracking and model revisions.
- 8.6 Area Specific Post-Implementation Data Collection
 - 8.6.1 SoD No special post implementation Data Collection needs.
 - 8.6.2 EoD No special post implementation Data Collection needs.
 - 8.6.3 Cherry Creek Weekend Travel Time runs will be collected to compare to preimplementation.
 - 8.6.4 Evans No special post implementation Data Collection needs.
 - 8.6.5 Hampden No special post implementation Data Collection needs.
 - Approximate Task Budget:
 - 8.7.1 Bicycle Travel Time \$2,250
 - 8.7.2 All Else: \$31,000

9.0 Post-Implementation Report

8.7

- 9.1 Signal Timing Brief Consultant will prepare a brochure similar to DRCOG's "Signal Timing Brief" to summarize and document performance changes with the signal retiming effort. Delay and pollution improvements may not necessarily be achieved due to the new Denver pedestrian and vehicle clearance interval requirements. The safety benefits of the new clearance intervals (pedestrian and vehicle) will be documented along with any delay and pollution results.
- 9.2 Project Documentation Complete package of all task deliverables and all area signal timing briefs will be provided to Denver for documentation of the entire project.

9.3 City Provided Information

9.3.1 One round of review and comment on draft "Signal Timing Briefs"

9.4 Deliverables

- 9.4.1 Area "Signal Timing Briefs"
- 9.4.2 Complete package of deliverables submitted electronically.
- 9.5 Area Specific Report
 - 9.5.1 SoD Signal Timing Brief will focus on Broadway/Lincoln Street changes

- 9.5.2 EoD Signal Timing Brief will focus on multiple corridors, show individual corridor results and a rolled up overall area comparison.
- 9.5.3 Cherry Creek Signal Timing Brief will compare both weekday and weekend plan changes.
- 9.5.4 Evans No special reporting requirements.
- 9.5.5 Hampden No special reporting requirements.

9.6 Approximate Task Budget: \$26,000

10.0 Hampden Accident Analysis

- 10.1 Accident data in the Hampden corridor will be the subject of a clearance interval accident comparison study. The City will provide accident records for all of the intersections along the Hampden corridor and available traffic historic traffic counts. The records should cover a period from five years before the new clearance interval policy was implemented on the Hampden corridor through the most recent data available. If available the original crash reports should be made available.
- 10.2 Normalize Crash Reporting Consultant will review the crash data and crash reports to determine if the crash type and crash location are being reported consistently. A common coding error involves police reporting of Approach/Turn crashes. In many instances the reporting officer will report this crash type as a "Broadside" if the turning vehicle was traveling perpendicular to oncoming traffic at impact. For a study of signal clearance interval impacts on safety it will be necessary to correct this type of coding irregularity.

Location of accidents must also be reviewed to screen crashes that occurred at driveways near the intersection and not at the intersection. Most accident reports reference the location of an accident by distance to the nearest intersection. Crash software will often report crashes near an intersection when summarizing accident data. To prepare a more accurate accident analysis, these crashes should be removed from the analysis.

- 10.3 The City will provide the precise dates of when signals were reconstructed and when new timing that included the new clearance interval policy was implemented at each intersection. Data at each intersection will be categorized into three possible treatments:
 - 10.3.1 Base condition before the clearance interval was implemented
 - 10.3.2 After condition after clearance interval timing was implemented
 - 10.3.3 Changed After condition data collected after the clearance interval timing was implemented and another significant safety project implemented (for example, the signal reconstructed or a protected turn phase replacing a permitted turn phase).
- 10.4 Data Analysis The will be analyzed to compare raw crash totals, crash types and crash rate by entering volume or conflicting volumes. The comparison will be used to determine the statistical relevance of any differences.
- 10.5 White Paper Report The accident analysis will be documented in a draft white paper. The paper will be provided to City Staff for review and comment. After receiving comments from the City, a final report will be prepared. All spreadsheets and other data analysis information will be provided to the City electronically.

10.6 Deliverables

- 10.6.1 Draft White Paper
- 10.6.2 Final White Paper
- 10.6.3 Electronic copies of all data collection and analysis.
- 10.7 Approximate Task Budget: \$15,000

11.0 Schedule/Fee

- 11.1 The above scope of work will be completed by **December 31, 2015**. Individual area schedules will be dependent on City staff availability.
- 11.2 Total Fee for above scope of work not to exceed **\$720,315**.

Exhibit B

Name	Classification	Rate
Bergondo, Amie	Administrative Assistant I	63
Gill, Michael	Senior Project Manager	189
Higginson, Gail	Administrative Assistant I	63
Mahmood, Mohammed	Intern	50
Mustafa, Nathan	Designer	77
Pratt, Rob	Project Manager	165
Sammons, Charlene	Project Engineer	120
Shanker, Anita	Project Engineer I	130
Vanipali, Vinay	Junior Engineer	101
Williams, Christy	Senior Technical Editor	154
Wissel, Ken	Senior Professional	154

Reimbursible Expense	Rate	
Mileage	0.565	per mile



Centennial Engineering, Inc. 2013 Hourly Billing Rate Schedule

NAME/Labor Classification	Hourly Rate
<u>Steven J. Sabinash, P.E.</u> Senior Traffic Engineer	\$138.00
<u>Mark P. Post, P.E.</u> Senior Structural Engineer	\$138.00
<u>Mark W. Webb</u> Senior Network Engineer	\$138.00
<u>Adria C. Lucerna, P.E.</u> Senior Roadway Engineer	\$115.00
<u>Erica M. Olsen, P.E.</u> Engineer III	\$107.00
<u>James R. Mills</u> Senior Designer	\$105.00
<u>Cathy S. Selan</u> Senior Administrative Assistant	\$83.00

DIRECT EXPENSES

ltem	Rate
Xerox	\$0.15/Sheet
Messenger Services	Invoice Cost
Shipping	Invoice Cost
Travel	Invoice Cost
Mileage	Current Federal Rate
Outside Services	Invoice Cost
Printing / Reproduction	Invoice Cost



Billing Rates EST, Inc.

7-31-2013

Person	Classification	Rate
Gary Johnson	Sr. Transportation	\$175
	Engineer	
Chuck Dreesen	Sr. Transportation	\$185
	Engineer	
Amanda Newberry	Project Engineer	\$105
Preston Petty	Project Engineer	\$105
Amy Backel	Project Engineer	\$95
Mary McFarland	Administration	\$65

Other Direct Costs:

Mileage at current Federal rate Other Direct Costs (ODC's) billed at cost



HOURLY RATES AND REIMBURSABLE EXPENSES

CCD Signal Timing Project

Personnel Title	Ηοι	rly Rates	Personnel
Group Manager	\$	180.00	Steve Pouliot
Senior Project Manager	\$	165.00	Chuck Huffine, Chris Primus
Project Manager III	\$	150.00	Brian Hoeshen
Project Engineer II	\$	115.00	Emily Flagg
Design Engineer	\$	95.00	Nitin Deshpande
Junior Engineer	\$	75.00	Kirsten Sargent
Transportation Planner III	\$	102.00	Keith Borsheim
Senior GIS Technician	\$	86.00	Norm Sehms
GIS Technician II	\$	78.00	Andy Priest
Senior Graphic Designer	\$	75.00	Karen Rhea
Project Coordinator II	\$	87.00	Lisa Reich
Administrative Assistant II	\$	62.00	Yesenia Noriega, Kathryn Garth, Stephanie Andreakos

Reimbursible Expense	Rate		
Mileage	\$	0.565	per mile

Stave Ventures, LLC HOURLY RATES AND REIMBURSABLE EXPENSES CCD Signal Timing Project

Personnel Title Managing Partner Hourly Rates \$150.00 <u>Personnel</u> Ralph Stavermann

Tab. Image: Multiple Sected Processing Proc				Steve Pouliott	Brian Hoeschen	Nitin Deshpande	Amy Backel	Preston Petty	Amanda Newberry	Chuck Dreesen	Gary Johnson	Steve Sabinash - Principal	Ralph Stavermanı	Nathan Mustafa - Designer	Vinay Vanipali - Junior Engineer	Anita Shanker - Project Engineer I	Mohammed Mahmood - Transportation Inter	Gail Higginson - Administrative Assitant	Michael Gill - Principal Transportation	
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6.0 Work Order Generation Image preliminary work orders in consultant copy of TEAMS (CETAMS) 7 80 20 14 14 48 72 4 2 24 10 10 6.1 Proprie preliminary work orders in consultant copy of TEAMS 10 12 4 4 176 16 4 2 24 10 20 14 14 48 72 4 2 24 10 24 10 16 24 10 16 4 4 10 16 4 4 10 16 24 10 14 14 10 16 24 10 2 10 2 10 2 10 2 10 2 16 8 8 16	12,375						U	8								3			J	Prepare revised Timing Plans based on comments
6.1 Prepare preliminary work orders in consultant copy of TEAMS (CTEAMS) 7 80 20 14 14 48 72 4 2 24 60 20 14 6.2 Review work orders in CEMS 10 12 4 4 476 16 4 8 24 10 12 4 4 4 16 4 8 24 10 12 4 <td>64,188</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>30</td> <td>20</td> <td>20</td> <td>32</td> <td>b</td> <td>18</td> <td>142</td> <td>62</td> <td>38</td> <td>38</td> <td>21</td> <td>69</td> <td>5</td> <td>31</td> <td></td>	64,188	0	0	0	0	30	20	20	32	b	18	142	62	38	38	21	69	5	31	
62.8 eview work orders in oTEAMS - - 12 4 4 4 7.0 16 4 8 - 24 -	39,84				20	60			24	2	4	72	48	14	14	20	80		7	Prepare preliminary work orders in consultant copy of TEAMS (cTEAMS)
6.4 Meeting to review and approve transfer of work orders to live TEAMS 9 5 2 10 2 2 14 .	34,260					24			8		4	16	176	4	4	4	12		400	Review work orders in cTEAMS
6.5 Transfer to TEAMS 9 8 4 6 1 4 0	28,510				14	10			4				24	3	3	3	8	5		Approve work orders for submittal to City in CI EAMS Meeting to review and approve transfer of work orders to live TEAMS
Subtotal Task 6 141 5 136 33 27 27 269 118 18 4 52 8 8 10 63 8 0 0 2.0 Field Implementation 8 4 9 8 0	8,043			8															9	Transfer to TEAMS
7.9 Field Implementation 8 4 9 8 4 1 6 1 </td <td>14,620 131,784</td> <td>0</td> <td>0</td> <td>0</td> <td>62</td> <td></td> <td>8</td> <td>-</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>•</td> <td></td> <td>4</td> <td></td> <td>E</td> <td>0</td> <td></td>	14,620 131,784	0	0	0	62		8	-		-				•		4		E	0	
7.1 Meeting to Schedule Implementation 8 4 9 8 6 6 6 6 7.2 Coordinate Controller programming/testing with City Staff 5 6 11 5 6 0	131,76	0	U	0	03	110	0	0	52	4	10	110	209	21	21	- 33	130	3	141	
7.3 Field review and adjustments 72 64 64 34 34 200 116 24 4 12 32 6	4,218											8	9					4	8	Meeting to Schedule Implementation
7.4 Occurrent field adjustments 7 2.4 2.8 19 5.4 8 16 - <td>3,285</td> <td></td> <td></td> <td></td> <td></td> <td>6</td> <td>30</td> <td>10</td> <td>24</td> <td></td> <td>24</td> <td>116</td> <td></td> <td>24</td> <td>24</td> <td>64</td> <td>64</td> <td></td> <td>5</td> <td>Coordinate Controller programming/testing with City Staff</td>	3,285					6	30	10	24		24	116		24	24	64	64		5	Coordinate Controller programming/testing with City Staff
Subtotal Task 7 97 4 138 99 41 41 258 230 36 4 48 12 32 6 0 0 0 0 0 8.0 Post Implementation Tave Ollection (video/qps) 2 4 1 28 24 <td>19,54</td> <td></td> <td></td> <td></td> <td></td> <td>Ű</td> <td>JZ</td> <td>12</td> <td></td> <td>-</td> <td></td> <td>54</td> <td>19</td> <td>34</td> <td>54</td> <td></td> <td></td> <td></td> <td></td> <td>Document field adjustments</td>	19,54					Ű	JZ	12		-		54	19	34	54					Document field adjustments
8.0 Post Implementation Data Collection 2 5 6 4 5 6 6 7 6 8.1 Post Implementation Taxel Time data collection (video/qps) 2 3 16 19 4 24 8 7 6 7 7 6 7 7<	16,47								8		4	47	19	7	7	7	50		5	
8.1 Post implementation Travel Time data collection (video/qps) 2 - <t< td=""><td>133,04</td><td>0</td><td>0</td><td>0</td><td>0</td><td>6</td><td>32</td><td>12</td><td>48</td><td>4</td><td>36</td><td>230</td><td>258</td><td>41</td><td>41</td><td>99</td><td>138</td><td>4</td><td>97</td><td></td></t<>	133,04	0	0	0	0	6	32	12	48	4	36	230	258	41	41	99	138	4	97	
8.2 Propare DRCOG based benefits analysis 20 38 16 19 4 24 0 0 0 0 Subtotal Task 8 22 0 38 16 0 0 0 24 0 0 88 24 7 0 0 9.0 Post Implementation Report 12 4 36 14 11 23 4 4 16 4 0	14,150			7	24	88						4							2	
9.0 Post Implementation Report 12 4 36 14 11 23 4 4 16 4 9.1 Draft timplementation Report 12 4 36 14 11 23 4 4 16 4	13,602		-	_		00	0											0		Prepare DRCOG based benefits analysis
9.1 Draft Implementation Report 12 4 36 14 11 23 4 4 16 4 4 16 4 4 16 4 4 16 4 4 16 4 4 16 4 4 16 4 4 16 4 4 16 4 4 16 4 4 16 4 4 16 4 4 16 4 4 16 4 4 16 4 1 4 16 4 1 4 16 4 1 4 16 4 1 4 16 4 1 4 16 4 1 4 16 4 1 4 16 4 1 4 16 4 1 4 16 4 1 4 16 4 1 4 16 4 1 4 16 4 1 4 16 4 1 4 16 4 1 4 16 4 16 4 1 4 16 4 16 4 16 4 16 4 16 4 16 4 16 4	27,752	0	0	(24	88	0	0	24	0	4	23	0	0	0	16	38	0	22	
9.3 Revise Report per City comments 5 12 5 4 1 4 9.4 Revise "Signal Timing Briefs" per City Comments 5 2 6 3 4 1 4	14,504							4	16	4	4	23	11			14		4	12	
9.4 Revise "Signal Timing Briefs" per City Comments 5 2 6 3 4 1 4 <	5,66						8			2	2							2	5	Prepare Draft "Signal Timing Briefs"
Subtotal Task 9 27 8 67 26 0 0 11 39 8 6 32 4 8 0 0 0 0 0 0	3,342																	2	5	Revise Report per City comments Revise "Signal Timing Briefs" per City Comments
10.0 House An either An either	26,419	0	0	0	0	0	8	4	32	6	8	39	11	0	0	26	67	8	27	
10.0 Trainipueri Accueiri Anaiysis																				0 Hampden Accident Analysis
10.1 Data Collection 2 16 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1,178															8			2	
10.3 Data Classification 16 16 10 10 10 10 10 10 10 10 10 10 10 10 10	80															~	16		-	3 Data Classification
10.4 Data Analysis 8 24 24 0	5,832 4,192	— T																	8	4 Data Analyisis
10.5 Draft and Final White Paper Report 8 1 12 15 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	4,192	0	0	0	0	0	0	0	0	0	D	0	0	0	0			0	20	
Total labor [594] 73 978 338 159 [159 728 854 151 33 322 80 156 427 203 43] 0 0	633,374	0	0	43	203	427	156	80	322	33	151	854	728	159	159			73	594	

leage/Printing/Copies							54
affic Counts (All Traffic Data)							86,40
24 hour counts (weekday, directional, no classification)	Quantity	105	\$100	ea.	=	10,500	
Turning Movement Counts (Three 1 hour periods)	Quantity	223	\$300	ea.	=	66,900	
Turning Movement Counts (Two 1 hour periods)	Quantity	18	\$250	ea.	=	4,500	
Bicycle Travel Time (3-5 runs per corridor. AM/PM periods	or Quantity	6	\$750	ea.	=	4,500	

Exhibit C

								-		
A	CORD [®] CER [®]	TIF	FIC	ATE OF LIA	BI	LITY IN	ISUR/	ANCEREVISED		re (MM/DD/YYYY) 8/26/2013
E F	HIS CERTIFICATE IS ISSUED AS A CERTIFICATE DOES NOT AFFIRMAT BELOW. THIS CERTIFICATE OF IN REPRESENTATIVE OR PRODUCER, A	IVEL SUR/	Y OF ANCE HE C	R NEGATIVELY AMEND, DOES NOT CONSTITU ERTIFICATE HOLDER.	EXT TE A	END OR ALT CONTRACT	ER THE CO	OVERAGE AFFORDED THE ISSUING INSURER	BY TH R(S), A	HE POLICIES
t	MPORTANT: If the certificate holder he terms and conditions of the policy ertificate holder in lieu of such endor	, cer	tain p	policies may require an e	polic ndors	y(ies) must b ement. A sta	e endorsed. tement on tl	If SUBROGATION IS V nis certificate does not o	VAIVE confer	D, subject to rights to the
	DDUCER	Senne	m(s)	•	CONT	ACT ANDREA	OTTO			
	AON REED STENHOUSE IN	C			PHON	E = 1-800-		FAX	952-6	656-8834
	AON RISK SERVICES CENT		INC		E-MAIL	^E No, Ext): 1-800- Ess: ANDREA		ON COM	002 0	
	900 - 10025 - 102A AVENUE				noon			RDING COVERAGE		NAIC #
	EDMONTON, AB T5J 0Y2				INSUR	RER A: ZURICH	AMERICAN	INSURANCE COMPANY		16535
INS	URED							INSURANCE COMPANY		16535
	STANTEC CONSULTING					RER C: ZURICH				
	2000 SOUTH COLORADO	BL\	/D, S	SUITE 2-300			AMERICAN	INSURANCE COMPANY		16535
	DENVER, CO 80222				INSUR					
	OVERAGES CEF	TIFI	CATE	NUMBER: 348	INSUR	ER F:		REVISION NUMBER:		1
_	HIS IS TO CERTIFY THAT THE POLICIES			0.0	BEEN	ISSUED TO T	HE INSURED		POLIC	Y PERIOD
	NDICATED. NOTWITHSTANDING ANY RE ERTIFICATE MAY BE ISSUED OR MAY F XCLUSIONS AND CONDITIONS OF SUCH F	QUIR PERTA POLIC	EMEN NN, IES. L	T, TERM OR CONDITION O THE INSURANCE AFFORDE IMITS SHOWN SHOWN MAY	F ANY D BY 1	CONTRACT O THE POLICIES BEEN REDUCE	R OTHER DC DESCRIBED D BY PAID CL	CUMENT WITH RESPECT HEREIN IS SUBJECT TO A	TO WH	HICH THIS
INSR LTR		INSR	SUBR	POLICY NUMBER		POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	'S	
A		X	X	GLO6556026		05/01/13	05/01/14	EACH OCCURRENCE	\$	2,000,000
	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	300,000
	CLAIMS-MADE X OCCUR							MED EXP (Any one person) PERSONAL & ADV INJURY	S S	10,000 2,000,000
	X OWNERS & CONTRACTORS			XCU COVER INCLUD	ED			GENERAL AGGREGATE	s	4,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:							PRODUCTS - COMP/OP AGG	\$	2,000,000
	POLICY X PRO- JECT X LOC								s	
В	AUTOMOBILE LIABILITY X ANY AUTO	X		BAP5940882		11/01/12	11/01/13	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person)	s s	1,000,000
	ALL OWNED SCHEDULED AUTOS AUTOS HIRED AUTOS NON-OWNED AUTOS							BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	\$ \$	
	AUTOS							(Per accident)	\$ \$	
С	X UMBRELLA LIAB X OCCUR	Х		8831307		05/01/13	05/01/14	EACH OCCURRENCE	s	5,000,000
-	X EXCESS LIAB CLAIMS-MADE			EXCESS GENERAL, AUTO A		00101110	00/01/11	AGGREGATE	\$	5,000,000
	DED X RETENTION \$10,000			EMPLOYERS LIABILITY (FOL FORM)	LOW				\$	
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			WC5940881		11/01/12	11/01/13	X WC STATU- TORY LIMITS ER		
	AND EMPLOYERS' LIABILITY Y / N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?	N/A						E.L. EACH ACCIDENT	\$	1,000,000
	(Mandatory in NH)							E.L. DISEASE - EA EMPLOYEE	-	1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLICY LIMIT	\$	1,000,000
DEC	CRIPTION OF OPERATIONS / LOCATIONS / VEHIC	1 50 /			0-1-1-1					
THI AS	ADDITIONAL INSUREDS WITH RILLICIES.	R, IT:	S EL	ECTED AND APPOINTI	ED OI	FFICIALS, EI	MPLOYEES			
CE	RTIFICATE HOLDER			• • • • • • • • • • • • • • • • • • •	CAN	CELLATION				
	CITY AND COUNTY OF D 201 WEST COLFAX AVE DENVER CO 80202	EΝV	'ER		THE	EXPIRATION	DATE THE	ESCRIBED POLICIES BE CA REOF, NOTICE WILL B Y PROVISIONS.		
					AUTHO	RIZED REPRESEN	ITATIVE			
							Andrea	R. 016		

Ą	CORD [®] CER	TIFIC	CATE OF LIA	BILITY	NSUR			E (MM/DD/YYYY) 8/26/2013
B	HIS CERTIFICATE IS ISSUED AS A ERTIFICATE DOES NOT AFFIRMA ELOW. THIS CERTIFICATE OF IN EPRESENTATIVE OR PRODUCER, A	TIVELY O	OR NEGATIVELY AMEND, E DOES NOT CONSTITU	EXTEND OR A	LTER THE C	OVERAGE AFFORDED	BY TH	E POLICIES
th	IPORTANT: If the certificate holde e terms and conditions of the polic ertificate holder in lieu of such endo	y, certain	policies may require an e	e policy(ies) must indorsement. A s	be endorsed. tatement on t	If SUBROGATION IS his certificate does not	WAIVED confer	D, subject to rights to the
	DUCER		<i>.</i>	CONTACT MICHA		т		
	MARSH CANADA LIMITE	D		PHONE (A/C, No, Ext): 780-	917-4850		780-4	29-1422
	680, 10180 - 101 STREET					T@MARSH.COM	<u>, · • • · · ·</u>	
	EDMONTON, AB T5J 3S	4				RDING COVERAGE		NAIC #
				INSURER A:				
INSU				INSURER B:				
	STANTEC CONSULTING			INSURER C:				
	2000 SOUTH COLORADO	O BLVD,	SUITE 2-300	INSURER D:				07540
	DENVER, CO 80222			INSURER E: LLOY	D'S OF LONI	JON		37540
CO	/ERAGES CE	RTIFICAT	E NUMBER: 302	INSURER F:		REVISION NUMBER:		1
TH	IS IS TO CERTIFY THAT THE POLICIES	OF INSU	RANCE LISTED BELOW HAVE	E BEEN ISSUED TO	THE INSURED	NAMED ABOVE FOR THE	POLICY	PERIOD
	DICATED. NOTWITHSTANDING ANY RI RTIFICATE MAY BE ISSUED OR MAY CLUSIONS AND CONDITIONS OF SUCH	EQUIREMEI PERTAIN, POLICIES.	NT, TERM OR CONDITION C THE INSURANCE AFFORDE LIMITS SHOWN SHOWN MAY	F ANY CONTRACT D BY THE POLICIE HAVE BEEN REDUC	OR OTHER DO S DESCRIBED ED BY PAID CL	CUMENT WITH RESPECT HEREIN IS SUBJECT TO AIMS.	TO WH	ICH THIS
INSR LTR	TYPE OF INSURANCE	ADDL SUB	POLICY NUMBER	POLICY EFF (MM/DD/YYY	POLICY EXP (MM/DD/YYYY)	LIM	TS	
-	GENERAL LIABILITY					EACH OCCURRENCE	\$	
+	COMMERCIAL GENERAL LIABILITY					DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	
ł	CLAIMS-MADE OCCUR					MED EXP (Any one person)	\$	
						PERSONAL & ADV INJURY	S	
ł	GEN'L AGGREGATE LIMIT APPLIES PER:					GENERAL AGGREGATE	\$	
-	PRO-					PRODUCTS - COMP/OP AGG		
	POLICY JÉČT LOC					COMBINED SINGLE LIMIT	\$	
t	ANY AUTO					(Ea accident)	\$ \$	
Ţ	ALL OWNED AUTOS SCHEDULED					BODILY INJURY (Per person) BODILY INJURY (Per accident)		
	HIRED AUTOS NON-OWNED AUTOS					PROPERTY DAMAGE (Per accident)	\$	
							\$	
-	UMBRELLA LIAB OCCUR					EACH OCCURRENCE	\$	
_	EXCESS LIAB CLAIMS-MADE					AGGREGATE	\$	
	DED RETENTION \$						S	
	AND EMPLOYERS' LIABILITY Y / N					WC STATU- TORY LIMITS ER		
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Mandatory in NH)	N/A				E.L. EACH ACCIDENT	\$	
	f yes, describe under					E.L. DISEASE - EA EMPLOYEE		
	DESCRIPTION OF OPERATIONS below PROFESSIONAL LIABILITY &	N/A	05047512	00/04/40	00/04/44	E.L. DISEASE - POLICY LIMIT		
	CONTRACTORS POLLUTION		QF047513	08/01/13	08/01/14	CLAIM AND AGGRE \$3,000,000 INCLUSIN		
1	LIABILITY		NO RETROACTIVE DA	ATE		CLAIMS MADE BASI		
JESCH	IPTION OF OPERATIONS / LOCATIONS / VEHI	CLES (Attach	ACORD 101, Additional Remarks	Schedule, if more spac	ə is required)			
CER	TIFICATE HOLDER			CANCELLATIO	N			
	CITY AND COUNTY OF D 201 WEST COLFAX AVE DENVER CO 80202	ENVER			N DATE THE	ESCRIBED POLICIES BE C REOF, NOTICE WILL E Y PROVISIONS.		
			ľ	AUTHORIZED REPRES	ENTATIVE			
	I				anfar	15-		
				C	1988-2010 AC	CORD CORPORATION.	All righ	ts reserved.

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