DESIGN SERVICES AGREEMENT

THIS AGREEMENT is made between the **CITY AND COUNTY OF DENVER**, a municipal corporation of the State of Colorado (the "City") and **FELSBURG HOLT & ULLEVIG, INC**., a Colorado corporation, doing business at 6300 SOUTH SYRACUSE WAY SUITE 600 CENTENNIAL,CO 80111 (the "Design Consultant"), jointly "the Parties".

RECITALS:

A. The City desires to obtain professional architecture and engineering design services in support of the I-25 & Broadway Interchange Reconstruction – Broadway, Ohio, and Wedge Ramp project (the "Project"); and

B. The Design Consultant represents that its members include a duly licensed engineer/architect of the State of Colorado and that the Design Consultant has the present capacity and is experienced and qualified to perform professional architectural and engineering design services for the City in connection with the Project as specified in this Agreement; and

C. Design Consultant is ready, willing and able to provide the services described herein.

NOW, THEREFORE, in consideration of the premises and the mutual covenants and obligations herein set forth, the parties hereto mutually agree as follows:

SECTION 1 – ENGAGEMENT

1.01 <u>Engagement</u>. The City engages the Design Consultant with respect to the furnishing of professional design services for the Project as set forth in this Agreement. The Design Consultant accepts such engagement upon, subject to and in accordance with the terms, conditions and provisions of this Agreement.

1.02 Line of Authority for Contract Administration. The City's Executive Director 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 City Engineer as the Manager's authorized representative for the purpose of designating a Project Manager, for the purpose of issuing a written Notice to Proceed and for purposes of administering, coordinating and finally approving the work performed by the Design Consultant under this Agreement. The Project Manager shall be responsible for the day-to-day administration, coordination and approval of work performed by the Design Consultant, except for approvals which are specifically identified in this Agreement as requiring the Manager's approval. The Manager expressly reserves the right to designate another authorized representative to perform on the Manager's behalf by written notice to the Design Consultant.

1.03 <u>Independent Contractor</u>. The Design Consultant is an independent contractor retained to perform professional or technical services for limited periods of time. Neither the Design 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.

1.04 <u>Scope of Design Consultant's Authority</u>. The Design Consultant shall have no authority to act on behalf of the City other than as expressly provided in this Agreement. The Design Consultant is not authorized to act as a general agent for or to undertake, direct or modify any contracts on behalf of the City. The Design 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.

SECTION 2 – DESIGN CONSULTANT'S SERVICES

2.01 <u>General</u>. The Design Consultant shall provide professional design services for the Project in accordance with the terms and conditions of this Agreement. The Design Consultant's basic services shall consist of all of those services described in this Agreement and in **Exhibit A** and if applicable any additions to **Exhibit A**.

2.02 Professional Responsibility.

(a) All of the work performed by the Design 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 nature similar to the Work described in this Agreement.

(b) The Design Consultant agrees to strictly conform to and be bound by written standards, criteria, budgetary considerations and memoranda of policy furnished to it by the City and further agrees to design each project in compliance with applicable laws, statues, codes, ordinances, rules and regulations, and industry standards.

(c) All professional services, plans and specifications and other work, or deliverables provided under this Agreement for the Project shall be adequate and sufficient for the proper construction of the Project and its intended purpose.

(d) All drawings, specifications and other products shall be prepared so the Project, when constructed in accordance with such drawings and specifications, is in compliance with all applicable laws, statutes, codes, ordinances, and rules and regulations of the City, the State and the Federal government.

(e) Any design changes required by changes in such applicable laws, statutes, codes, ordinances or rules and regulations of the City, the state or the federal government, which are enacted after the City's acceptance of Construction Documents, defined herein, will be outside the scope of the Design Consultant's basic services and basic fee, and will be compensated for approval as an additional service, subject to the additional services budget for that project.

(f) The Design Consultant shall prepare the plans, specifications and other documents for the Project in a format that complies with all City requirements as well as all state and federal requirements for the Project. No funds will be paid to the Design Consultant for the preparation of contract documents in a form other than that considered usual and customary by the Department of Public Works. It shall be the responsibility of the Design Consultant to contact the reviewing agencies and determine the acceptable format for the final documents. No documents will be considered final until approved by the City, even though any responsible federal and state agencies have approved such documents.

(g) The City reserves the right to proceed with the construction of the Project using either the City's standard general contractor bidding approach, on call contractors or using construction management techniques. The Design Consultant agrees to organize its Contract Documents for either construction technique and to coordinate the construction documents into selected bid packages, as appropriate. The City will notify the Design Consultant prior to the completion of the Design Development Design Phase which method will be used and the amount of work or the limits of construction to be included in the proposed bid package(s).

(h) The reports, studies, drawings and specifications and other products prepared by the Design Consultant under this Agreement, when submitted by the Design Consultant to the Manager and the user agency for any identified phase of the Project, must represent a thorough study and competent solution for the project as per usual and customary professional standards and shall reflect all architectural and engineering skills applicable to that phase of the project.

(i) The responsibilities and obligations of the Design Consultant under this Agreement shall not be relieved or affected in any respect by the presence on the site of any agent, consultant or subconsultant, or an employee of the City.

(j) The Design Consultant shall provide all professional services required by the City in defending all claims against the City, which relate in any way to alleged default hereunder, errors or omissions of the Design Consultant or its subconsultants, without additional compensation.

2.03 <u>Program and Budget</u>.

(a) The Design Consultant agrees to review the City's program and budget for the Project and further agrees, unless it has timely notified the City that the Project cannot be accomplished within such budget, to accomplish the Project within the intent of the program and established budget. Should the Design Consultant determine that The Project cannot be accomplished within the established budget, the Design Consultant shall immediately notify the City, in writing, so that the project scope or project budget can be reviewed and modified if necessary.

(b) The term "Project Construction Cost" shall mean the estimated cost to the City of actually constructing the Project, but such cost shall not include any Design Consultant's or special

consultant's fees or reimbursements or the cost of equipment installed by the City under separate contract, unless the Design Consultant is required by the City to prepare drawings and specifications for such equipment. The initial Project Construction Cost will be provided to the Design Consultant upon execution of this Agreement.

(c) The Design Consultant agrees to design the Project within the estimated Project Construction Cost for the Project. Should all responsive bids or proposal received for the Project work provided for in the design exceed such cost, the Design Consultant agrees to redesign the Project at no additional cost to City and, in a manner acceptable to the City.

2.04 <u>Coordination and Cooperation</u>.

(a) The Design Consultant agrees to perform under this Agreement in such a manner and at such times that the City or any Contractor who has work to perform, or contracts to execute, can do so without unreasonable delay.

(b) Coordination with the City and other involved agencies shall be a continuing work item through all phases of each assigned project. Such coordination shall consist of regular progress and review meetings with the City, work sessions with the City's Public Works, and other user agencies or as otherwise directed by the City. Such coordination may also include field and office reviews of plans and documents as required during the development of the design for any specific project. The Design Consultant shall document all such conferences and distribute notes to the City.

2.05 <u>Personnel Assignments</u>.

(a) The key professional personnel identified in *Exhibit B* (and any supplements to **Exhibit B**) will be assigned by the Design Consultant or its subconsultants to perform the services required under this Agreement, as appropriate.

(b) The Design Consultant's services shall be diligently performed by the regular professional and technical staff of the Design Consultant. In the event the Design Consultant does not have as part of its regular staff certain professional consultants, then such consulting services shall be performed, with City approval, by practicing professional consultants outside of the employ of the Design Consultant.

(c) The Design Consultant agrees, at all times during the term of this Agreement, to maintain on its payroll or to have access to through outside subconsultants, professional design personnel and technicians in sufficient strength to meet the requirements of the City. Such personnel and technicians shall be of the classifications referenced in Exhibit A. The hourly rates specified therein include all costs except those specifically referenced as reimbursables in the appropriate hourly rate schedule.

(d) Prior to designating an outside professional to perform subconsultant work, the Design Consultant shall submit the name of such subconsultant, together with a resume of training and experience in work of like character and magnitude of the project being contemplated, to the City and receive prior approval in writing.

(e) It is the intent of the Parties hereto that all key professional personnel be engaged to perform their specialty for all such services required by this Agreement and that the Design Consultant's and the subconsultant's key professional personnel be retained for the life of this Agreement to the extent practicable and to the extent that such services maximize the quality of work performed hereunder.

(f) If the Design Consultant or a subconsultant decides to replace any of its key professional personnel, the Design Consultant shall notify the Manager in writing of the desired change. No such changes shall be made until replacement personnel are recommended by the Design Consultant and approved in writing by the Manager, which approval shall not be unreasonably withheld.

(g) If, during the term of this Agreement, the Manager determines that the performance of approved key personnel or a subconsultant is not acceptable, she shall notify the Design Consultant and give the Design Consultant the time which the Manager considers reasonable to correct such performance. Thereafter, she may require the Design Consultant to reassign or replace such key

personnel. If the Manager notifies the Design Consultant that certain of its key personnel or a subconsultant should be replaced, Design Consultant will use its best efforts to replace such key personnel or a subconsultant within ten (10) days from the date of the Manager's notice.

(h) Neither the Design Consultant nor any subconsultant shall have other interests which conflict with the interests of the City, including being connected with the sale or promotion of equipment or material which may be used on a project to which they may be assigned, and the Design Consultant shall make written inquiry of all of its subconsultants concerning the existence of a potential for such conflict. In unusual circumstances, and with full disclosure to the City of such conflict of interest, the City, in its sole discretion, may grant a written waiver for the particular consultant or subconsultant.

(i) Actions taken by the City under this Article shall not relieve the Design Consultant of its responsibility for contractual or professional deficiencies, errors or omissions.

(j) The Design Consultant shall submit to the Manager a list of any additional key professional personnel who will perform work under this Agreement within thirty (30) days after this Agreement has been executed, together with complete resumes and other information describing their ability to perform the tasks which may be assigned. Such additional personnel must be recommended by the Design Consultant and approved by the Manager before they are assigned to a specific project.

(k) The Manager shall respond to the Design Consultant's written notice regarding replacement of key professional personnel within fifteen (15) days after the Manager receives the list of changes. If the Manager or his designated representative does not respond within that time, the changes shall be deemed to be approved.

2.06 <u>Basic Services – General</u>.

(a) These services shall be diligently performed by the regular professional and technical staff of the Design Consultant. In the event the Design Consultant does not have as part of its regular staff certain professional consultants, then such consulting services shall be performed, with City approval, by practicing professional consultants outside of the employ of the Design Consultant.

(b) Prior to designating an outside professional to perform work or services under this Agreement, the Design Consultant shall submit the name of such professional, together with a resume of training and experience in work of like character and magnitude as the project being contemplated, to the City and receive prior approval in writing.

(c) All professional consultants and subconsultants must be retained for the life of the Project to the extent practicable, except that acceptable replacements may be substituted with prior written approval from the City as set out in Section 2.05.

(d) The Design Consultant's basic services for the Project shall consist of the phases described below and shall include, but not be limited to, architectural, structural, mechanical, civil and electrical engineering services appropriate to each Project for each phase.

(e) The Design Consultant shall obtain written authorization from the City before proceeding with each phase.

(f) Nothing in this Agreement shall be construed as placing any obligation on the City to proceed with any phase beyond the latest phase authorized in writing by City.

(g) The responsibilities and obligations of the Design Consultant under this Agreement shall not be relieved or affected in any respect by the presence on the site of any agent, consultant, subconsultant, or employee of the City.

2.07 Basic Services - Phase Specific. The Basic Services which must be performed on the Project have been separated into the phases described below. This initial agreement will establish the tasks and a maximum price for Phase I. If, in its sole discretion, the City decides to authorize Design Consultant to proceed with Phase II the phase will be authorized by written amendment.

(a) Phase I – Final Design: Phase I – The Final Design of the project consists of all work described in *Exhibit A*. The Design Consultant shall satisfactorily complete all work set out in *Exhibit A* as part of Design Consultants basic services for Phase I. (b) Phase II –Construction Design Support and/or Administration: If the City, in its sole discretion, decides to proceed with Phase II –Construction Design Support and/or Administration, for the project, Consultant and City will develop a Scope of Work that will be incorporated into this agreement as *Exhibit A-1* by written amendment. Any Phase II work performed by consultant before the City executes a written amendment will be performed at the Consultant's risk.

2.08 Additional Services.

(a) If the Design Consultant performs services in addition to its Basic Services, as a result of material changes in the Project or due to other circumstances beyond the Design Consultant's control, and if such services (1) are pre-approved in writing; (2) will not cause the total compensation payable to the Design Consultant to exceed the Maximum Contract Amount; and (3) are not occasioned by any neglect, breach or default of the Design Consultant, then the Design Consultant will be reimbursed its pre-approved cost for performance of such service(s).

(b) Before providing any such services, the Design Consultant first shall file with the City, and secure the City's written approval of, a complete description of the proposed services including an estimate of the maximum cost of any and all such services, on the basis set out in **Exhibits A and B** (and any supplements thereto), of rates per hour, per day, or other basis of cost. Such description shall also include a statement from the Design Consultant that the maximum cost of such services will not cause the total amount payable to the Design Consultant under this Agreement to exceed the maximum contract amount. In no event shall any form of authorization or pre-approval of additional services be deemed valid or binding upon either the City or the Design Consultant if the maximum cost of such services would cause the aggregate amount payable under this Agreement to exceed the maximum contract amount. Payment for additional services shall not, in any event, exceed the cost estimated by the Design Consultant and approved in writing by the City.

(c) The cost of such additional service shall be deemed to be the lesser of the estimated maximum cost or:

- 1. The actual time card cost of all design personnel including principal designer's time at the rates as set out in **Exhibit A** (and any supplements thereto);
- 2. The actual cost to the Design Consultant for other necessary outside services, such as structural, mechanical or electrical engineering performed by independent consultants; and
- 3. The Design Consultant's actual reproduction cost for drawings.

(d) The Design Consultant shall maintain an accurate and acceptable cost accounting as to all such additional expenses and shall make available to the City all records, canceled checks and other disbursement media to substantiate any and all requests for payment for additional services.

(e) Payment to the Design Consultant for such additional services shall not, in any event, exceed the maximum additional services amount set forth in Section 3.

2.09 <u>Surveying and Testing</u>.

(a) The Design Consultant shall obtain all necessary surveying, tests and reports to properly design and administer the construction of each project, including, but not limited to, soils and hazardous materials testing. The Design Consultant shall be responsible for the accuracy, adequacy and content of such tests, surveying and reports.

(b) The Design Consultant and its appropriate subconsultant shall review all survey and test results reports and shall follow the recommendation of the soils engineer or other subconsultant unless, in the exercise of appropriate professional judgment, the Design Consultant or appropriate subconsultant discovers, or should in the exercise of professional judgment discover, factors indicating the report or results are not reliable.

(c) If any such inadequacy or any inconsistency, based upon such exercise of professional judgment, is noted the Design Consultant and/or its appropriate subconsultant shall report

such inconsistency or inadequacy promptly of the City and require such inadequacy or inconsistency to be addressed by the soils engineer, testing laboratory or land surveyor before any further use is put to the data.

(d) The Design Consultant shall require all surveying, engineering and testing entities it selects to carry and maintain Comprehensive Auto Liability and Property Damage Insurance, General Commercial Liability and Property Damage Insurance and Professional Errors and Omissions coverage as required by the City's Office of Risk Management which will adequately protect the interests of the City and third parties from the acts and omissions of the testing entity.

(e) Payment to the Design Consultant for such surveying, testing, and abatement shall not exceed the surveying and testing budget set forth in the project specific proposal for each project.

2.10 <u>COMPLIANCE WITH DBE, EQUAL OPPORTUNITY REQUIREMENTS AND</u>

FEDERAL GRANT 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 <u>20%</u>.

SECTION 3 - COMPENSATION, PAYMENT, AND FUNDING

The City shall compensate the Design Consultant for its service performed and expenses incurred under this Agreement as follows.

3.01 <u>Fee for basic services</u>. The City agrees to pay the Design Consultant, as full compensation for its basic services rendered hereunder, a fee not to exceed:

(a) Fee for Basic Services: The City agrees to pay the Design Consultant, as full compensation for all basic services rendered hereunder, a fee not to exceed TWO MILLION FIVE HUNDRED SIXTY-FOUR THOUSAND ONE HUNDRED NINETY-NINE AND 60/100 DOLLARS (\$2,564,199.60), in accordance with the billing rates and project budget stated in *Exhibit B*.

3.02 Reimbursable Expenses. Except for those reimbursable expenses specifically identified in **Exhibit A** (and any supplements thereto) or approved in writing by the City as reasonably related to or necessary for the Design Consultant's services, all other expenses shall be included in the Design Consultant's fee and will not be reimbursed hereunder. The maximum amount to be paid for all reimbursable expenses under this Agreement is **THIRTY-NINE THOUSAND TWENTY NINE AND 00/100 DOLLARS (\$39,029.50)** unless an additional amount is approved by the Manager or his designee in writing, subject to the Maximum Contract Amount stated herein. Unless this Agreement is amended in writing according to its terms to increase the Maximum Contract Amount, any increase in the maximum amount of reimbursable expenses will reduce the Design Consultant's maximum fee amount accordingly.

3.03. <u>Additional Services</u>. If pre-approved additional services are performed by the Design Consultant, the City agrees to pay the Design Consultant for such additional services in accordance with Section 2.08. The maximum amount to be paid by the City for all additional services under this contract is **ONE HUNDRED THOUSAND AND 00/100 DOLLARS (\$100,000.00**).

3.04 Invoicing and Payment. The City will make monthly progress payments for all services performed under this Agreement based upon the Design Consultant's monthly invoices. Such invoices shall be in a form acceptable to the City and shall include detail of the time worked by the Design Consultant's own personnel, billings from subcontractors, and all other information necessary to assess the Design Consultant's progress. Invoices shall be accompanied by documentation of expenses for which reimbursement is sought, and all other 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 this Agreement. Final Payment to the Design Consultant shall not be made until after the Project is accepted,

and all certificates of completion, record drawings and reproducible copies are delivered to the City, and the Agreement is otherwise fully performed by the Design Consultant. The City may, at the discretion of the Manager, withhold reasonable amounts from billing and the entirety of the final payment until all such requirements are performed to the satisfaction of the Manager. However, no deductions shall be made from the Design Consultant's compensation on account of penalty, liquidated damages or other sums withheld from payments to contractor(s).

3.05 Maximum Contract Amount.

(a) Notwithstanding any other provision of the Agreement, the City's maximum payment obligation will not exceed **TWO MILLION SEVEN HUNDRED THREE THOUSAND TWO HUNDRED TWENTY-NINE AND 10/100 DOLLARS** (\$2,703,229.10) (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 Design Consultant beyond that specifically described in **Exhibit A**. Any services performed beyond those set forth therein are performed at Design Consultant's risk and without authorization under the Agreement.

(b) 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, and the Agreement does not and is not intended to create a multiple-fiscal year direct or indirect debt or financial obligation of the City.

(c) The Design Consultant understands and agrees that the provision of any services by the Design Consultant, which would cause the total amount payable to the Design Consultant to exceed the amount of previously appropriated and encumbered funds, is strictly prohibited. In the event the continuation of services by the Design Consultant would cause the amount payable to the Design Consultant to exceed such amounts, the Design Consultant agrees to give to the Project Manager at least two (2) weeks' notice of the exhaustion of available funds. In the event additional funds are not made available within such two (2) week period, the Design Consultant agrees to stop providing services until such time as additional funds are appropriated and encumbered for the purposes of the this Agreement, and amounts which remain available for payment to the Design Consultant

(d)

SECTION 4 – TERM AND TERMINATION

4.01 <u>**Term.**</u> The term of this Agreement shall commence on execution of this Agreement and expire, unless sooner terminated, upon final completion of the Project.

4.02 <u>Termination</u>.

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

(b) The Manager may terminate this Agreement for cause at any time if the Design Consultant's services become unsatisfactory, in the sole discretion of the Manager. The City shall have the sole discretion to permit the Design 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 Design 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 Design Consultant shall be liable to City for all reasonable cost in excess of what the City would have paid the Design Consultant had there been no termination for cause.

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

(e) If the Design Consultant's services are terminated, postponed or revised, or if the Design Consultant shall be discharged before all the work and services contemplated have been completed, or if the project is, for any reason, stopped or discontinued, the Design Consultant shall be

paid only for the portion of work or services which has been satisfactorily completed at the time of such dismissal, termination, cancellation, postponement, revision or stoppage.

(f) All drawings, specifications, and other documents relating to the design or administration of work completed or partially completed shall be delivered by the Design Consultant to the City in the event of any dismissal, termination, cancellation, postponement, revision or stoppage.

(g) In the event of any dismissal, termination, cancellation, postponement, revision or stoppage, the Design Consultant shall cooperate in all respects with the City. Such cooperation shall include, but not be limited to, delivery of drawings, specifications, and other documents referred to herein, and assisting the City during a transition to another Design Consultant, if applicable.

SECTION 5 – GENERAL PROVISIONS

5.01 City's Responsibilities.

(a) The City shall provide available information regarding its requirements for each project, including related budgetary information, and shall cooperate fully with the Design Consultant at all times. However, the City does not guarantee the accuracy of any such information and assumes no liability therefore. The Design Consultant shall notify City in writing of any information or requirements provided by the City which the Design Consultant believes to be inaccurate or inappropriate to the design or construction of the project.

(b) If the City observes or otherwise becomes aware of any fault or defect in the project or non-conformance with Contract Documents, it shall give prompt notice thereof to Design Consultant.

5.02 Ownership of Documents.

(a) The City shall have title and all intellectual and other property rights, in and to all phased and final Design documents, and all data used in the development of the same, including the results of any tests, surveys or inspections at the Project site, and all photographs, drawings, drafts, studies, estimates, reports, models, notes and any other materials or work products, whether in electronic or hard copy format, created by the Design Consultant pursuant to this Agreement, in preliminary and final forms and on any media whatsoever (collectively, the "Documents"), whether the Project for which the Documents were created is executed or not. The Design Consultant shall identify and disclose, as requested, all such Documents to the City.

(b) To the extent permitted by the U.S. Copyright Act, 17 USC § 101 <u>et seq.</u>, as the same may be amended from time to time, the Documents are a "work made for hire," and all ownership of copyright in the Documents shall vest in the City at the time the Documents are created. To the extent that the Documents are not a "work made for hire," the Design Consultant hereby assigns and transfers all right, title and interest in and to the Documents to the City, as of the time of the creation of the Documents, including the right to secure copyright, patent, trademark, and other intellectual property rights throughout the world and to have and to hold such copyright, patent, trademark, and other intellectual property rights in perpetuity.

(c) The Design Consultant shall provide (and cause its employees and subcontractors to provide) all assistance reasonably requested in securing for the City's benefit any patent, copyright, trademark, service mark, license, right or other evidence of ownership of such Documents, and shall provide full information regarding the Documents and execute all appropriate documentation in applying for or otherwise registering, in the City's name, all rights to such Documents.

(d) The Design Consultant agrees to allow the City to review any of the procedures used in performing the work and services hereunder, and to make available for inspection the field notes and other documents used in the preparation for and performance of any of the services performed hereunder.

(e) The Design Consultant shall be permitted to retain reproducible copies of all of the Documents for the information and reference, and the originals of all of the Documents, including all CAD disks, shall be delivered to the City promptly upon completion thereof, or if authorized by the City's Project Manager, upon termination or expiration of this Agreement.

5.03 <u>**Taxes and Licenses**</u>. The Design 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 Design Consultant shall furnish the Manager, 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 Design 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.

5.04 <u>Design Consultant's Records</u>. Records of the Design Consultant's direct personnel, consultant and reimbursable expenses pertaining to this Project and records of accounts between the City and the Design Consultant shall be kept on a generally recognized accounting basis. The Design Consultant agrees that any duly authorized representative of the City, including the City Auditor, shall, until the expiration of three (3) years after the final payment under this Agreement, have access to and the right to examine any books, documents, papers and records of the Design Consultant, involving transactions related to this Agreement.

5.05 <u>Assignment and Subcontracting</u>. The City is not obligated or liable under this Agreement to any party other than the Design Consultant named herein. The Design Consultant understands and agrees that it shall not assign or subcontract with respect to any of its rights, benefits, obligations or duties under this Agreement except upon prior written consent and approval of the City to such assignment or subcontracting. Any attempt by the Design Consultant to assign or subcontract its rights hereunder without such prior written consent of the City shall, at the option of the City, automatically terminate this Agreement and all rights of the Design Consultant hereunder. Such consent may be granted or denied at the sole and absolute discretion of the City. In the event any such subcontracting shall occur, with the City's approval, such action shall not be construed to create any contractual relationship between the City and such subcontractor, and the Design Consultant named herein shall in any and all events be and remain responsible to the City according to the terms of this Agreement.

5.06 <u>No Discrimination in Employment</u>. In connection with the performance of work under this Agreement, the Design 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, marital status, or physical or mental disability. The Design Consultant agrees to insert the foregoing provision in all subcontracts hereunder.

5.07 <u>Insurance</u>.

General Conditions: Design Consultant agrees to secure, at or before the time (a) of execution of this Agreement, the following insurance covering all operations, goods or services provided pursuant to this Agreement. Design 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 eight (8) 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, contractor 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 Design Consultant. Design Consultant shall be responsible for the payment of any deductible or selfinsured retention. The insurance coverages specified in this Agreement are the minimum requirements,

and these requirements do not lessen or limit the liability of the Design Consultant. The Design 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) **<u>Proof of Insurance:</u>** Design Consultant shall provide a copy of this Agreement to its insurance agent or broker. Design Consultant may not commence services or work relating to the Agreement prior to placement of coverages required under this agreement. Design 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 Design 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) <u>Additional Insureds:</u> For Commercial General Liability, Auto Liability and Excess Liability/Umbrella, Design 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 required under this agreement, Design Consultant's insurer shall waive subrogation rights against the City.

(e) <u>Subcontractors and Subconsultants:</u> 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 Design Consultant. Design 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. Design 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>: Design 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 claims. Design 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 Design 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 this Agreement, and that any such rejections previously effected, have been revoked as of the date Design Consultant executes this Agreement.

(g) <u>Commercial General Liability</u>: Design 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:** Design 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:** Design Consultant shall maintain limits of \$1,000,000 for each claim, and \$1,000,000 aggregate limit for all claims.

- (j) Additional Provisions:
 - (1) For Commercial General Liability, the policies must provide the following:
 - (i) That this Agreement is an Insured Contract under the policy;
 - (ii) Defense costs are outside the limits of liability;
 - (iii) A severability of interests or separation of insureds provision (no insured vs. insured exclusion); and

- (iv) A provision that coverage is primary and non-contributory with other coverage or self-insurance maintained by the City.
- (2) For claims-made coverage:
 - (i) 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) Contractor 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 Contractor will procure such per occurrence limits and furnish a new certificate of insurance showing such coverage is in force.

5.08 <u>Defense & Indemnification</u>.

(a) To the fullest extent permitted by law, the Design 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 related to the work performed under this Agreement that are due to the negligence or fault of the Design Consultant or the Design 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) Design 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 suit has been filed and even if Design Consultant is not named as a Defendant.

(c) Design 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 Design Consultant under the terms of this indemnification obligation. The Design 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.

5.09 <u>Colorado Governmental Immunity Act</u>. The parties hereto understand and agree that the City is relying upon, and has not waived, the monetary limitations (presently \$150,000 per person, \$600,000 per occurrence) and all other rights, immunities and protection provided by the Colorado Governmental Immunity Act, C.R.S. § 24-10-101, *et seq.*

5.10 <u>Contract Documents; Order of Precedence</u>. This Agreement consists of Sections 1 through 5, which precede the signature page, and the following attachment, which is incorporated herein and made a part hereof by reference:

Exhibit A	Scope of Work
Exhibit B	Key Personnel/Rates
Exhibit C	ACORD Certificate of Insurance

In the event of an irreconcilable conflict between a provision of Sections 1 through 5 and the listed attachments, or between provisions of any attachments, such that it is impossible to give effect to both, the order of precedence to determine which provision shall control to resolve such conflict, is as follows, in descending order:

Sections 1 through 5 Exhibit A

Exhibit B Exhibit C

5.11 <u>When Rights and Remedies Not Waived</u>. In no event shall any payment by the City constitute a waiver of any breach of covenant or default which may then exist on the part of the Design 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.

5.12 <u>**Governing Law; Venue.**</u> This Agreement shall be construed and enforced in accordance with the laws of the State of Colorado, the Charter and Revised Municipal Code of the City and County of Denver, and the ordinances, regulations and Executive Orders enacted or promulgated pursuant to the Charter and Code, including any amendments. The Charter and Revised Municipal Code of the City and County of Denver, as the same may be amended from time to time, are hereby expressly incorporated into this Agreement. Venue for any action arising hereunder shall be in the City and County of Denver, Colorado.

5.13. <u>Conflict of Interest</u>.

(a) The parties agree that no employee of the City shall have any personal or beneficial interest in the services or property described herein, and the Design Consultant further agrees not to hire or contract for services with any employee or officer of the City which would be in violation of the Revised Municipal Code Chapter 2, Article IV, Code of Ethics or Denver City Charter provisions 1.2.9 and 1.2.12.

(b) The Design Consultant agrees that it will not engage in any transaction, activity or conduct that would result in a conflict of interest under this Agreement. The Design 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 Design Consultant by placing the Design Consultant's own interests, or the interests of any party with whom the Design Consultant has a contractual arrangement, in conflict with those of the City. The City, in its sole discretion, shall determine the existence of a conflict of interest and may terminate this Agreement in the event such a conflict exists after it has given the Design Consultant written notice which describes the conflict. The Design Consultant shall have thirty (30) days after the notice is received to eliminate or cure the conflict of interest in a manner that is acceptable to the City.

5.14 <u>No Third Party Beneficiaries</u>. 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 Design Consultant, and nothing contained in this Agreement shall give or allow any claim or right of action by any other or third person under this Agreement. It is the express intention of the parties that any person other than the City or the Design Consultant receiving services or benefits under this Agreement shall be deemed to be an incidental beneficiary only.

5.15 <u>Time is of the Essence</u>. The parties agree that in the performance of the terms, conditions and requirements of this Agreement by the Design Consultant, time is of the essence.

5.16 <u>**Taxes, Charges and Penalties.**</u> The City and County of Denver shall not be liable for the payment of taxes, late charges, or penalties of any nature except as provided in the City's Prompt Payment Ordinance.

5.17 <u>Proprietary or Confidential Information</u>.

(a) <u>City Information</u>: The Design Consultant acknowledges and accepts that, in performance of it work under the terms of this Agreement, the Design Consultant may have access to Proprietary Data or confidential information which may be owned or controlled by the City and that the disclosure of such data or information may be damaging to the City or third parties. As such, the Design Consultant agrees that all information provided or otherwise disclosed by the City to the Design Consultant be held in confidence and used only in the performance of its obligations under this Agreement. The Design Consultant shall exercise the same standard of care to protect such information as a reasonably prudent Design Consultant would to protect its own proprietary or confidential data. "Proprietary Data" shall mean geographic materials or Geographic Information Systems ("GIS") data owned by the City and County of

Denver including but not limited to maps, computer programs, aerial photography, methodologies, software, diagnostics and documents; or any other materials or information which may be designated or marked "Proprietary" or "Confidential" and provided to or made available to the Design Consultant by the City. Such Proprietary Data may be in hardcopy, printed, digital or electronic format.

(b) <u>Design Consultant's Information</u>: The parties understand that all the material provided or produced under this Agreement may be subject to the Colorado Open Records Act, C.R.S. 24-72-201, et seq., and that in the event of a request to the City for disclosure of such information, the City shall advise the Design Consultant of such request in order to give the Design Consultant the opportunity to object to the disclosure of any of its proprietary or confidential material. In the event of the filing of a lawsuit to compel such disclosure, the City will tender all such material to the court for judicial determination of the issue of disclosure and the Design Consultant agrees to intervene in such lawsuit to protect and assert its claims of privilege and against disclosure of such material or waive the same. The Design Consultant further agrees to defend, indemnify and save and hold harmless the City, its officers, agents and employees, from any claim, damages, expense, loss or costs arising out of the Design Consultant's intervention to protect and assert its claim of privilege against disclosure under this Article including, but not limited to, prompt reimbursement to the City of all reasonable attorney fees, costs and damages that the City may incur directly or may be ordered to pay by such court.

5.18 <u>Use, Possession or Sale of Alcohol or Drugs</u>. The Design 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's barring the Design Consultant from City facilities or participating in City operations.

5.19 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
vised	Municipal C	ode, and any amendments (the "Certification

Denver Revise 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 threeday 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.

5.20 Disputes. All disputes between the City and Design Consultant regarding this Agreement shall be resolved by administrative hearing pursuant to the procedure established by D.R.M.C. § 56-106(b), *et seq.* For the purposes of that procedure, the City official rendering a final determination shall be the Manager.

5.21 <u>Waiver of C.R.S. 13-20-802, et seq</u>. The Design Consultant specifically waives all the provisions of Chapter 8 of Article 20 of Title 13, Colorado Revised Statutes (also designated C.R.S. 13-20-802 *et seq.*) relating to design defects in the Project under this Agreement.

5.22 Survival of Certain Contract Provisions. The parties understand and agree that 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 generality of the foregoing, the Design 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."

5.23 <u>Advertising And Public Disclosure</u>. The Design Consultant shall not include any reference to this Agreement or to services performed pursuant to this Agreement in any of its advertising or public relations materials without first obtaining the written approval of the Manager, which will not be unreasonably withheld. Any oral presentation or written materials related to services performed under this Agreement shall include only services that have been accepted by the City. The Manager shall be notified in advance of the date and time of any such presentation. Nothing in this provision shall preclude the transmittal of any information to officials of the City, including without limitation the Mayor, the Manager, City Council or the Auditor.

5.24 <u>Legal Authority</u>. Design 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 this Agreement. Each person signing and executing this Agreement on behalf of Design Consultant represents and warrants that he has been fully authorized by Consultant to execute this Agreement on behalf of Design Consultant and to validly and legally bind Design Consultant to all the terms, performances and provisions of this Agreement. The City shall have the right, in its sole discretion, to either temporarily suspend or permanently terminate this Agreement if there is a dispute as to the legal authority of either Design Consultant or the person signing the Agreement to enter into this

Agreement.

5.25 <u>Notices.</u> Notices, bills, invoices or reports required by this Agreement shall be sufficiently delivered if sent in the United States mail, postage prepaid, to the Parties at the following addresses:

to the City:	Michael Harmer, Project Manager 201 West Colfax Avenue, Dept. 506 Denver, Colorado 80202
to the Design Consultant:	FELSBURG HOLT & ULLEVIG, INC
	6300 SOUTH SYRACUSE WAY SUITE 600
	CENTENNIAL, CO 80111

The addresses may be changed by the Parties by written notice.

5.26 <u>Severability</u>. It is understood and agreed by the parties hereto that, if any part, term, or provision 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 by the courts held to be illegal or in conflict with any law of the State of Colorado, the validity 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.

5.27 <u>Agreement as Complete Integration-Amendments</u>. This Agreement is intended as the complete integration of all understandings between the parties. No prior or contemporaneous addition, deletion or other amendment shall have any force or effect, unless embodied herein in writing. No subsequent novation, renewal, addition, deletion or other amendment hereto shall have any force or effect unless embodied in a written amendatory or other agreement executed by the parties and signed by the signatories to the original Agreement. This Agreement and any amendments shall be binding upon the parties, their successors and assigns.</u>

5.28 <u>Counterparts of this Agreement</u>. This Agreement will be executed in two (2) counterparts, each of which shall be deemed to be an original, and all of which, taken together, shall constitute one and the same instrument.

5.29 Electronic Signatures and Electronic Records. Design 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:

PWADM-201629558-00

Contractor Name:

FELSBURG HOLT & ULLEVIG, INC.

By: <u> < </u>

Name: DEAN P. BRADLEY (please print)

Title: Peosident (please print)

ATTEST: [if required] By: Thulling

Name: THOMAS W. ANZIA (please print)

Title: <u>PRINCIPAL</u> (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:
	By
By	

By_____



Exhibit A



June 23, 2016

City and County of Denver Project PWT2016-003 I-25& Broadway Interchange Reconstruction – Broadway, Ohio, and Wedge Ramp Scope of Work

Overview

This Scope of Work is for Professional Engineering Services necessary to complete final design, construction documents, opinions of probable construction costs and utility clearances / agreements for the work stated below:

- 1) Reconstruction of Broadway south of Ohio to Exposition
- 2) Reconstruction of Exposition from Lincoln to Broadway
- 3) Construct New SB I-25 On-Ramp (Wedge Ramp)
- 4) RTD Parking Lot Modifications
- 5) Wedge Ramp Water Quality Pond

It should be noted that final design of items such as roadway, lighting, utilities, drainage and water quality may be required for areas of the overall project outside the limits of the proposed project to ensure what is constructed fits construction of future project phases.

Task 1 - Project Management

(Felsburg Holt & Ullevig)

This task is in support of the City & County of Denver's project manager, Michael Harmer, in management of this project.

- Coordinate project tasks with the City and County of Denver's (CCD) Project Manager, Michael Harmer; other CCD personnel and departments as required.
- Review sub invoices; prepare and submit monthly invoices and progress reports.
- Develop and maintain a project schedule in Microsoft Office Project; update monthly and include with monthly invoice.
- Manage and coordinate work efforts of the Consultant Team.
- Assist the City with those items identified as a local agency responsibility on CDOT Form 1243 (Local Agency Contract Administration Checklist) developed for this project.
- Prepare and submit a QA/QC plan and adhere to the process throughout the project.
- Assemble plans and specifications for 90% review, final review and bid.
- Prepare opinion of probable cost for 90% design, final review and Bid.
- Assemble and provide a Preliminary Design set of plans for the current phase of the project from the 30% design information; provide a copy to the City Manager for review.

City and County of Denver Project PWT2016-003 I-25& Broadway Interchange Reconstruction – Broadway, Ohio, and Wedge Ramp Scope of Work

Page 2

Deliverables

- QA/QC Plan
- Monthly Invoices and Progress Reports
- Project Schedule (with monthly updates)
- Preliminary Plan Set
- Opinion of Probable Cost for 90% Design
- 90% Review Plans and Specifications
- 90% Design Review Comment Response Matrix
- Opinion of Probable Cost for Final Construction Review
- Final Construction Review Plans and Specifications
- Final Construction Review Comment Response Matrix
- Construction Contract Documents
- Three Record Drawing Sets

Task 2 – Survey

(NV5)

This task includes providing miscellaneous survey and extracting information from the survey conducted for the 30% design to assist in final design for the Phase 2.

Task Description

- As required, extract additional information from 30% design survey to assist in final design.
- Provide required traffic control for survey activities. (Traffic Control by NV5 Sub/Vendor)
- If required, obtain required right-of-entry permits for survey and geotechnical investigation associated with Task 3. CDOT Form 730 may be used for this purpose.
- Coordinate with Yeh & Associates in locating subsurface investigation test holes in association with Task 3.
- Coordinate with Goodbee in locating utility potholes in association with Task 7.
- As required, update topographical mapping and Digital Terrain Model of project limits with new survey information and additional information extracted from the 30% survey.
- As required, assist with updating the existing utility mapping with new survey information and additional information extracted from the 30% survey.
- Conduct/Attend coordination meetings with CCD and CDOT R1 Survey.
- Update Survey Control diagram as needed.

Deliverables

- Survey Coordination Meeting Minutes
- Geotechnical Test Hole location map, with coordinates and existing grade elevations.
- Pothole location map, with coordinates and existing grade elevations.
- Updated Topographical Base Map
- Updated Existing Digital Terrain Model
- Updated Existing one-foot interval Topographic Map
- Survey Control Diagram for Inclusion in Plans

Task 2A – Right of Way Documents

(NV5)

This task includes developing final ROW plans in accordance with CDOT policies and procedures for properties required within the Phase 2 project described in the overview.

Task Description

- Update Ownership map and tabulation prepared in the 30% design effort.
- Prepare legal exhibits and descriptions for all land acquisitions and remnant parcels, and temporary construction and permanent easements. These will be reviewed and approved by CCD Survey for content and format.
- Prepare final ROW plans.
- Conduct/Attend a ROWPR
- Conduct/Attend coordination meetings with CCD and CDOT R1 Survey.
- Revise and submit the ROW plans to CDOT and CCD that address revisions resulting from negotiations during ROW acquisition.

Deliverables

- Meeting Minutes for ROW related meetings.
- Updated Ownership Map & Tabulation
- Legal Exhibits and Descriptions
- Final ROW Plans

Task 2B – Right of Way Acquisition

(*H. C. Peck*)

This task includes all tasks necessary to acquire land and temporary easements needed for the project. It also includes the relocation of tenants residing or conducting business on the property to be acquired. All of the following activities will be performed in strict compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended, under the oversight of the Colorado Department of Transportation (CDOT), with direction the City & County of Denver.

- Create and maintain project scheduling information of all land activities to show progress of each parcel and to estimate segment completion against established milestone schedules.
- Attend project meetings and coordinate tasks with City & County of Denver, CDOT, project appraisers, and others involved and/or affected by the project.
- Coordinate the appraisal and review appraisal process, title services, and ROW plans & legal descriptions for all parcels. Review all documents in preparation for negotiation.
- Prepare appraisals or value findings using guidelines established by the CDOT appraisal manual.
- Prepare the following documents: offer letter and summary of just compensation, final offer letter, conveyance documents, and any additional correspondence with property owners.

- Conduct negotiations with each owner for the acquisition of the property rights to be acquired based on the approved fair market value.
- Order/coordinate warrant requests, obtain partial releases/subordinations and tax prorations; coordinate and attend real estate closings.
- Prepare Acquisition Stage Relocation Plan (7-B Study) of affected properties.
- Prepare inventories, obtain moving estimates, and determine benefits for tenant relocations.
- Provide title insurance and closing services as described in the CDOT ROW Manual.
- Settle claims for moving costs.
- Provide statements and forms to CCD to support reimbursement requests of the budgeted federal funding.
- Provide documentation required for the ROW Clearance through CDOT.

Deliverables

- Acquisition Schedule
- Appraisals and Value Findings
- Offer Letters
- Summary of Just Compensation
- Conveyance Documents
- Warrant Requests, Partial Releases, Tax Prorations
- Acquisition Stage Relocation Plan
- Tenant Inventories, Moving Estimates and Relocation Benefits
- Title Insurance
- Reimbursement Requests
- CDOT ROW Clearance Documentation
- Updated Ownership Map & Tabulation

Task 3 - Geotechnical Investigations and Pavement Design

(Yeh & Associates)

This task includes the subsurface investigation for the purposes of final structural foundation recommendations, roadway and structural fill recommendations and pavement design for Phase 2 described in the overview. The task also includes providing boring log plan sheets and materials' related project specifications.

- Obtain soil and water samples for chemical analysis.
- Perform subsurface investigation and perform applicable laboratory tests in support of providing final pavement design, roadway and structural fill, and structural foundation recommendations.
- Obtain Street Occupancy Permit for subsurface investigation.
- Provide required traffic control for subsurface investigation activities. (Traffic Control by Yeh Sub/Vendor)
- Coordinate with NV5 for survey of the test hole locations.

- Prepare a Final Geotechnical and Pavement Design Report summarizing the above tests, investigations, analyses, calculations and recommendations for the project design. Report will include information on both the new test holes and test holes from 30% design subsurface investigation.
- Prepare geotechnical test hole reference file; reference file will include both new test holes and test holes from 30% design subsurface investigation. Reference file will show both test hole locations and labeling of the test holes. Test holes will be identified by the same callout as shown in the Final Geotechnical Report.
- Prepare geotechnical test hole location map plan sheet(s); location map will include both new test holes and test holes from 30% design subsurface investigation. Test holes will be identified by the same call-out as shown in the Final Geotechnical Report.
- Prepare boring log information plan sheets; boring log information sheets will include boring logs from both the new test holes and the test holes drilled in the 30% design subsurface investigation.
- Assist in writing concrete pavement, hot mix asphalt, structural fill and roadway fill project special provisions.
- Conduct/Attend coordination meetings with CCD.

Deliverables

- Chemical Analysis Reports
- Geotechnical Coordination Meeting Minutes
- Final Geotechnical Subsurface Investigation & Design Report for the project segments listed above (Pavement, Roadway Fill, Structure Fill and Foundation Recommendations)
- Test Hole Location Reference File (including new and 30% design test holes)
- Geotechnical Test Hole Location Map Plan Sheet(s) (including new and 30% design test holes)
- Boring Log Information Plan Sheets for 2 bridges and retaining walls (including new and 30% design test holes)
- Information for Concrete Pavement, HMA, Structural Fill and Roadway Fill Construction Specifications

Task 4 – Streetscape and Landscape Design

(Design Workshop, Hermsen (Historic))

This task includes final design and construction documents for streetscape and landscape design features and irrigation for Phase 2 as described in the overview.

- Advance 30% streetscape and landscape design for the project segments described above to 100%.
- Develop and design elements for mitigation of the historic trolley tracks as identified in the FONSI and subsequent MOA with the SHPO and CDOT. Continue to implement the developed project wide historic mitigation conceptual plan developed during the 30% design effort and as documented in the MOA with CDOT.
- Support FHU Task 9 Structural Engineering with aesthetic treatments and details for ramp walls and pedestrian/bike CBC, and retaining walls.

- Support FHU Task 11 Water Quality Analysis & Design with regard to landscape design and the proposed water quality pond.
- Support SSG Task 13 Electrical and Lighting Analysis & Design to coordinate light locations with streetscape module.
- Design an irrigation system(s).
- Develop 90% review, final review and bid plans and specifications for landscape, streetscape, irrigation and historic mitigation.
- Develop streetscape, landscape and irrigation quantity tabulations for 90% review, final review and bid. Provide unit costs for pay items in the tabulations.
- Conduct/Attend coordination meetings with CCD and CDOT on streetscape, landscape irrigation, and historic mitigation design. (Assume 4 meetings)

Deliverables

- Historic Mitigation, Streetscape, Landscape and Irrigation Coordination Meeting Minutes
- Historic Mitigation, Streetscape, Landscape and Irrigation Quantity Calculations
- Historic Mitigation, Streetscape, Landscape and Irrigation 90%, Final Review and Bid Plans, Tabulations, Specifications and Cost Estimates
- Historic Mitigation, Landscape Design / Field Notebook (Design Calculations, Design Decisions, Product Information and Quantity Calculations)

Task 5 – Roadway Design

(Felsburg Holt & Ullevig)

This task includes final design of roadway and roadside elements for the project as described in the overview. The basis for design will be the data in CDOT Form 463, Design Data.

- Update design criteria as required for changes to AASHTO and City criteria.
- Check 30% horizontal and vertical alignments against updated design criteria.
- Confirm 30% design with respect to possible changes for area planned development, specifically at the RTD Broadway park-n-Ride.
- Incorporate planned developments on the former Gates Rubber Plant Site, at the RTD Broadway park-n-Ride, and the area north of I-25, west of Broadway into the design and Digital Terrain Models.
- Advance the 30% roadway and multi-modal design to 100%. Provide alignments, toes of slope and pertinent design features, including permanent and temporary impacts, to the ROW, Utility and Environmental task leads.
- Develop intersection geometrics and grading.
- Run vehicle turning templates at turning movements within the project limits.
- Develop concrete jointing plans.
- Design tie-ins back into existing
 - Broadway at the north and south end of the project limits.
 - Ohio from Broadway to Lincoln with inclusion of 8 ft. minimum width sidewalk.
 - Access to the RTD I-25/Broadway Station including multi-modal connections.
- Develop roadway removal plans.
- Document design variances including justification for each variance.

- Assist the City with obtaining concurrence from affected agencies for design variances.
- Generate a 3 dimensional digital terrain model of the design.
- Develop 90%, final review and bid plans and specifications for roadway design.
- Develop roadway quantity tabulations for 90%, final review and bid plans.
- Conduct/Attend coordination meetings with CCD and CDOT on roadway/interchange design.

Deliverables

- Roadway Design Coordination Meeting Minutes
- Roadway Design Quantity Calculations
- Roadway Design 90%, Final Review and Bid Plans, Profiles, Tabulations and Specifications
- Roadway Design Notebook (Design Calculations, Design Variances, Design Decisions)
- Roadway Field Book (Alignment Information, Intersection Design Information and Quantity Calculations)

Task 6 - Utility Coordination

(Goodbee & Associates, Inc.)

This task is in support of the City & County of Denver's efforts to coordinate with utility companies and obtain utility agreements with the affected utility companies within Phase 2 as described in the overview.

- Update existing utility base mapping
 - Complete UNCC search to identify all utility owner's in area (wet and dry)
 - Contact owners and obtain key maps (assume a total of 16 utility companies 11 dry and 5 wet)
 - Hire private locator to verify new utilities since previous 30% plan effort
 - Complete site visit to field verify key maps, locates, and utility survey fileCoordinate with NV5 on field verification and applicable updates to the existing utility reference file to incorporate utility poles, manholes, valves, pedestals, guy wires, and other visible utility features; and utility markings for underground facilities.
- Identify potential utility conflicts between existing utilities and proposed improvements for coordination with design team and utility companies.
- Meet one-on-one with utility companies and jurisdictions to discuss project scope, utility conflicts, and relocation and mitigation strategies. Set up meetings, develop agendas, facilitate meetings, and develop meeting minutes. NV5 will participate in wet utility meetings.
- Obtain easements, license agreements, and relocation agreement templates from Utility companies as applicable and provide to CCD and CDOT's R1 Utility Engineer.
- Conduct/Attend utility coordination meetings with CCD and CDOT, separate from one-onone utility meetings mentioned above. (Assume 2 meetings)
- After 90% plan review, conduct as needed coordination/comment resolution meetings with utility owners on wet and dry utility design (in conjunction with NV5). GA to set meetings, prepare agendas, and develop meeting minutes for dry utilities.

- Finalize the alternative access points for Denver fire standpipes that will be blocked by the construction of the wedge ramp, as presented in the 30% design (NV5).
- Prepare, coordinate and obtain utility clearance letters with the affected dry utility agencies.
- Complete XCEL work order request form. Assume that XCEL coordination and documentation related to lighting will be completed by SSG MEP. Obtain estimates of probable cost for dry utility relocations that are a cost to the project.
- Submit the request for and obtain utility clearance from CDOT.

Deliverables

- Utility Coordination Meeting Minutes
- Updated Existing Utility Map and Reference File
- Documents as Required to Obtain Utility Agreements and Clearances

Task 7 - Utility Design

(Goodbee & Associates, Inc. - Dry Utilities, NV5 - Wet Utilities)

This task includes potholing, developing existing utility plans and identifying utilities that will be affected by the final design within the project limits, and relocation design of affected wet utilities within the project limits. It is assumed dry utility (gas, non-CCD fiber optics, electric etc.) relocates will be by the utility owner. Dry utility relocations, as designed by the utility companies, will be shown in the plans.

- Utility potholing, assume 25 potholes (Goodbee)
- Create pothole location map and log plan sheet(s); pothole location map and logs will include both new pot holes and pot holes from the 30% design pothole effort. (Goodbee)
- Prepare existing utility plan sheets showing existing utility facilities, exiting utility easements and conflicts with proposed construction. (Goodbee)
- Prepare a summary table of all utilities within the project limits, noting utility adjustments, relocations and / or replacement. (Goodbee)
- Create an existing manhole log plan sheet(s). (Goodbee)
- Design wet utility relocations (domestic water lines, water distribution lines and sanitary sewer). (NV5)
- Develop 90%, final review and bid plans and specifications for wet utility relocations and new utilities. Each affected utility will have its own plan section. (NV5)
- Develop wet new/relocation utility quantity tabulations for 90%, final review and bid. (NV5)
- Develop tabulation of utility removals and adjustments. (Goodbee)
- Conduct/Attend coordination meetings with utility owners on wet and dry utility design. (Assume 5 meetings) (NV5 and Goodbee)
- Check utility clearances and existing utility locations as they relate to proposed grading. (NV5 and Goodbee)

City and County of Denver Project PWT2016-003 I-25& Broadway Interchange Reconstruction – Broadway, Ohio, and Wedge Ramp Scope of Work

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Deliverables

- Utility Design Coordination Meeting Minutes (Goodbee and NV5)
- Existing Utility Plan Sheets Including Table of Affected Utilities (Goodbee)
- Pothole Location Map + Log Plan Sheets (Goodbee)
- Manhole Log Plan Sheets (Goodbee)
- Utility Design Quantity Calculations (Goodbee and NV5)
- Utility Design Notebook (Design Calculations, Design Variances, Design Decisions) (Goodbee and NV5)
- Utility Specification (Includes but is not limited to utility owner contact information, contractor responsibilities and utility owner responsibilities) (CDOT Format) (Goodbee with help from NV5)
- Utility Relocation 90%, Final Review and Bid Plans, Profiles, Tabulations and Specifications. Separate plan sections and tabulations will be completed for each wet utility. Dry utility relocations will be shown in plan-view in the overall utility plan sheets. (Goodbee and NV5)
- Memo of Understanding of costs and work to be completed by XCEL and the Contractor. (Goodbee)

Task 8 - Traffic Engineering Design/Traffic Analysis

(Felsburg Holt & Ullevig)

This task includes updating the traffic analysis; and final design for traffic elements including CCD and CDOT ITS, traffic signals, signing and striping.

Task Description

- Traffic analysis to support environmental re-evaluation, and configuration of the entrance conditions at the Wedge Ramp.
- Traffic analysis to support confirmation of 30% design, and coordination with CCD TES on final configuration of access to the wedge ramp.
- Advance 30% traffic design within project limits to 100%.
- Coordinate with SSG MEP as required for electrical feeds for traffic signals.
- Develop 90%, final review and bid plans and specifications for traffic design elements and removals.
- Develop traffic design and removal quantity tabulations for 90%, final review and bid.
- Conduct/Attend coordination meetings with CCD and CDOT on traffic design. (Assume 4 meetings)

Deliverables

- Traffic Analysis Results
- Traffic Design Coordination Meeting Minutes
- Traffic Design Quantity Calculations
- Traffic Design and Removal 90%, Final Review and Bid Plans, Tabulations and Specifications

Task 9 - Structural Engineering

(Felsburg Holt & Ullevig)

This task includes design of traffic signal foundations, the wedge ramp bridge, pedestrian undercrossing structure and required retaining walls.

Task Description

- Participate in structural review meetings with CDOT and CCD Structural Reviewers.
- Review 30% structural design package and structure selection documents, and confirm structure types (e.g., MSE vs. CIP walls) and other final design decisions.
- Assist CCD with development of an IGA with CDOT for ownership and maintenance confirm structure ownership in IGA.
- Design traffic signal foundations. (Assumes 8 signal foundations.)
- Design retaining walls (7 total), the 459' four-span bridge over Broadway Boulevard, and the 48.5' single-span bridge serving as a pedestrian underpass associated with the Wedge Ramp from Broadway to SB I-25, all in accordance with AASHTO, CDOT, and CCD requirements.
- Design minor retaining and landscape walls as required for the project.
- Coordinate and develop aesthetic enhancement details as required on the bridges and walls.
- Conduct independent design checks for the bridges and retaining walls.
- Develop 90%, final review and bid plans and specifications for signal foundations, the bridges, and retaining walls.
- Develop structure quantity tabulations for 90%, final review and bid.
- Provide LRFR Bridge Ratings in accordance with the CDOT bridge Rating Manual and the AASHTO Manual for Bridge Evaluation.

Deliverables

- Meeting Agenda's and Notes
- IGA Documentation
- Structure Design and Design Check Notes
- Structure Design Quantity Calculations and Check
- Structure Rating Package
- Structure Field Book (Structure Geometry and Quantity Calculations)
- Structure Design 90%, Final Review and Bid Plans, Tabulations and Specifications

Task 10 - Hydrology and Hydraulic Analysis & Design

(Felsburg Holt & Ullevig)

This task includes final design of a stormwater conveyance system for proposed roadway, structural and parking improvements within the project segments described in the overview.

- Confirm and advance 30% drainage design within project limits to 100%; design will be in conformance with CCD's Master Drainage Plan.
- Develop 90%, final review and bid plans and specifications for drainage design elements and removals.
- Develop drainage quantity tabulations for 90%, final review and bid design and removals.

City and County of Denver Project PWT2016-003 I-25& Broadway Interchange Reconstruction – Broadway, Ohio, and Wedge Ramp Scope of Work

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- Prepare final drainage report for drainage facilities within the project limits.
- Conduct/Attend coordination meetings with CCD and CDOT on drainage analysis and design.

Deliverables

- Drainage Design Coordination Meeting Minutes
- Final Drainage Report
- Drainage Quantity Calculations
- Drainage 90% review, Final Review and Bid Plans, Details, Profiles, Tabulations and Specifications

Task 11 - Water Quality and Erosion Control Analysis & Design

(Felsburg Holt & Ullevig)

This task includes design of a water quality pond within the area enclosed by the SB I-25 on-ramp from Broadway and developing storm water management and erosion control plans for construction and final project conditions. Both project specific and regional water quality facilities will be considered in final design.

Task Description

- Advance 30% water quality design within project limits to 100%.
- Develop 90% review, final review and bid plans and specifications for construction and permanent erosion control and water quality BMP's.
- Develop water quality and erosion control quantity tabulations for 90%, final review and bid.
- Develop water quality design information for final drainage report in conjunction with Task 10.
- Provide assistance to CCD in obtaining miscellaneous permits from CCD departments and outside entities with regard to construction and permanent water quality features / BMP's.
- Prepare the CASDP Permit and supporting plans.
- Conduct/Attend coordination meetings with CCD and CDOT on water quality facility design. (Assume 5 meeting)

Deliverables

- Water Quality Design Coordination Meeting Minutes
- Water Quality and Erosion Control Quantity Calculations
- Water Quality and Erosion Control 90% Review, Final Review and Bid Plans, Details, Tabulations and Specifications

Task 12 - Environmental Services

(Felsburg Holt & Ullevig, Hermsen, Pinyon, Yeh & Associates)

This task is in support of the City & County of Denver's continuing compliance with the National Environmental Policy Act (NEPA) and FHWA and CDOT guidance for phases of the Preferred Alternative identified in the South Broadway Finding of No Significant Impact (FONSI). This scope of services reflects processing of the NEPA clearance as a reevaluation of the EA/FONSI. It also reflects that the environmental clearance is granted by CDOT under a Categorical Exclusion Determination, CDOT Form 128a.

- Identify and document changes or the lack thereof to the human, socio economic, or natural environment since completion of the South Broadway FONSI.
- Evaluate refinements to the engineering design from the conceptual-level of design presented in the South Broadway FONSI.
- Prepare CDOT's Reevaluation Form (Form 1399), required by 23 CFR 771.129 for each project segment described in the overview. Coordinate with CDOT and CCD to review findings, determine impacts and identify any additional mitigation measures. Resource evaluation tasks are anticipated to include:
 - Prepare an Air Quality Update Technical Memorandum updating the previous Air Quality analysis with 2040 traffic volumes
 - Prepare a Noise Impact Analysis Technical Memorandum updating the previous Noise Analysis with 2040 traffic volumes
 - Prepare an Initial Site Assessment (Form 881) documenting existing hazardous materials conditions
 - Prepare a Biological Resources Technical Memorandum documenting existing conditions
 - Prepare updated historic resources inventory to identify properties fifty years old or older, and determine if a Section 106 consultation is required.
- Develop mitigation measures for hazardous and solid waste found in soils and groundwater; summarize in a Materials Management Recommendation.
- Develop project special provision outlining materials management requirements for the Contractor.
- Determine appropriate environmental pay items to include in construction documents.
- Develop environmental plans, tabulations and specifications for 90% review, final construction review and bid. Plans will include details for removal of monitoring wells.
- Implement the appropriate environmental mitigation identified in the South Broadway FONSI and documentation for environmental resources affected by design/construction.
- Conduct/Attend coordination meetings with CCD, CDPHE, DEH, FHWA, CDOT and SHPO. (Assume 5 coordination meetings)
- Continue to coordinate findings and mitigation measures with Gates/Lionstone and the completion of the VCUPS.
- In association with structure foundation subsurface investigation, collect and test soil samples for hazardous contaminants.
- Groundwater sampling at test holes.

- Conduct historic mitigation for impacts to the Denver Tramway Trolley tracks in accordance with the FHWA, CDOT, and SHPO Memorandum of Agreement.
- Coordinate with CDOT Historian regarding the trolley line and implement a strategy for documenting the significance of the line (website/newsletter).
- Conduct historic mitigation, as required by proposed Broadway improvements, for 9 historic properties identified in the area of potential effect for the S. Broadway NEPA study (between Exposition and Arizona).
- Conduct/Attend coordination meetings with CCD, CDPHE, DEH, FHWA, CDOT and SHPO. (Assume 8 coordination meetings)
- Perform all activities necessary to obtain all environmental clearances and permits, including obtaining the CASDP, the CDPHE Discharge Permit and other environmental permits.
- Conduct Phase 1/ Phase 2 Environment Site Assessments in support of Task 2B.

Deliverables

- Environmental Coordination Meeting Minutes
- Contaminated Soil & Groundwater Summary
- Materials Management Recommendation
- Trolley Track Website/Newsletter
- EA Revaluation (Form 1399 and Form 128)
 - Air Quality Technical Memorandum
 - Noise Analysis Technical Memorandum
 - Initial Site Assessment
 - Biological Resources Technical Memorandum
- Environmental Mitigation Quantity Calculations.
- Environmental Mitigation 90%, Final Review and Bid Tabulations, Plans and Specifications
- Phase 1 ESAs
- Phase 2 ESAs

Task 13 – Electrical and Lighting Analysis & Design (SSG MEP)

This task includes final design of pedestrian and street lighting within the Phase 2 project limits as described in the overview.

- Confirm and advance 30% electrical and lighting design within project limits to 100%; show the following information on the plans sheets:
 - Circuit type and voltage of power source
 - Luminaire type and lumens
 - Light standard type
 - Foundation details, including the one for the high mast light
 - Size and location of electrical conduit
 - o Locations of power sources(s)/lighting control center(s)
 - Location of direct burial cable
 - Size of wiring and/or direct burial cable.

- Coordinate electrical and lighting design with traffic signal design associated with Task 8.
- Coordinate electrical utility design in association with Task 7.
- Develop 90%, final review and bid plans and specifications for electrical facilities and lighting, plus associated removals of existing electrical and lighting equipment.
- Develop electrical and lighting tabulations for 90%, final review and bid design and removals.
- Conduct/Attend electrical and lighting design coordination meetings with CCD, CDOT and appropriate utility agency(ies). (Assume 4 meetings)

Deliverables

- Electrical and Lighting Design Coordination Meeting Minutes
- Electrical and Lighting Design Quantity Calculations
- Electrical and Lighting Design 90%, Final Review and Bid Plans, Tabulations, Cost Estimates and Specifications
- Determination of Power Source Locations

Task 14 - Construction Phasing & Detour Design

(Felsburg Holt & Ullevig)

This task includes developing construction phasing plans for construction of Phase 2 as described in the overview.

Task Description

- Develop 90%, final review and bid plans and specifications for construction phasing and detours. Detours design will include plans, typical sections, horizontal alignment, profiles and cross-sections. Phasing will take into consideration and be coordinated with concrete pavement jointing design and installation of utilities (storm sewer, water, sanitary etc.).
- Develop construction phasing and detour tabulations for 90%, final review and bid.

Deliverables

- Phasing and Detour Design Quantity Calculations
- Phasing and Detour Design 90%, Final Review and Bid Plans, Tabulations and Specifications

Task 15 - Construction Traffic Control

(Felsburg Holt & Ullevig)

This task includes developing a schedule of traffic control items for construction of the Phase 2 project segments described in the overview.

- Develop construction traffic control specification.
- Develop a schedule of construction traffic control items based on traffic control required for detours and construction phasing.

Deliverables

- Schedule of construction traffic control items and appropriate specifications for 90%, Final Review and Bid Plans.
- Roll plots of traffic control items draped on detours and construction phasing.

Task 16 - Public Outreach and Information

(Felsburg Holt & Ullevig)

This task is in support of the City & County of Denver's continuing public outreach efforts.

Task Description

- Update public communication contact list.
- Prepare content for web page updates. Coordinate updates with PW Communications.
- Coordinate meetings with adjacent property owner's business owners and RNO's.
- Exhibits, graphics and project presentations for web, project updates, public outreach, project funding/phasing.
- Prepare for, send invites for and attend one Public Meeting.
- Coordination meetings with adjacent property owners as related to ROW acquisition.
- Coordination/ concept review meetings with adjacent developers relating to integration of future development.

Deliverables

- Updated Public Communication Contact List
- Public Outreach Related Meeting Minutes/Summaries
- Website Page Update Text and Graphics
- Public Meeting Invites and Presentation Boards
- Meeting Graphics, Handouts, and Website file attachments

Task 17 - Multi Agency Involvement & Coordination, Stakeholder Coordination

(Felsburg Holt & Ullevig, NV5, Design Workshop, SSG MEP)

This task is in support of the City & County of Denver's coordination efforts with outside agencies and area stakeholders (developers).

Task Description

- Coordinate/consensus-build with CCD Agencies, Denver Water Board, CDOT, FHWA, CDPHE, RTD, DRCOG and others.
- Coordinate with project stakeholders including: Metro and Maintenance Districts within the project corridor.
- Conduct/Attend coordination meetings with coordinating agencies.
- Coordinate design with design teams for adjacent development projects.

Deliverables

- Agency Coordination Meeting Minutes/Summaries
- Meeting Graphics, Handouts
- Meeting Documentation

Task 18 – Design Progress / Coordination Meetings

(Consultant Team)

This task covers project management coordination meetings, consultant team coordination meetings and miscellaneous meetings with CCD staff and outside entities.

Task Description

- Attend project management meetings.
- Attend consultant team coordination meetings.
- Attend miscellaneous meetings.
- Attend 90% review meeting.
- Attend 90% comment resolution meeting.
- Attend final review meeting.
- Prepare agendas, exhibits, handouts, conduct and write minutes for above mentioned meetings. Minutes will be completed within 7 days of the meetings.
- Prepare agendas, exhibits, handouts, conduct and write meeting minutes for 90% Design Review Meeting. Minutes will be completed within 7 days of the meeting.

Deliverables

- Meeting agendas
- Meeting exhibits
- Meeting handouts
- Meeting minutes

Task 19 – Additional Services

(Consultant Team)

This task covers unanticipated items or additional services as approved by CCD's Project Manager.

Miscellaneous Contract Requirements

- All CAD files/designs shall be produced in AutoCAD Civil 3D 2016 and be compatible with CCD's latest version of the software.
- Development of topographic data shall follow CCD CAD Standards.
- Electronic information shall be organized using CCD's file directory structure.
- Electronic Files shall be transmitted to CCD upon completion of the project organized in accordance with the CCD file directory structure.
- All documents shall be provided in a pdf format in addition to the file created by the original program.
- Plan packages shall be submitted in accordance with CCD's CPEP Plan requirements and CDOT's final PS&E check list.
- Prepare design documents consistent with CDOT's requirements for FOR, ROWPR, design variances and other submittals.

Exclusions

- Services do not include assisting CCD with advertisement of the project.
- Services do not include engineering assistance during construction.
- Services do not include construction management during construction.
- Services do not include meetings related to exploring possibilities for special district formation.

Exhibit B

CCD Project Control No. PWT2016-003 - I-25 Broadway Interchange Reconstruction - Broadway, Ohio, and Wedge Ramp

Summary by Task/Sub

				Additional			De	esign													-
Tasks		Totals	% Total	Services		FHU	Wor	kshop	Goodbee (D	BE)	HC Peck (DBE)	Hermsei	ו (DBE))	NV5	Pir	nyon (DBE)	SSG	MEP (DBE)	Y	eh (DBE)
1.	Project Management	\$ 217,330.00	8.0%		\$	203,470.00			\$ 6,96	0.00								\$	6,900.00		
2.	Survey	\$ 78,996.90	2.9%		\$	-								\$	78,996.90						
2A.	Right-of-Way Documents	\$ 94,608.60	3.5%		\$	4,760.00								\$	89,848.60						
2B.	Right-of-Way Acquisition	\$ 271,407.90	10.0%		\$	-					\$ 271,407.90										
3.	Geotechnical Investigation & Pavement Design	\$ 64,279.00	2.4%		\$	-														\$	64,279.00
4.	Streetscape and Landscape Design	\$ 135,270.00	5.0%		\$	-	\$ 12	29,870.00				\$	5,400.00								
5.	Roadway Design	\$ 327,200.00	12.1%		\$	327,200.00															
6.	Utility Coordination	\$ 27,840.00	1.0%		\$	1,360.00			\$26	,480											
7.	Utility Design	\$ 153,153.86	5.7%		\$	1,360.00			\$ 55,40	0.00				\$	96,393.86						
8.	Traffic Engineering Design	\$ 92,120.00	3.4%		\$	92,120.00															
9.	Structural Engineering	\$ 338,980.00	12.5%		\$	338,980.00															
10.	Hydrology and Hydraulic Analysis & Design	\$ 49,780.00	1.8%		\$	49,780.00															
11.	Water Quality Analysis & Design	\$ 49,650.00	1.8%		\$	49,650.00															
12.	Environmental Services	\$ 140,973.00	5.2%		\$	81,680.00						\$	8,280.00			\$	51,013.00				
13.	Electrical and Lighting Analysis & Design	\$ 60,430.00	2.2%		\$	-												\$	60,430.00		
14.	Construction Phasing & Detour Design	\$ 18,380.00	0.7%		\$	18,380.00															
15.	Construction Traffic Control	\$ 18,380.00	0.7%		\$	18,380.00															
16.	Public Outreach and Information	\$ 29,030.00	1.1%		\$	29,030.00															
17.	Multi Agency Involvement & Coordination	\$ 20,905.00	0.8%		\$	20,905.00															
18.	Design Progress / Coordination Meetings	\$ 175,575.34	6.5%		\$	79,045.00	\$ 4	41,250.00				\$	3,060.00	\$	30,878.34	\$	5,192.00	\$	8,470.00	\$	7,680.00
	Reimbursables	\$ 39,029.50	1.4%		\$	7,527.50	\$	7,908.00	\$ 6,24	6.00	\$ 9,580.00			\$	1,910.00	\$	5,320.00	\$	538.00		
	Vendors	\$ 199,910.00	7.4%		\$	5,000.00	\$	9,000.00	\$ 10,60	0.00				\$	5,290.00	\$	53,250.00			\$	116,770.00
19.	Additional Services	\$ 100,000.00	3.7%	\$-	\$	-															
	Totals	\$ 2,703,229.10	100.0%	\$ -	\$ 1	,328,627.50	\$ 18	88,028.00	\$ 105,68	6.00	\$ 280,987.90	\$ 1	6,740.00	\$	303,317.70	\$	114,775.00	\$	76,338.00	\$	188,729.00

% DBE	29%			
			Totals	%
SURVEY			\$ 78,996.90	3%
ROW Documents			\$ 94,608.60	3%
ROW Acquisition			\$ 271,407.90	10%
DESIGN			\$ 1,270,862.86	47%
PHASING AND CTC			\$ 36,760.00	1%
UTILITY CLEARANCE	E / COORDINATION		\$ 27,840.00	1%
ENVIRONMENTAL			\$ 140,973.00	5%
MANAGEMENT + CO	ORDINATION		\$ 267,265.00	10%
COORDINATION MEI	ETINGS		\$ 175,575.34	6%
VENDORS			\$ 199,910.00	7%
ADDITIONAL SERVIC	ES		\$ 100,000.00	4%
REIMBURSABLE EXF	PENSES		\$ 39,029.50	1.4%
		total	\$ 2,703,229.10	100%

FELSBURG HOLT & ULLEVIG		cipal III		ncipal II		ncipal I		GIS Manager	Engineer, E Scientist-P Plan	ner, GIS	Scientist-Planner,Tr Planner, GIS	ansp Env S Plar Pla	IV Engineer, vironmental Scientist- nner,Transp anner, GIS	Scientist-Pla Planne	anner,Transp er, GIS	Scientist-P Planr	lanner,Transp ner, GIS	Scientist-P Planner, Design S	I Environmental Planner,Transp GIS, Grpahic Specialist III
engineering paths to transportation solutions		\$235.00		: \$210.00		\$190.00		\$180.00	-	: \$170.00	Rate: \$150.00		: \$135.00		\$115.00		\$100.00		: \$90.00
Tasks	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours Fe	e Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee
1. Project Management																			
- General Coordination with CCD PM	2	\$ 470.00		\$-		\$-	40	\$ 7,200.00		\$-	\$	-	\$-		\$-		\$-		\$-
- Review Sub Invoices; Monthly Progress Reports & Invoices		\$-		\$-		\$-	60	\$ 10,800.00		\$-	\$	-	\$-		\$-		\$-		\$-
- Develop & Maintain Project Schedule		\$-		\$-		\$-	60	\$ 10,800.00		\$-	\$	-	\$-		\$-		\$-		\$-
- Consultant Team Coordination		\$-		\$-		\$-	400	\$ 72,000.00	40	\$ 6,800.00	\$	-	\$-		\$-		\$-		\$-
- Assist CCD with CDOT Form 1243 Checklist Items		\$-		\$-		\$-	16	\$ 2,880.00		\$-	\$	-	\$-		\$-		\$-		\$-
- QA/QC Plan		\$-		\$-		\$-	16	\$ 2,880.00		\$-	\$	-	\$-		\$-		\$-		\$-
- Assemble & Provide Preliminary Design Set of Plans for Current Project		\$-		\$-		\$-	8	\$ 1,440.00	16	\$ 2,720.00	\$	- 12	\$ 1,620.0) 12	\$ 1,380.00	8	\$ 800.00	16	\$ 1,440.00
- Assemble 90%, Final Review & Bid Plans & Specification Packages		\$-		\$-		\$-	80	\$ 14,400.00	2	\$ 340.00	\$	- 8	\$ 1,080.0)	\$-	8	\$ 800.00	2	\$ 180.00
- 90%, Final Review & Bid Plans and Specification Package QA		\$-		\$-	80	\$ 15,200.00	24	\$ 4,320.00	8	\$ 1,360.00	\$	-	\$-		\$-		\$-	4	\$ 360.00
- 90%, Final Reivew and Bid Cost Estimates		\$-		\$-		\$-	40	\$ 7,200.00	44	\$ 7,480.00	\$	- 8	\$ 1,080.0)	\$-	8	\$ 800.00	4	\$ 360.00
- 90% and Final Review Response to Plan and Spec Comments		\$-		\$-		\$-	8	\$ 1,440.00	44	\$ 7,480.00	\$	- 8	\$ 1,080.0)	\$-	8	\$ 800.00	4	\$ 360.00
- Prepare Final Project Submittal for CCD		\$-		\$-		\$-	16	\$ 2,880.00	16	\$ 2,720.00	\$	-	\$-		\$-		\$-		\$-
2A. Right-of-Way Documents																			
- Update Ownership Map & Tabulation		\$-		\$-		\$ -		\$-		\$ -	\$	-	\$-		\$ -		\$-		\$ -
Prepare Legal Exhibits and Descriptions for ROW Acquisition		\$-		\$ -		\$-		\$ -		\$-	\$	-	\$ -		\$-		\$-		\$ -
Prepare Final ROW Plans (includes revisions based on ROWPR)		s -		\$-		s -		\$-		s -	\$	-	\$-		\$-		\$-		\$-
Update ROW Plans, Legal Exhibits and Descriptions (as needed during ROW		¢		\$ -		¢		¢		¢	¢		\$ -		¢		¢		\$ -
negotiations)		φ -		•		φ -		φ -		J	\$	-			φ - •		э -		φ -
- ROW Related Coordination Meetings		\$ -		\$ -		\$-		\$ -	24	\$ 4,080.00	\$	-	\$ -		\$ -		\$-		\$ -
- Conduct/ Attend ROWPR		\$-		\$ -		\$-		\$-	4	\$ 680.00	\$	-	\$ -		\$ -		\$-		\$ -
5. Roadway Design																			
- Update Design Criteria (as required)		\$-		\$-		\$-		\$-	2	\$ 340.00	\$	-	\$-	4	\$ 460.00		\$-		\$-
- Confirm 30% Design		\$-		\$-		\$-		\$-	16	\$ 2,720.00	\$	-	\$-	40	\$ 4,600.00		\$-		\$-
- Incorporate Planned Developments into Design		\$-		\$-		\$-		\$-	4	\$ 680.00	\$	-	\$-	40	\$ 4,600.00		\$-		\$-
- 90%, Final Review and Bid Roadway Design + Plans + Specificaitons		\$-		\$-		\$-		\$-	120	\$ 20,400.00	\$	-	\$-	1120	\$ 128,800.00		\$-		\$-
- Design, Plans, Specifications for Temporary Tie-Ins to Existing		\$-		\$-		\$-		\$-	16	\$ 2,720.00	\$	-	\$-	40	\$ 4,600.00		\$-		\$-
- Document and Obtain Concurrence on Design Variances		\$-		\$-		\$-		\$-	8	\$ 1,360.00	\$	-	\$-	4	\$ 460.00		\$-		\$-
- Develop Digital Terrain Model of Finished Grade		\$-		\$-		\$-		\$-	16	\$ 2,720.00	\$	-	\$-	80	\$ 9,200.00		\$-		\$-
- Quantity Calculations and Tabulations		\$-		\$-		\$-		\$-	16	\$ 2,720.00	\$	-	\$-	32	\$ 3,680.00		\$-		\$-
- Roadway Design & Quantity Notebook		\$-		\$-		\$-		\$-	24	\$ 4,080.00	\$	-	\$-	40	\$ 4,600.00		\$-		\$-
- Roadway Design Related Coordination Meetings, Exhibits + Minutes		\$-		\$-		\$-	4	\$ 720.00	8	\$ 1,360.00	\$	-	\$-	4	\$ 460.00		\$-		\$-
6. Utility Coordination																			
- Utility Related Coordination with CCD and CDOT Meetings + Minutes		\$-		\$-		\$-		\$-	8	\$ 1,360.00	\$	-	\$-		\$-		\$-		\$-
7. Utility Design																			
- Utility Design Coordination Meetings + Minutes		\$-		\$-		\$-		\$-	8	\$ 1,360.00	\$	-	\$-		\$-		\$-		\$-
8. Traffic Engineering Design																			
- Traffic Analysis for Environmental Re-Evaluation		\$-	30	\$ 6,300.00		\$-		\$-		\$-	\$	-	\$-	8	\$ 920.00		\$-		\$-
- Traffic Analysis to Support 30% Design Confirmation & TES Coord.		\$-	30	\$ 6,300.00		\$-		\$-	16	\$ 2,720.00	\$	-	\$-	32	\$ 3,680.00		\$-		\$-
- 90%, Final Review and Bid Traffic Design + Plans + Specificaitons		\$-		\$-		\$-		\$-	120	\$ 20,400.00	\$	-	\$-		\$-		\$-	184	\$ 16,560.00
- Quantity Calculations and Tabulations		\$-		\$-		\$-		\$-	20	\$ 3,400.00	\$	-	\$-		\$-		\$-	20	\$ 1,800.00
- Traffic Design Related Coordination Meetings + Minutes		\$-	8	\$ 1,680.00		\$-		\$-	8	\$ 1,360.00	\$	-	\$-		\$-		\$-	4	\$ 360.00
9. Structural Engineering																			
- Review 30% Structure Selection Report, Confirm Structure Types		\$-		\$-	4	\$ 760.00		\$-		\$-	8 \$ 1,2	00.00	\$-		\$ -		\$-	8	\$ 720.00
- 90%, Final Review and Bid Structural Design + Plans + Specificaitons		\$ -		\$ -	120	\$ 22,800.00		\$ -		\$-		00.00	\$ -		\$-		\$-	340	\$ 30,600.00
Quantity Calculations, Quantity Checks Notebooks and Tabulations		\$ -		\$ -		\$ -		\$ -		\$ -		00.00	\$ -		\$-		\$ -	40	\$ 3,600.00
Design and Design Review Notebooks		\$ -		\$ -		° \$-		\$ -		\$-		00.00	\$ -		\$ -		\$-	16	\$ 1,440.00
Coordinate with Urban Design on Structure Aesthetics		\$-		\$ -		\$-		\$-		\$ -	\$	-	\$ -		\$-		\$-		\$ -
Structure Rating and Additional CDOT Coordination		s -		\$ -		s -		\$-		\$ -	\$	-	\$ -		\$ -		\$ -		\$ -
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FELSBURG HOLT & ULLEVIG		enior Bridge signer	Senior	Designer	Graphic	jner V, c Design lager	Designe Graphic I Speciali	esign	De	signer l	Senior Adm	nin. Assistant	Admin	istrative	Vendor	-	Totals	
engineering paths to transportation solutions	Rate:	\$150.00	Rate	: \$130.00	Rate:	\$120.00	Rate: \$	100.00	Rate	: \$75.00	Rate	: \$95.00	Rate	: \$80.00	Fee	Hours		Fee
Tasks	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	100			
1. Project Management																1198	\$	203,470.00
- General Coordination with CCD PM		\$-		\$-		\$-	5	-		\$-		\$-		\$-		42	\$	7,670.00
- Review Sub Invoices; Monthly Progress Reports & Invoices		\$-		\$-		\$-	5	-		\$-		\$-		\$-		60	\$	10,800.00
- Develop & Maintain Project Schedule		\$-		\$-		\$-	5	-		\$-		\$-		\$-		60	\$	10,800.00
- Consultant Team Coordination		\$-		\$-		\$-	5	-		\$-		\$-		\$-		440	\$	78,800.00
- Assist CCD with CDOT Form 1243 Checklist Items		\$-		\$-		\$-	\$	-		\$-		\$-		\$-		16	\$	2,880.00
- QA/QC Plan		\$-		\$-		\$-	5	-		\$-		\$-		\$-		16	\$	2,880.00
- Assemble & Provide Preliminary Design Set of Plans for Current Project	24	\$ 3,600.00	8	\$ 1,040.00	12	\$ 1,440.00	5	-		\$-		\$-		\$-		116	\$	15,480.00
- Assemble 90%, Final Review & Bid Plans & Specification Packages		\$-	4	\$ 520.00		\$-	5	-		\$-		\$-		\$-		104	\$	17,320.00
- 90%, Final Review & Bid Plans and Specification Package QA		\$-		\$-		\$-	5	-		\$-		\$-		\$-		116	\$	21,240.00
- 90%, Final Reivew and Bid Cost Estimates		\$-		\$-		\$-	5	-		\$-		\$-		\$-		104	\$	16,920.00
- 90% and Final Review Response to Plan and Spec Comments		\$-		\$-		\$-	Ş	-		\$-		\$-		\$-		72	\$	11,160.00
- Prepare Final Project Submittal for CCD		\$-	4	\$ 520.00		\$-	5	-		\$-	8	\$ 760.00	8	\$ 640.00		52	\$	7,520.00
2A. Right-of-Way Documents																28	\$	4,760.00
- Update Ownership Map & Tabulation		\$-		\$-		\$-	5	-		\$-		\$-		\$-		0	\$	-
- Prepare Legal Exhibits and Descriptions for ROW Acquisition		\$-		\$-		\$-	5	-		\$-		\$-		\$-		0	\$	-
- Prepare Final ROW Plans (includes revisions based on ROWPR)		\$-		\$-		\$-	5	-		\$-		\$-		\$-		0	\$	-
Update ROW Plans, Legal Exhibits and Descriptions (as needed during ROW		\$-		\$-		s -	5	-		s -		\$ -		\$ -		0	\$	-
negotiations) - ROW Related Coordination Meetings		÷ \$ -		÷ \$-		÷ \$ -	5	_		\$ -		\$ -		\$ -		24	- e	4,080.00
		\$ - \$ -		•		\$ - \$ -				\$ - \$ -		ş - \$ -		\$ - \$ -		4	ф Ф	,
Conduct/ Attend ROWPR		ə -		\$ -		ъ -		-		\$ -		р -		\$ -		·	¢	680.00
5. Roadway Design		\$ -		\$ -		s -	9			¢		\$ -		\$ -		3131	>	327,200.00
Update Design Criteria (as required)				•		÷				\$ -		•		•		6 56		800.00
- Confirm 30% Design		•		\$ - \$ -		•				\$ -	20	*		\$ - \$ -				7,320.00
Incorporate Planned Developments into Design		•		Ŷ		÷			30	\$ 2,250.0			00	Ŷ		74		7,530.00
- 90%, Final Review and Bid Roadway Design + Plans + Specificaitons		Ψ ·	220	\$ 28,600.00		\$ -		-	1000	\$ 75,000.0		\$ 760.00	20	\$ 1,600.00		2488	\$	255,160.00
Design, Plans, Specifications for Temporary Tie-Ins to Existing		\$-	8	\$ 1,040.00		\$-	\$		120	\$ 9,000.0		\$ -	5	\$ 400.00		189		17,760.00
Document and Obtain Concurrence on Design Variances		\$-	10	\$ -		\$ -	\$		8	\$ 600.0	0 2	\$ 190.00		\$ -		22	\$	2,610.00
- Develop Digital Terrain Model of Finished Grade		\$ -	16	\$ 2,080.00		\$ -	5	-		\$ -		\$ -		\$ -		112	\$	14,000.00
Quantity Calculations and Tabulations		\$ -		\$ -		\$ -	Ş	-	40	\$ 3,000.0	00	\$ -		\$ -		88	\$	9,400.00
- Roadway Design & Quantity Notebook		\$ -		\$ -		\$ -	5			\$-	8	\$ 760.00	8	\$ 640.00		80	\$	10,080.00
- Roadway Design Related Coordination Meetings, Exhibits + Minutes		\$-		\$-		\$ -	5	-		\$-		\$ -		\$ -		16	\$	2,540.00
6. Utility Coordination																8	\$	1,360.00
- Utility Related Coordination with CCD and CDOT Meetings + Minutes		\$-		\$-		\$ -	5	-		\$ -		\$-		\$ -		8	\$	1,360.00
7. Utility Design																8	\$	1,360.00
- Utility Design Coordination Meetings + Minutes		\$-		\$-		\$-	5	-		\$-		\$-		\$ -		8	\$	1,360.00
8. Traffic Engineering Design											_					688	\$	92,120.00
- Traffic Analysis for Environmental Re-Evaluation		\$-		\$-		\$-	5	-		\$-		\$-	8	\$ 640.00		46	\$	7,860.00
- Traffic Analysis to Support 30% Design Confirmation & TES Coord.		\$-		\$-		\$ -	5	-		\$-		\$-		\$-		78	\$	12,700.00
- 90%, Final Review and Bid Traffic Design + Plans + Specificaitons		\$-	200	\$ 26,000.00		\$-	5	-		\$-		\$-		\$ -		504	\$	62,960.00
- Quantity Calculations and Tabulations		\$-		\$-		\$ -	5	-		\$-		\$-		\$-		40	\$	5,200.00
- Traffic Design Related Coordination Meetings + Minutes		\$-		\$-		\$ -	5	-		\$-		\$-		\$-		20	\$	3,400.00
9. Structural Engineering																2804	\$	338,980.00
- Review 30% Structure Selection Report, Confirm Structure Types		\$-		\$-		\$-	5	-		\$-		\$-	4	\$ 320.00		24	\$	3,000.00
- 90%, Final Review and Bid Structural Design + Plans + Specificaitons	800	\$ 120,000.00		\$-		\$-	5	-	820	\$ 61,500.0	00	\$-		\$-		2620	\$	315,900.00
- Quantity Calculations, Quantity Checks Notebooks and Tabulations	40	\$ 6,000.00		\$-		\$-	5	-		\$-		\$-	4	\$ 320.00		124	\$	15,920.00
- Design and Design Review Notebooks		\$-		\$-		\$-	5	-		\$-		\$-	4	\$ 320.00		36	\$	4,160.00
- Coordinate with Urban Design on Structure Aesthetics		\$-		\$-		\$-	5	-		\$-		\$-		\$-		0	\$	-
- Structure Rating and Additional CDOT Coordination		\$-		\$-		\$-	5	-		\$-		\$-		\$-		0	\$	-
- Assist CCD with CCD/CDOT IGA for Maintenance of Structures		\$-		\$-		\$-	5	-		\$-		\$-		\$-		0	\$	-

(FELSBURG HOLT & ULLEVIG engineering paths to transportation solutions		cipal III	Princip Rate: \$			ncipal I : \$190.00			Engineer, E Scientist-Pl Plann		Scientist-P Plan	V Environmental lanner,Transp ner, GIS \$150.00	Eng Enviro Scie Planne	IV lineer, nmental entist- er, Transp ner, GIS	Scientist-P Planı	III Environmental lanner,Transp ner, GIS	Scientist-Pl Planr			nner,Trans S, Grpahic ecialist III
		Hours	. \$233.00 Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee
40	Tasks	Hours	гее	Hours	ree	nours	ree	Hours	ree	Hours	ree	Hours	гее	Hours	ree	Hours	ree	nours	гее	Hours	гее
10.	Hydrology and Hydraulic Analysis & Design		-													-					
	- Review Preliminary Hydraulic Investigation, Update as Required		\$ -	\$	5 -		\$ -		\$ -		\$ -		\$ -	4 \$	540.00		\$ -	40	\$ 4,000.00	3	- 6
	- 90%, Final Design, and Bid Drainage Design + Plans + Specificaitons		\$-	\$	ş -		\$-		\$-		\$-		\$-	16 \$	2,160.00		\$-	240	\$ 24,000.00	9	ş -
	- Quantity Calculations and Tabulations		\$-	\$	5 -		\$-		\$-		\$-		\$-	4 \$	540.00		\$-	16	\$ 1,600.00	9	5 -
	- Final Drainage Report		\$-	\$	6 -		\$-		\$-		\$-		\$-	4 \$	540.00		\$-	40	\$ 4,000.00	9	-
	- Drainage Design Related Coordination Meetings (3), Exhibits + Minutes		\$ -	\$	ş -		\$-		\$-		\$-		\$-	8 \$	1,080.00		\$-	16	\$ 1,600.00	9	5 -
11.	Water Quality Analysis & Design																				
	- 90%, Final Review & Bid Water Quality Design		\$-	\$	6 -		\$-		\$-		\$-		\$-	8 \$	1,080.00		\$-	100	\$ 10,000.00	\$	6 -
	- 90%, Final Review & Bid Erosion and Sediment Control		\$-	\$	ş -		\$-		\$-		\$-		\$-	8 \$	1,080.00		\$-	40	\$ 4,000.00	9	ş -
	- Quantity Calculations and Tabulations		\$-	\$	ş -		\$-		\$-		\$-		\$-	4 \$	540.00		\$-	40	\$ 4,000.00	9	ş -
	- Develop WQ Info for Drainage Report		\$-	\$	ş -		\$ -		\$-		\$-		\$-	\$	-		\$-	40	\$ 4,000.00	\$	-
	- CASDP + Supporting Plans		\$-	\$	6 -		\$-		\$-		\$-		\$-	2 \$	270.00		\$-	8	\$ 800.00	9	6 -
	- Other Permits as Required		\$-	\$	6 -		\$-		\$-		\$-		\$-	8 \$	1,080.00		\$-	8	\$ 800.00	9	6 -
	- Water Quality Design Related Coordination Meetings (5) + Minutes		\$-	\$	6 -		\$-		\$-		\$-		\$-	16 \$	2,160.00		\$-	16	\$ 1,600.00	9	ş -
12.	Environmental Services																				
	- 90%, Final Review & Bid Design Environmental Plans + Specifications	1	\$ -	\$	6 -	2	\$ 380.00		\$-	4	\$ 680.00		\$-	8 \$	5 1,080.00	80	\$ 9,200.00	16	\$ 1,600.00	9	6 -
	- Quantity Calculations and Tabulations	1	\$-	\$	6 -	2	\$ 380.00		\$-		\$ -		\$ -	\$;	8	\$ 920.00	16	\$ 1,600.00	9	ş -
	- EA Re-Evaluation	1	\$ -		β -	4	\$ 760.00	16	\$ 2,880.00	100	\$ 17,000.00		\$ -	100 \$	3 13,500.00		\$ -	40	\$ 4,000.00	9	β -
	Develop Materials Management Recommendation	1	\$ -		р 6 -		\$ -	-	\$ -	8	\$ 1,360.00		\$-	4 \$	540.00		\$ -	-	\$ -	9	<u>-</u>
	Coordinate Env. Mitigation with Project Design		\$ -		•	4	\$ 760.00		\$-	0	\$ -		\$-	16 \$	2,160.00	8	\$ 920.00	16	\$ 1,600.00	9	
	Phase 1 and 2 Environmental Site Assessments in Support of Task 2B		•		•				•		φ •		•	10 4		0		10	φ 1,000.00		r
	(Assume for 12 Properties)		\$-	\$	• -	6	\$ 1,140.00		ъ -	6	\$ 1,020.00		\$-	\$	-		\$-		ф -	9	6 -
	- Historic Mitigation (Design, Coord w/CDOT Historian)		\$ -	\$	ş -	4	\$ 760.00		\$-	4	\$ 680.00		\$-	8 \$	1,080.00		\$-		\$-	9	ş -
	- Coordinate with Outside Env. Agencies		\$ -	\$	6 -	16	\$ 3,040.00		\$-	24	\$ 4,080.00		\$-	8 \$	1,080.00		\$ -		\$-	9	6 -
	- Environmental Related Coordination Meetings + Minutes		\$-	\$	-	16	\$ 3,040.00		\$-	16	\$ 2,720.00		\$-	8 \$	1,080.00		\$-		\$-	\$	-
14.	Construction Phasing & Detour Design																				
	- 90%, Final Review & Bid Phasing and Detour Design + Plans		\$-	\$	ş -		\$-		\$-	24	\$ 4,080.00		\$-	\$; -	60	\$ 6,900.00		\$-	9	ş -
	- Quantity Calculations and Tabulations		\$-	\$	6 -		\$-		\$-	8	\$ 1,360.00		\$-	\$; -	16	\$ 1,840.00		\$-	9	6 -
15.	Construction Traffic Control																				
	- 90% Final Review & Bid Construction Traffic Control Design		\$ -	\$	ş -		\$-		\$-	24	\$ 4,080.00		\$-	\$; -	60	\$ 6,900.00		\$-	9	ş -
	- Quantity Calculations and Tabulations		\$-	\$	6 -		\$-		\$-	8	\$ 1,360.00		\$-	\$; -	16	\$ 1,840.00		\$-	9	6 -
16.	Public Outreach and Information																				
	- Update Public Communication Contact List		\$-	\$	6 -	8	\$ 1,520.00	8	\$ 1,440.00		\$-		\$-	\$; -		\$-		\$-	9	6 -
	Prepare Content for Project Website	1	\$-	\$	6 -		\$-	8	\$ 1,440.00	8	\$ 1,360.00		\$-	\$; -		\$-		\$-	8 9	5 720.00
	Prepare for and Attend Public Meeting	2	\$ 470.	00 \$	6 -	8	\$ 1,520.00	8	\$ 1,440.00	8	\$ 1,360.00		\$ -	\$; -		\$-		\$-	9	6 -
	Exhibits for Presentations to Public Works Management		\$ -		s 6 -	-	\$ -	8	\$ 1,440.00	8	\$ 1,360.00		\$-		, ; -		\$ -		\$ -	9	<u>ہ</u>
	Individual Meetings with Property and Business Owners	1	\$ -	•	s -		\$ -	8	\$ 1,440.00	8	\$ 1,360.00		\$-	\$, ; -		· \$ -		· \$ -		s -
	- Public Outreach Related Coordination Meetings, Exhibits + Minutes		\$ -		•	8	\$ 1,520.00	8	\$ 1,440.00	8	\$ 1,360.00		\$-	¢			\$ -		\$ -		6 -
17	Multi Agency Involvement & Coordination		Ψ		y	0	φ 1,520.00	0	φ 1,440.00	0	φ 1,000.00		Ψ	Ŷ	,		Ŷ		Ψ		y
17.		1	¢ 005	00 \$		8	¢ 1,520,00	8	£ 1.440.00	8	£ 1.260.00		\$ -	đ	<u>,</u>	-	¢		¢		•
	Coordinate/Consensus Build with Outside Agencies	4	\$ 235. \$ 225		•	-	\$ 1,520.00 \$ 1,520.00	-	\$ 1,440.00 \$ 1,440.00	-	\$ 1,360.00 \$ 1,360.00		•	3	<u>-</u>		φ -		φ - ¢		6 -
	Coordinate with Project Stakeholders	1	\$ 235.			8	\$ 1,520.00	8	\$ 1,440.00 (1,440.00	8	\$ 1,360.00		\$ -	\$	- -		ф -		ф -		6 -
	Coordinate Design with Adjacent Developments/Projects	<u> </u>	\$ -	•		-	> -	8	\$ 1,440.00	24	\$ 4,080.00		\$-	\$	-	-	\$ -		\$ -	9	6 -
	- Multi-Agency Related Coordination Meetings, Exhibits + Minutes	1	\$ 235.	00 \$	• -	8	\$ 1,520.00	8	\$ 1,440.00	8	\$ 1,360.00		\$-	\$	5 -	8	\$ 920.00		\$ -	9	<u> </u>
18.	Design Progress / Coordination Meetings																				
	- Project Management Meetings	1	\$ 235.	00 \$	6 -		\$ -	24	\$ 4,320.00		\$ -		\$ -	\$	5 -		\$ -		\$ -	9	<u> </u>
	- Consultant Team Coordination Meetings		\$ -	\$	ş -	32	\$ 6,080.00	40	\$ 7,200.00	60	\$ 10,200.00	40	\$ 6,000.00	\$	-	30	\$ 3,450.00		\$-	40 \$	3,600.00
	- Miscellaneous Meetings		\$-	\$	6 -	8	\$ 1,520.00	8	\$ 1,440.00	20	\$ 3,400.00	8	\$ 1,200.00	\$; -		\$-		\$-	16 \$	\$ 1,440.00
	- 90% Review Meeting		\$-	\$	6 -	8	\$ 1,520.00	8	\$ 1,440.00	8	\$ 1,360.00	8	\$ 1,200.00	\$	-	4	\$ 460.00		\$-	8 9	\$ 720.00
	- 90% Comment Resolution Meeting		\$-	\$	6 -	4	\$ 760.00	4	\$ 720.00	4	\$ 680.00		\$-	\$; -	4	\$ 460.00		\$ -	4 9	\$ 360.00
	- Agendas		\$-	\$	ş -		\$-	8	\$ 1,440.00		\$-		\$-	\$	-		\$-		\$-	\$	- 6
	- Meeting Handouts/Graphics		\$ -	\$	6 -		\$-	4	\$ 720.00	8	\$ 1,360.00		\$-	\$; -		\$-		\$-	9	5 -
	- Meeting Minutes		\$-	\$	6 -		\$-	80	\$ 14,400.00	8	\$ 1,360.00		\$-	\$; -		\$-		\$-	9	6 -
	Totals		\$ 1,880.	00 68 \$	\$ 14,280.00	358	\$ 68,020.00	1044	\$ 187,920.00	1030	\$ 175,100.00	660	\$ 99,000.00	270 \$	36,450.00	1750	\$ 201,250.00	724	\$ 72,400.00	718	64,620.00

	FELSBURG HOLT & ULLEVIG	Des	enior Bridge signer		Designer	Graphi Ma	gner V, c Design nager	Graphic Speci	ner III, : Design alist IV		igner I	Senior Adm			istrative Vendor	1	Totals	
	engineering paths to transportation solutions	Rate: Hours	\$150.00	Rate: Hours	\$130.00	Rate Hours	: \$120.00 Fee	Rate: Hours	\$100.00 Fee	Rate: Hours	\$75.00 Fee	Rate: Hours	\$95.00 Fee	Rate: Hours	\$80.00 Fee	Hours		Fee
10	Tasks Hydrology and Hydraulic Analysis & Design	riours	100	Tiours	100	Tiours	100	nours	100	Tiours	100	Tiours	100	Tiours	100	476	s	49,780.00
	Review Preliminary Hydraulic Investigation, Update as Required		\$ -	1	\$ -	8	\$ 960.00		\$ -		\$ -	8	\$ 760.00		\$ -	60	\$	6,260.00
	- 90%, Final Design, and Bid Drainage Design + Plans + Specificaitons		\$-		\$ -	40	\$ 4,800.00		\$ -		\$-		\$ -	8	\$ 640.00	304		31,600.00
	Quantity Calculations and Tabulations		\$ -		\$ -	4	\$ 480.00		\$ -		\$-		\$-	0	\$ -	24	\$	2,620.00
	- Final Drainage Report		\$ -		\$ -	4	\$ 480.00		\$-		\$-		\$-	8	\$ 640.00	56	\$	5,660.00
	Drainage Design Related Coordination Meetings (3), Exhibits + Minutes		\$ -		\$ -	8	\$ 960.00		\$-		\$-		\$-	0	\$ -	32	\$	3,640.00
11.	Water Quality Analysis & Design					-	• • • • • • •		•		•		•			450	s	49,650.00
	- 90%, Final Review & Bid Water Quality Design		\$ -		\$-	40	\$ 4,800.00		\$-		s -		\$-		\$ -	148	\$	15,880.00
	- 90%, Final Review & Bid Erosion and Sediment Control		\$ -		\$-	80	\$ 9,600.00		\$ -		\$ -		\$-		\$-	128	\$	14,680.00
	Quantity Calculations and Tabulations		\$ -		÷ \$-	24	\$ 2,880.00		\$ -		\$ -		÷ \$-		\$ -	68	\$	7,420.00
	Develop WQ Info for Drainage Report		\$ -		· \$ -		\$ -		\$ -		\$ -		\$ -		\$ -	40	\$	4,000.00
	- CASDP + Supporting Plans		\$-		\$-	4	\$ 480.00		\$-		\$ -		\$-		\$ -	14	\$	1,550.00
	- Other Permits as Required		\$-		\$-	4	\$ 480.00		\$-		\$ -		\$-		\$ -	20	\$	2,360.00
	- Water Quality Design Related Coordination Meetings (5) + Minutes		\$ -		\$-		\$ - \$ -		\$-		\$ -		\$-		\$ -	32	\$	3,760.00
12	Environmental Services		Ţ.		•		Ŷ		÷		÷		Ŷ		•	576	s	81,680.00
	- 90%, Final Review & Bid Design Environmental Plans + Specifications		\$ -		\$ -		\$ -		\$-		\$-		\$-	4	\$ 320.00	114	\$	13,260.00
	Quantity Calculations and Tabulations		\$ -		\$-		\$ -		\$-		\$-		\$-		\$ -	26	\$	2,900.00
	- EA Re-Evaluation		\$ -		\$ -		\$ -		\$-		\$ -		\$-	4	\$ 320.00	264		38,460.00
	Develop Materials Management Recommendation		\$ -		\$ -		\$ -		\$-		\$-		¢ \$-	-	\$ -	12	\$	1,900.00
	Coordinate Env. Mitigation with Project Design		\$ -		\$ - \$ -		\$ -		φ - \$ -		\$ -		\$ - \$ -		\$ -	44	۰ ب	5,440.00
	Phase 1 and 2 Environmental Site Assessments in Support of Task 2B						÷		•		•		•		Ŷ			
	(Assume for 12 Properties)		\$-		\$-		\$-		\$-		\$ -		\$-		\$ -	12	\$	2,160.00
	- Historic Mitigation (Design, Coord w/CDOT Historian)		\$-		\$-		\$-		\$-		\$-		\$-		\$ -	16	\$	2,520.00
	- Coordinate with Outside Env. Agencies		\$-		\$-		\$-		\$-		\$-		\$-		\$-	48	\$	8,200.00
	- Environmental Related Coordination Meetings + Minutes		\$-		\$-		\$-		\$-		\$-		\$-		\$ -	40	\$	6,840.00
14.	Construction Phasing & Detour Design															164	\$	18,380.00
	- 90%, Final Review & Bid Phasing and Detour Design + Plans		\$-		\$-		\$-		\$-	40	\$ 3,000.00		\$-		\$ -	124	\$	13,980.00
	- Quantity Calculations and Tabulations		\$-		\$-		\$-		\$-	16	\$ 1,200.00		\$-		\$ -	40	\$	4,400.00
15.	Construction Traffic Control															164	\$	18,380.00
	- 90% Final Review & Bid Construction Traffic Control Design		\$-		\$-		\$-		\$-	40	\$ 3,000.00		\$-		\$ -	124	\$	13,980.00
	- Quantity Calculations and Tabulations		\$-		\$-		\$-		\$-	16	\$ 1,200.00		\$-		\$ -	40	\$	4,400.00
16.	Public Outreach and Information															194	\$	29,030.00
	- Update Public Communication Contact List		\$-		\$-		\$-		\$-		\$-		\$-		\$ -	16	\$	2,960.00
	Prepare Content for Project Website	8	\$ 1,200.00		\$-		\$-	8	\$ 800.00		\$-		\$-		\$ -	40	\$	5,520.00
	- Prepare for and Attend Public Meeting		\$-	8	\$ 1,040.00		\$-	16	\$ 1,600.00		\$-		\$-		\$-	50	\$	7,430.00
	- Exhibits for Presentations to Public Works Management		\$-		\$-		\$-	16	\$ 1,600.00		\$-		\$-		\$ -	32	\$	4,400.00
	- Individual Meetings with Property and Business Owners		\$-		\$-		\$-		\$-		\$-		\$-		\$-	16	\$	2,800.00
	- Public Outreach Related Coordination Meetings, Exhibits + Minutes		\$-		\$-		\$-	16	\$ 1,600.00		\$-		\$-		\$ -	40	\$	5,920.00
17.	Multi Agency Involvement & Coordination															82	\$	20,905.00
	- Coordinate/Consensus Build with Outside Agencies		\$-		\$-		\$-		\$-		\$-		\$-		\$ -	25	\$	4,555.00
	- Coordinate with Project Stakeholders		\$-		\$-		\$-		\$-		\$-		\$-		\$ -	25	\$	4,555.00
	- Coordinate Design with Adjacent Developments/Projects		\$-		\$-		\$ -		\$-		\$-		\$-		\$-	32	\$	5,520.00
	- Multi-Agency Related Coordination Meetings, Exhibits + Minutes		\$-		\$-		\$ -	8	\$ 800.00		\$-		\$-		\$-	41	\$	6,275.00
18.	Design Progress / Coordination Meetings															499	\$	79,045.00
	- Project Management Meetings		\$-		\$-		\$ -		\$-		\$-		\$-		\$-	25	\$	4,555.00
	- Consultant Team Coordination Meetings		\$-		\$-		\$ -		\$-		\$-		\$-		\$-	242	\$	36,530.00
	- Miscellaneous Meetings		\$-		\$-		\$-		\$-		\$-		\$-		\$ -	60	\$	9,000.00
	- 90% Review Meeting		\$-		\$ -		\$-		\$-		\$-		\$-		\$ -	44	\$	6,700.00
	- 90% Comment Resolution Meeting		\$-		\$-		\$-		\$-		\$-		\$-		\$ -	20	\$	2,980.00
	- Agendas		\$-		\$-		\$-		\$-		\$-		\$-		\$-	8	\$	1,440.00
	- Meeting Handouts/Graphics		\$-		\$-		\$-		\$-		\$-		\$-		\$-	12	\$	2,080.00
	- Meeting Minutes		\$-		\$ -		\$-		\$ -		\$-		\$-		\$-	88	\$	15,760.00
	Totals	872	\$ 130,800.00	468	\$ 60,840.00	228	\$ 27,360.00	64	\$ 6,400.00	2130	\$ 159,750.00	34	\$ 3,230.00	85	\$ 6,800.00 -	10511	\$	1,316,100.00



engineering paths to transportation solutions

CCD Project Control No. PWT2016-003

Fee Worksheet - Reimbursables

Date: 6/30/2016	Address:	6300 S. Syracuse Way, Suite 600 Centennial, CO 80111
By: Jeanne Sharps	Phone:	303-721-1440

Reimbursables	Unit	 ost Per Unit	Number	Cost
Mileage	Miles	\$ 0.575	500	\$ 287.50
Parking	Each	*	40	\$ 600.00
Plotting Bond	SF	\$ 0.31	1,000	\$ 310.00
Copies Black & White	Each	\$ 0.12	10,000	\$ 1,200.00
Copies Color	Each	\$ 0.19	8,000	\$ 1,520.00
Foam Core Exhibit Mounting Board	SF	\$ 1.51	1000	\$ 1,510.00
Postage for Major Mailings	Each	*	1	\$ 500.00
Meeting Facility Rental	Each	*	1	\$ 500.00
Catering for Public Meetings	Each	*	1	\$ 300.00
Field Supplies for Materials Testing	Each	*	0	\$ -
Couriers	Each	*	20	\$ 500.00
Overnight Deliveries	Each	*	10	\$ 300.00
	•		Total	7,527.50

* At actual cost

Vendors	Cost
Miscellaneous (traffic counts)	\$ 5,000.00
Total	5,000.00

Additional Services	Cost
Miscellaneous as Requested By CCD Project Manager	\$ -
Total	-



engineering paths to transportation solutions

CCD Project Control No. PWT2016-003

Listing of Key Personnel - By Rate Category

Date: 7/11/2016

6300 S. Syracuse Way, Suite 600 Address: Centennial, CO 80111

By: David Kim

Phone: 303-721-1440

	Ш	П	I	Associate,	Senior	v *	IV *
		Principal		GIS Manager		nvironmenta Transp Plan	
Dean Bradley	Х						
Lyle DeVries		Х					
Patrick Stein			Х				
Kevin Maddoux			Х				
Jeanne Sharps				Х			
Evan Kirby				Х			
David Kim					Х		
Larry Lang					Х		
Jessica Myklebust					Х		
Cindy Otegui *						x *	
Karen Fox *						х*	
Sean Fahey							Х
Kendra Gabbert *							x *
Keith Hildalgo						_	Х

Personnel denoted * are currently being evaluated for promotions and may be re-classified during the execution of this contract.

CCD Project Control No. PWT2016-003 - I-25 Broadway Interchange Reconstruction - Broadway, Ohio, and Wedge Ramp Fee Worksheet - Design Workshop Labor

Date: 7/11/2016

Address: 1390 Lawrence Street Suite 100

By: Joshua Brooks	Phone:	303 623 518	6									
Tasks	Pri	ncipal	Projec	ct Manager		Landscape chitect	Projec	t Assistant	Vendor	Τα	otals	
	Rate	: \$225.00	Rate	e: \$150.00	Rate	: \$100.00	Rate	: \$80.00	F ee	llaura		
	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Fee	Hours		Fee
4. Streetscape and Landscape Design										964	\$	129,870.00
- Develop & Design Mitigation for Historic Trolley Tracks	8	\$ 1,800.00	20	\$ 3,000.00	42	\$ 4,200.00	2	\$ 160.00		70	\$	9,160.00
- Develop Aesthetic Treatments for Bridges and Retaining Walls	16	\$ 3,600.00	32	\$ 4,800.00	64	\$ 6,400.00	2	\$ 160.00		112	\$	14,960.00
- Support Task 11 WQ Analysis & Design w/regard to Landscape	8	\$ 1,800.00	28	\$ 4,200.00	48	\$ 4,800.00	2	\$ 160.00		84	\$	10,960.00
- Support Task 13 Electrical & Lighting Analysis to Determine Light Locations	8	\$ 1,800.00	16	\$ 2,400.00	36	\$ 3,600.00	2	\$ 160.00		60	\$	7,960.00
- 90%, Final Review and Bid Landscape Design + Plans + Specifications	16	\$ 3,600.00	48	\$ 7,200.00	72	\$ 7,200.00	2	\$ 160.00		136	\$	18,160.0
90%, Final Review and Bid Streetscape (Includes Historic Mitigation)Design + Plans + Specifications	24	\$ 5,400.00	72	\$ 10,800.00	144	\$ 14,400.00	2	\$ 160.00		240	\$	30,760.00
- 90%, Final Review and Bid Irrigation Design + Plans + Specifications	8	\$ 1,800.00	36	\$ 5,400.00	18	\$ 1,800.00	2	\$ 160.00		62	\$	9,160.00
- Quantity Calculations and Tabulations	8	\$ 1,800.00	18	\$ 2,700.00	54	\$ 5,400.00	4	\$ 320.00		80	\$	10,220.00
- Urban Design Related Coordination Meetings, Exhibits + Minutes	14	\$ 3,150.00	32	\$ 4,800.00	24	\$ 2,400.00	8	\$ 640.00		70	\$	10,990.00
- Urban Design Calculations Notebook	8	\$ 1,800.00	18	\$ 2,700.00	24	\$ 2,400.00	8	\$ 640.00		50	\$	7,540.00
18. Design Progress / Coordination Meetings										300	\$	41,250.0
- Project Management Meetings		\$-		\$-		\$-		\$-		0	\$	-
- Consultant Team Coordination Meetings (assume 18)	20	\$ 4,500.00	60	\$ 9,000.00	24	\$ 2,400.00	6	\$ 480.00		110	\$	16,380.0
- Miscellaneous Meetings (assume 5)	12	\$ 2,700.00	48	\$ 7,200.00	24	\$ 2,400.00	4	\$ 320.00		88	\$	12,620.0
- 90% Review Meeting		\$-	16	\$ 2,400.00		\$-	2	\$ 160.00		18	\$	2,560.0
- 90% Comment Resolution Meeting		\$-	16	\$ 2,400.00		\$-	2	\$ 160.00		18	\$	2,560.0
- Agendas		\$-		\$-		\$-		\$-		0	\$	-
- Meeting Handouts/Graphics	2	\$ 450.00	12	\$ 1,800.00	36	\$ 3,600.00	16	\$ 1,280.00		66	\$	7,130.0
- Meeting Minutes		\$-		\$-		\$-		\$-		0	\$	-
Totals	152	\$ 34,200.00	472	\$ 70,800.00	610	\$ 61,000.00	30	\$ 5,120.00	-	1264	\$	171,120.0

CCD Project Control No. PWT2016-003

Fee Worksheet - Design Workshop Reimbursables

Date: 5/31/	2016	Address:	1390 Lawrence street suite 100
By:	Joshua Brooks	Phone:	303 623 5186

Reimbursables	Unit		ost Per Unit	Number	Cost	
Mileage	Miles	\$	0.540	200	\$	108.00
Parking	Each	\$	10.00	0	\$	-
Plotting Bond	SF	\$	3.50	1,500	\$	5,250.00
Copies Black & White	Each	\$	0.25	2,500	\$	625.00
Copies Color	Each	\$	1.50	750	\$	1,125.00
Foam Core Exhibit Mounting Board	SF	\$	2.00	250	\$	500.00
Postage for Major Mailings	Each	\$	10.00	20	\$	200.00
Meeting Facility Rental	Each				\$	-
Catering for Public Meetings	Each				\$	-
Field Supplies for Materials Testing	Each				\$	-
Couriers	Each	\$	20.00	5	\$	100.00
Overnight Deliveries	Each				\$	-
		-		Total		7,908.00

* At actual cost

Vendors		Cost
Hydro systems KDI		\$ 9,000.00
	Total	9,000.00

Additional Services	Cost
Miscellaneous as Requested By CCD Project Manager	\$-
Total	-

Goodbee & Associates Inc.

CCD Project Control No. PWT2016-003 - I-25 Broadway Interchange Reconstruction - Broadway, Ohio, and Wedge Ramp

June 2, 2016

Task	Description of Activities /Assumptions	Role	Owner	Principal	PM III	PM II	PM I	Designer	Administrator	CAD I/Coordinator I	CAD I/Coordinat or I	Total Hrs.
		CCD Attachment 5	\$180.00/hr	\$175.00/hr	\$140.00/hr	\$125.00/hr	\$115/hr	\$100.00/hr	\$100.00/hr	\$75.00/hr	\$75/hr	
Task 1. Project	Project Meetings (coordinate with consultant team assume 6 meetings at FHU and 2 meetings at CCD)				24							24
Mgmt.	Monthly progress reports and invoicing. Assume 15 months.				15				15			30
	Meet one-on-one with wet and dry utility companies and jurisdictions to discuss project scope, utility conflicts, and relocation and mitigation strategies. (Assume 16 meetings at Goodbee offic over five days). GA to set up meetings, develop agendas, facilitate meetings, and develop meeting minutes. NV5 will participate in wet utility meetings. Obtain easements, license agreements, and relocation agreements/templates from utility companies as applicable and provide to CCD and CDOT's R1 Utility Engineer.	e			64 4			16 8				80 12
	Conduct/Attend utility coordination meetings with CCD and CDOT, separate from one-on-one utility meetings mentioned above. (Assume 4 meetings)				12			8				12
Task 6. Utility Coordination	After 90% plan review, conduct as needed coordination/comment resolution meetings with utility owners on wet and dry utility design (in conjunction with NV5). GA to set meetings, preparagendas, and develop meeting minutes for dry utilities. Assume 6 meetings at Goodbee office over 2 days.	e			28							28
	Prepare, coordinate and obtain utility clearance letters with the affected dry utility agencies. Assume six letters.				24							24
	Complete XCEL work order request form. Assume that XCEL coordination and documentation related to lighting will be completed by SSG MEP.				8							8
	Obtain estimates of probable cost for dry utility relocations that are a cost to the project.				8							8
	Submit the request for CDOT utility clearance. Prepare utility spec.				24							24
	Update existing utility base mapping in coordination with surveyor. Search UNCC database to identify all utility owner's in area (wet and dry) Contact owners and obtain key maps (assume a total of 16 utility companies - 11 dry and 5 wet) Hire private locator to verify new utilities since previous 30% plan effort Complete site visit to field verify key maps, locates, and utility survey file Coordinate with NV5 on field verification and applicable updates to the existing utility reference file to incorporate visible utility features and utility markings				18			16				34
	Identify potential utility conflicts between existing utilities and proposed improvements (final storm sewer, landscaping, lighting design, etc.) for coordination with design team and utility companies.				36							36
Task 7. Utility Design	Conduct supplemental utility potholing. Prepare preliminary pothole plan with input from client. Hire potholing contractor to pothole an assumed 25 locations over 4 days. Mark preliminary pothole locations for UNCC locates by potholing contractor and field meet. Field meet with contractor to mark final pothole locations. Coordinate with contractor during potholing. Field verify pothole logs with pothole markings. Coordinate with project survey or to have potholes surveyed. Update existing utility CAD file with pothole survey data. Prepare pothole location map and log plan sheet(s) with both 30% design and new potholes				30			12				42
	Prepare existing dry utility plan sheets showing existing utility facilities, exiting utility easements and conflicts with proposed construction. Assume 20 sheets in the dry utility plan set.		2		36	8		144				190
	Prepare a summary table of all utilities within the project limits, noting utility adjustments, relocations and/or replacement.		2		24							26
	Coordinate with other design disciplines in showing existing utilities in profiles and cross-sections. Check dry utility clearances and existing utility locations against other disciplines prior to 9 submittal.	0%			20							20
	Develop 90% plans and specifications for dry utilities. Assume 18 sheets in the dry utility plan set. Distribute 90% plans to utility owners. Attend 90% plan meeting.		4		16			36				56
	Develop tabulation of dry utility removals and adjustments.				2			8				10
	Develop final construction review plans and specifications for dry utilities. Re-evaluate utility conflicts resulting from changes made to 90% design.		4		16			12				32
	Develop bid plans and specifications for dry utilities.		2		4			8				14
TOTAL LABOR			14	0	413	8	0	260	15	0	0	710

Item		# of Units	Units	Unit Price	Subtotal
Mileage (assume 6 site visits (10 miles) and 7 meetings at CCD (3 miles) and 6 meetings at FHU (28 miles))		300	miles	\$0.54	\$162
Parking at CCD offices		7	EA	\$12	\$84
Private locator (estimate for two days, actual bids to be obtained after key maps are collected)		2	days	\$1,300	\$2,600
Potholing contractor (estimate for 25 potholes over 4 days actual bids to be obtained after pothole plan developed). Assume temporary cold patch.		4	days	\$2,000	\$8,000
Traffic Control during potholing (estimate for 4 days actual bids to be obtained after pothole plan developed)		4	days	\$1,500	\$6,000
Permitting (assume fee waived by CCD)			LS		\$0
Miscellaneous			at cost		\$0
TOTAL ODCs					\$16,846

TOTAL ESTIMATE

\$88,840 +

Assumptions:

1. Goodbee to coordinate and incorporate design of dry utilities for Phase 2 of the overall South Broadway Arizona to Exposition and I-25 Interchange Project. Specifically the project includes:

Goodbee to coordinate and incorporate design of dry utilitie
 a) Exposition from Lincoln to Broadway
 b) Broadway from Exposition to south of Ohio
 c) New SB I-25 On-Ramp (Wedge Ramp)
 d) RTD Parking Lot
 e) Wedge Ramp Water Quality Pond
 f) New traffic signals and ITS
 g) New roadway width, sidewalks, landscaping and lighting
 h) Upgraded stormsewer system and water distribution lines

Project duration 15 months.
 Project duration 15 months.
 Assume 2011 30% FIR plans from Arizona to Exposition are advanced for this phase of the project. Dry utility plan set assume a total of 20 sheets.
 Design wet utility relocations (water line and sanitary sewer) and wet utility plans and specifications to be completed by SSG MEP. XCEL coordination and documentation related to lighting will be completed by SSG MEP.

Assume for the provide AutoCAD LT which is compatible with AutoCAD 3D 2016. 3D dry utility design files are excluded.

8. Post design services are not included.

Total Cost CCD
contract rates
\$3,360
\$3,600
\$10,560
\$1,360
\$1,680
\$1,000
\$3,920
\$3,720
\$3,360
\$1,120
\$1,120 \$3,360
\$3,300
\$4,120
\$5,040
\$5,400
\$20,800
\$3,720
\$2,800
\$6,560
\$1,080
\$4,160
\$1,720
\$88,840

\$16,846 = \$105,686

H. C. Peck & Associates, Inc.

FELSBURG HOLT & ULLEVIG - I-25 BROADWAY INTERCHANGE RECONSTRUCTION BROADWAY, OHIO, AND WEDGE RAMP - PWT2016-003 SCOPE OF SERVICES - TIME & COST ESTIMATE

This Scope of Services - Time & Cost Estimate is predicated on the following assumptions as of 5/31/2016 - acquisition of fee land from 8 privatelyowned parcels with 8 commercial relocations. This includes parcels 135/160, 136/159, 137/156/158, 138/157, 139, 140, 153, and 155. If there is no agreement to acquire the property, the file will be turned over for condemnation. All the following activities will be performed in strict compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended, under the oversight of the Colorado Department of Transportation (CDOT), with direction from FHU and the City & County of Denver.

		Sr. Project Mgr Hrs	Sr. ROW Agent Hrs	R/W Agent III Hrs	R/W Agent II Hrs	R/W Agent I Hrs	Total \$
1	Create and maintain project scheduling information of all land activities to show progress of each parcel and to estimate segment completion against established milestone schedules.	8			32		\$3,653.28
2	Project Administration: attend project meetings and coordinate tasks with FHU, CCD staff, CDOT, project appraisers, and others involved and/or affected by the project. Provide assistance toward ROW clearance and reimbursement requests.	130	24		12	12	\$20,548.96
3	Coordinate the appraisal and review appraisal process, title services, and row plans & legal descriptions for all parcels. Review all documents in preparation for negotiation.	20	28		8		\$6,060.88
4	Have each parcel appraised using guidelines established by CDOT appraisal manual. (Cost + 10%.)						\$88,000.00

5	Prepare: offer letters and summaries of just compensation, final offer letters, conveyance documents, and any additional correspondence with property owners.	24	40	30	\$9,631.06
6	Conduct negotiations with each owner for the acquisition of the property rights to be acquired based on the approved fair market value. These negotiations will be carried out in accordance with all applicable Federal and State laws and City & County of Denver policies.	64	180		\$26,650.96
7	Order/coordinate warrant requests, obtain partial releases/subordinations and tax prorations; coordinate and attend real estate closings.		24	64	\$7,804.64
8	 Prepare Acquisition Stage Relocation Plan (7-B Study) of affected properties. 1. Interview relocatees to determine special relocation needs. 2. Search for availability of suitable replacement sites. 3. Determine if relocation can be accomplished in the time frame given. 	30	120	60 60	\$21,171.60
9	Send first negotiation contact letter, prepare inventories, obtain moving estimates, and determine benefits.	10	120	120	\$23,662.60
10	Present approved moving benefits to each business and offer relocation assistance.	10	120	120	\$23,662.60
11	Request payments, settle claims for moving costs	10	100	100	\$19,926.40
12	Fees to Commercial Movers for Cost Estimates (Cost + 10%)				\$12,000.00

Fol

13 File closeout - QA/QC	16	16		60	60	\$8,634.92
14 Estimate of Reimbursables						\$9,580.00
TOTAL TIME & COST ESTIMATE	<u>322</u>	<u>772</u>	<u>0</u>	<u>606</u>	<u>132</u>	<u>\$280,987.90</u>

*Litigation support and relocation appeals will be billed at \$175.00/hour and are not included in this cost estimate. (This rate does not include the project appraiser(s).)

** If project design changes so that additional parcels must be appraised and acquired, this cost estimate will be revised. Similarly, if the Acquisition Phase Relocation Plan determines there are more than the estimated 8 businesses, this cost estimate will be revised.

*** H. C. Peck & Associates, Inc. will not be responsible for any delays by other consulting firms, nor any delays caused by Federal, State, or County officials granting licenses, permits or other entitlements of use. Notwithstanding any other provisions hereof, this Right-of-Way Cost Estimate is conditional upon and subject to the aforementioned assumptions. In the event other matters are required to be performed outside those described in the Scope of Work per the contract, negotiations exceed the industry standards for a "good faith effort to negotiate", or there are changes in the pertinent information provided at the inception of the project, H. C. Peck & Associates, Inc. reserves the right to amend its Right-of-Way Cost Estimate.

**** Title insurance is not included in this Cost Estimate. If requested Peck can provide title insurance through Westcor for an additional charge.

RATE SCHEDULE

*	Principal	\$145.30
*	Senior Project/Quality Manager	\$124.54
*	Project Manager 1	\$114.16
*	Sr ROW Agent	\$103.78
*	Right of Way Agent III	\$93.41
*	Right of Way Agent II	\$83.03
*	Right of Way Agent I	\$72.64

Proposed Cost Estimate and the above rates do not include the following expenses reimbursable at

Reproduction Costs (third party) Recording, notary, license & permit fees Maps Mileage at the IRS rate	Delivery and express mail Parking and tolls Long distance Telephone and Fax
Above reimbursable expenses are estimated to be:	\$2,500.00
Title Commitments (10)	\$6,000.00
Title Commitment Updates (20)	\$3,800.00
Real Estate Closing Fee (8)	\$3,280.00
Total	\$9,580.00

The above cost estimate is based upon average negotiation times and average expenses for a typical project and is intended to be used to establish a working budget for this project. Actual hours performing the work based upon certified time sheets and actual expenses will be billed on a monthly basis as work progresses. Invoices are due 30 days from receipt.

E.V.P. By: eck & Associates, Inc.

Date:

G.Z.16

CCD Project Control No. PWT2016-003 Fee Worksheet - Hermsen Labor

	Tasks	O	wne	r	Totals					
	18585	Rate:	\$18	80.00	Hours		Foo			
		Hours		Fee	Hours	Fee				
4.	Streetscape and Landscape Design				30	\$	5,400.00			
	- Develop & Design Mitigation for Historic Trolley Tracks	30	\$	5,400.00	30	\$	5,400.00			
12.	Environmental Services				46	\$	8,280.00			
	- Prepare updated historic resources inventory for CDOT Reevaluation	30	\$	5,400.00	30	\$	5,400.00			
	- Coordinatewith CDOT and outside agencies	8	\$	1,440.00	8	\$	1,440.00			
	- Environmental Related Coordination Meetings + Minutes	8	\$	1,440.00	8	\$	1,440.00			
18.	Design Progress / Coordination Meetings				17	\$	3,060.00			
	- Consultant Team Coordination Meetings (assume 5)	12	\$	2,160	12	\$	2,160.00			
	- Miscellaneous Meetings (assume 2)	5	\$	900	5	\$	900.00			
	Totals	93	\$	16,740.00	93	\$	16,740.00			



CCD Project Control No. PWT2016-003 - I-25 Broadway Interchange Reconstruction - Broadway, Ohio, and Wedge Ramp Fee Worksheet - NV5 Labor

CADD Technician II Associate Manager Associate Engineer Survey Manager Associate Surveyor 1-Person Field Crew 2-Person Field Crew Proje Tasks Rate: \$174.83 Rate: \$161.70 Rate: \$124.43 Rate: \$88.20 Rate: \$144.90 Rate: \$98.70 Rate: \$125.48 Rate: \$156.45 R Hours Hours Fee Hours Fee Fee Fee Fee Fee Hours Fee Fee Hours Hours Hours Hours Hours 2. Survey - Obtain Right-of-Entry Permits (for both survey and geotech) 2 289.80 8 789.60 - Traffic Control for Survey 2 289.80 8 789.60 10 1,748.30 40 34 24 2,368.80 100 \$ 15,645.00 - Supplemental Field Survey (Misc., Utilities, Subsurface Investigation) 3,528.00 4,926.60 32 \$ 2,822.40 1,159.20 40 \$ 3,948.00 - Extract Additional Information from 30% Survey 8 - Update TOPO CAD File 10 1,748.30 40 3,528.00 12 1,738.80 80 \$ 12,516.00 -- Update DTM 10 1,748.30 20 1,764.00 12 1,738.80 40 6,258.00 Update Survey Control Diagram
 Survey retracted coordination meetings (assumed -) per monitrion so monitris at s
 hours each) 30 2,318.40 24 \$ 2,368.80 2,646.00 16 16 2,318.40 2A. Right-of-Way Docume 1,411.20 1,159.20 24 \$ 2,368.80 - Update Ownership Map & Tabulation 16 8 --874.15 \$ 7,056.00 \$ 7,896.00 - Prepare Legal Exhibits and Descriptions for ROW Acquisition (assumed 20) 80 40 5,796.00 80 5 -- Prepare Final ROW Plans (includes revisions based on ROWPR) opdate ROW Flans, Legal Exhibits and Descriptions (as needed of 10 1,748.30 60 \$ 5,292.00 40 \$ 5,796.00 80 \$ 7,896.00 -874.15 \$ 11,592.00 negotiations) 5 -80 \$ 7,056.00 80 200 \$ 19,740.00 - ROW Related Coordination Meetings (Assumed 2 at 4 hours each) 16 2,318.40 - Conduct/ Attend ROWPR 4 579.60 4 394.80 7. Utility Design - 90%, Final Review & Bid Wet Utility Design + Plans + Specifications 16 2,797.28 90 14,553.00 200 24,886.00 300 \$ 26,460.00 -- 90%, Final Review and Bid Wet Utility Quantities and Tabulations 16 2,797.28 16 2,587.20 100 12,443.00 \$ 3,528.00 40 - Utility Design Coordination Meetings + Minutes (assumed 5 at 4 hours) 20 3,234.00 20 2,488.60 10 18. Design Progress / Coordination Meetings - Project Management Meetings 18 - Consultant Team Coordination Meetings (assume 18) (4 Hours Each) 72 11,642 72 8,959 2,426 - Miscellaneous Meetings (assume 5) (3 Hours each) 15 15 1,866 15 1,323 15 - 90% Review Meeting (assumed 1 for 3 Hours) 485 373 265 3 3 3 - 90% Comment Resolution Meeting(assumed 1 for 3 Hours) 3 485 з 373 3 265 3 19 Additional Services - Additional Services (Expenses estimated at about 0.6% of total fee) Totals 82 \$ 14,336.06 219 \$ 35,412.30 413 \$ 51,389.59 759 \$ 66,943.80 290 \$ 42,021.00 492 \$ 48,560.40 0 \$ - 220 \$ 34,419.00 49

FOLLOWING FEE ESTIMATE FOR HDS SURVEY RESCAN NOT INCLUDED IN THE BASE FEE:

20	HDS Survey - Re-scan																430	\$ 50,146.00
	- HDS - Field survey Areas 1, 2, 3 & 4		\$-	\$-	\$-		\$-	8	\$ 1,159.20	46	\$ 4,540.20	\$-	120	\$ 18,774.00	\$-	\$-	174	\$ 24,473.40
	- HDS Processing - Update TOPO CAD File	10	\$ 1,748.30	\$-	\$-	120	\$ 10,584.00	12	\$ 1,738.80		\$-	\$-		\$	\$-	\$-	142	\$ 14,071.10
	- HDS processiing - Update DTM	10	\$ 1,748.30	\$-	\$-	92	\$ 8,114.40	12	\$ 1,738.80		\$-	\$-		\$-	\$-	\$-	114	\$ 11,601.50
	Updated Fee by taking HDS route																0	\$ 19,105.80
	- Task 2 - Survey Deduction Ecel Line 31, 32																	\$ (31,040.20)
	- Task 20 - HDS - Rescan																	\$ 50,146.00
	- New Total																	\$ 320,513.50

ject A	\ssi	stant	Expe	nses		Vendor	Т	otals	
Rate:	\$61	.95		\$1.00		_			_
rs		Fee	Hours	F	ee	Fee	Hours		Fee
							618	\$	84,286.90
	\$	-		\$	-		10	\$	1,079.40
	\$	-		\$	-	\$ 5,290.00	10	\$	6,369.40
	\$	-		\$	-		208	\$	28,216.70
	\$	-		\$	-		80	\$	7,929.60
	\$	-		\$	-		142	\$	19,531.10
	\$	-		\$	-		82	\$	11,509.10
	\$	-		\$	-		70	\$	7,333.20
	\$	-		\$			16	\$	2,318.40
							832	\$	89,848.60
	\$	-		\$			48	\$	4,939.20
	\$	-		\$	-		205	\$	21,622.15
	\$	-		\$	-		190	\$	20,732.30
	\$	-		\$	-		365	\$	39,262.15
	\$	-		\$	-		16	\$	2,318.40
	\$	-		\$	-		8	\$	974.40
							828	\$	96,393.86
	\$	-		\$	-		606	\$	68,696.28
	\$	-		\$	-		172	\$	21,355.48
	\$	619.50		\$	-		50	\$	6,342.10
							246	\$	30,878.34
	\$ \$	- 1,115		\$ \$	-		0 162	\$ \$	- 21,716.46
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	\$	3,035.55	U	\$	-	\$ 5,290.00	2024	¢	301,407.70



Fee Worksheet - Design Workshop Reimbursables

Date	: 7/11/2016	Address:	2650 18th St., Suite 202, Denver, CO 80211
By:	Brian W. W. Thomasen, P.E.	Phone:	303-220-6463

Reimbursables	Unit	ost Per Unit	Number	Cost
Mileage	Miles	\$ 0.510	500	\$ 255.00
Parking	Each	\$ 20.00	5	\$ 100.00
Plotting Bond	SF	\$ 2.00	450	\$ 900.00
Copies Black & White	Each	\$ 0.20	450	\$ 90.00
Copies Color	Each	\$ 1.10	200	\$ 220.00
Foam Core Exhibit Mounting Board	SF	\$ 2.00	45	\$ 90.00
Postage for Major Mailings	Each	\$ 5.00	5	\$ 25.00
Meeting Facility Rental	Each			\$ -
Catering for Public Meetings	Each			\$ -
Field Supplies for Survey	Each	\$ 100.00	1	\$ 100.00
Couriers	Each	\$ 25.00	2	\$ 50.00
Overnight Deliveries	Each	\$ 40.00	2	\$ 80.00
			Total	1,910.00

* At actual cost

Vendors	Cost
Total	-

Additional Services	Cost
Miscellaneous as Requested By CCD Project Manager	\$ -
Total	-

Pinyon Environmental, Inc

CCD Project Control No. PWT2016-003 - I-25 Broadway Interchange Reconstruction - Broadway. Ohio. and Wedge Ramp Fee Worksheet - Pinyon Labor Date: 6/2/2016 By: Brian Partington

	Tasks	Prin	cipal	Project	Manager	Project	Specialist	Project Engi	neer/ Scientist	Staff II Engi	neer/ Scientist	Dra	fting		ician/ Project istant	Cle	erical	Тс	otals
	TUONO		\$196.00 Fee	Rate Hours	: \$155.00 Fee	Rate Hours	: \$114.00 Fee	Rate Hours	: \$110.00 Fee	Rate Hours	: \$101.00 Fee	Rate: Hours	\$81.00 Fee	Rate: Hours	\$74.00 Fee	Rate Hours	: \$58.00 Fee	Hours	Fee
12.	12. Environmental Services		166	110013	100	Tiours	100	Tiours	1.66	Tiours	100	Tiours	1.66	Tiours	1.66	Tiours	100	436	\$ 51,013.00
	- EA Re-Evaluation (Hazmat Section Only)	1	\$ 196.00	1	\$ 155.00	16	\$ 1,824	16	\$ 1,760.00		\$-		\$-		\$-	2	\$ 116.00	36	\$ 4,051.00
	- Prepare Modified Environmental Site Assessment	2	\$ 392.00	6	\$ 930.00	60	\$ 6,840		\$-		\$-	4	\$ 324.00		\$-	2	\$ 116.00	74	\$ 8,602.00
	- Develop Materials Management Plan	1	\$ 196.00	4	\$ 620.00	50	\$ 5,700		\$-		\$-	8	\$ 648.00		\$-	2	\$ 116.00	65	\$ 7,280.00
	- Coordinate Env. Mitigation with Project Design		\$-	4	\$ 620.00	16	\$ 1,824		\$-		\$-		\$-		\$-	2	\$ 116.00	22	\$ 2,560.00
	Two Phase I Environmental Site Assessments (two property groupings, if applicable)	1	\$ 196.00	6	\$ 930.00	60	\$ 6,840		\$ -		\$ -	6	\$ 486.00		\$ -	2	\$ 116.00	75	\$ 8,568.00
	Subsurface Investigation (assumes up to 30 borings converted into monitoring wells total); includes field work and reporting.	2	\$ 392.00	24	\$ 3,720.00		\$-		\$-	80	\$ 8,080		\$-	8	\$ 592.00	2	\$ 116.00	116	\$ 12,900.00
	- Coordinate with Outside Env. Agencies		\$-	20	\$ 3,100.00		\$-		\$-		\$-		\$-		\$-	2	\$ 116.00	22	\$ 3,216.00
	- Environmental Related Coordination Meetings + Minutes (assume	es 4 meetings)	\$-	24	\$ 3,720.00		\$-		\$-		\$-		\$-		\$-	2	\$ 116.00	26	\$ 3,836.00
18.	Design Progress / Coordination Meetings																	36	\$ 5,192.00
	- Consultant Team Coordination Meetings (assume 8@3 hrs ea.)		\$-	24	\$ 3,720		\$-		\$-		\$-		\$-		\$-	2	\$ 116.00	26	\$ 3,836.00
	- Miscellaneous Meetings (assume 2)		\$-	8	\$ 1,240		\$-		\$-		\$-		\$-		\$-	2	\$ 116.00	10	\$ 1,356.00
	Totals	7	\$ 1,372.00	121	\$ 18,755.00	202	\$ 23,028.00	16	\$ 1,760.00	80	\$ 8,080.00	18	\$ 1,458.00	8	\$ 592.00	20	\$ 1,160.00	472	\$ 56,205.00



Fee Worksheet - Reimbursables

Date	: 6/2/2016	Address:	9100 West Jewell Avenue
			Lakewood CO 80232
By:	Brian Partington	Phone:	303-980-5200

Reimbursables	Unit	C	ost Per Unit	Number	Cost
Field Visit	Each	\$	40.00	4	\$ 160.00
Soil Boring	Each	\$	105.00	30	\$ 3,150.00
Well Sampling	Each	\$	67.00	30	\$ 2,010.00
		-		Total	\$ 5,320.00

* At actual cost

Vendors	Cost
Drilling (Vista GeoScience, estimate)	\$ 20,000.00
Agency Database (GeoSearch)	\$ 1,250.00
Disposal of Investigation Derived Waste (Estimate)	\$ 2,000.00
Traffic Control (Estimate)	\$ 5,000.00
Laboratory Analysis (Origins, Inc., estimate)	\$ 25,000.00
Total	\$ 53,250.00

Note: Vendor costs are estimated, and are contingent on the results of the initial studies

Additional Services	Cos	st
Miscellaneous as Requested By CCD Project Manager	\$	-
Total		-

CCD Project Control No. PWT2016-003 - I-25 Broadway Interchange Reconstruction - Broadway, Ohio, and Wedge Ramp

Fee Worksheet - SSG MEP, Inc. Labor

Date: 6/5/2016

By: Sandra Scanlon

	Tasks	Priı	ncipal	PM/	Sr Eng	ineer	Staff	Engiı	neer	De	signer	r		D/BIM rafter			sine anag		т	otals	
	I dSKS	Rate:	\$165.00	Ra	te: \$13	35.00	Rate	: \$11	0.00	Rate	: \$95.0	00	Rate	: \$75.0)0	Rate:	: \$95	5.00	Hours		Fee
		Hours	Fee	Hours		Fee	Hours		Fee	Hours		Fee	Hours		Fee	Hours		Fee	Hours		ree
1.	Project Management																		52	\$	6,900.00
	- Assemble & Provide Preliminary Design Set of Plans for Current Project	4	\$ 660.0	0 0	\$	-	0	\$	-	0	\$	-	0	\$	-	24	\$	2,280.00	28	\$	2,940.00
	- Assemble 90%, Final Review & Bid Plans & Specification Packages	4	\$ 660.0	0	\$	-		\$	-		\$	-		\$	-		\$	-	4	\$	660.00
	- 90%, Final Review & Bid Plans and Specification Package QA	8	\$ 1,320.0	0	\$	-		\$	-		\$	-		\$	-		\$	-	8	\$	1,320.00
	- 90%, Final Reivew and Bid Cost Estimates	4	\$ 660.0	0	\$	-		\$	-		\$	-		\$	-		\$	-	4	\$	660.00
	- 90% and Final Review Response to Plan and Spec Comments	4	\$ 660.0	0	\$	-		\$	-		\$	-		\$	-		\$	-	4	\$	660.00
	- Prepare Final Project Submittal for CCD	4	\$ 660.0	0	\$	-		\$	-		\$	-		\$	-		\$	-	4	\$	660.00
13.	Electrical and Lighting Analysis & Design																		552	\$	60,430.00
	- Coordinate with Utility Companies	24	\$ 3,96	0	\$	-	40	\$	4,400		\$	-		\$	-		\$	-	64	\$	8,360.00
	- Coordinate Electrical Design with Traffic Signal Design	24	\$ 3,96	0	\$	-	60	\$	6,600		\$	-	16	\$	1,200		\$	-	100	\$	11,760.00
	- 90%, Final Review & Bid Lighting Design + Plans + Specifications	24	\$ 3,96	0	\$	-	180	\$	19,800		\$	-	100	\$	7,500		\$	-	304	\$	31,260.00
	- Quantity Calculations and Tabulations	16	\$ 2,64	0	\$	-	16	\$	1,760		\$	-	40	\$	3,000		\$	-	72	\$	7,400.00
	- Lighting Related Coordination Meetings, Exhibits + Minutes	6	\$ 99	0	\$	-	6	\$	660		\$	-		\$	-		\$	-	12	\$	1,650.00
18.	Design Progress / Coordination Meetings																		77	\$	8,470.00
	- Consultant Team Coordination Meetings (assume 18)		\$-		\$	-	54	\$	5,940		\$	-		\$	-		\$	-	54	\$	5,940.00
	- Miscellaneous Meetings (assume 5)		\$-		\$	-	15	\$	1,650		\$	-		\$	-		\$	-	15	\$	1,650.00
	- 90% Review Meeting		\$-		\$	-	4	\$	440		\$	-		\$	-		\$	-	4	\$	440.00
	- 90% Comment Resolution Meeting		\$-		\$	-	4	\$	440		\$	-		\$	-		\$	-	4	\$	440.00
	Totals	122	\$ 20,130.0	0 0	\$	-	379	\$	41,690.00	0	\$	-	156	\$ 1	1,700.00	24	\$	2,280.00	681	\$	75,800.00

CCD Project Control No. PWT2016-003

Fee Worksheet - SSG MEP Reimbursables

Reimbursables	Unit		ost Per Unit	Number	Cost		
Mileage	Miles	\$	0.540	600	\$	324.00	
Parking	Each	\$	16.00	8	\$	128.00	
Plotting Bond	SF	\$	0.24	216	\$	51.84	
Copies Black & White	Each	\$	0.18	50	\$	9.00	
Copies Color	Each				\$	-	
Foam Core Exhibit Mounting Board	SF				\$	-	
Postage for Major Mailings	Each				\$	-	
Meeting Facility Rental	Each				\$	-	
Catering for Public Meetings	Each				\$	-	
Field Supplies for Materials Testing	Each				\$	-	
Couriers	Each	\$	25.00	1	\$	25.00	
Overnight Deliveries	Each				\$	-	
		-		Total		537.84	

* At actual cost

CCD Project Control No. PWT2016-003 - I-25 Broadway Interchange Reconstruction - Broadway, Ohio, and Wedge Ramp Fee Worksheet - Yeh and Associates, Inc. Labor

Date: 6/29/2016	Address:	2000 Clay Street, Ste. 200, Denver, CO 80211	
By: Robert F. LaForce	Phone:	303-781-9590	
	1		-

Tasks	Pri	ncipal	Senior Pro	ject Manager		enior r/Geologist	Graphic	Specialist		oject /Geologist		Staff er/Geologist	Laborator	y Supervisor	Laboratory	y Technician		l Engineering inician	Field Eng Techn		Тс	otals
Tasks	Rate:	: \$180.00	Rate:	\$160.00	Rate:	\$115.00	Rate:	\$105.00	Rate:	\$100.00	Rate	: \$85.00	Rate:	\$85.00	Rate:	\$62.00	Rate:	\$85.00	Rate:	\$68.00	Hours	Fee
	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	ree
Geotechnical Investigation & Pavement Design																					723	\$ 64,279
- Obtain Street Occupancy Permits		\$-		\$-		\$-		\$-		\$-	20	\$ 1,700.00		\$-		\$-		\$-		\$-	20	\$ 1,700
- Traffic Control for Geotech Investigation		\$-		\$-		\$-		\$-		\$-	4	\$ 340.00		\$-		\$-		\$-		\$-	4	\$ 340
Environmenal Subsurface Investigation (Test Holes + Laboratory Tests) [Assumes 8 test holes + soil sampling + groundwater sampling + testing]		\$-		\$-		\$-		\$-	16	\$ 1,600.00	35	\$ 2,975.00		\$-		\$-		\$-		\$-	51	\$ 4,575
Structure Foundation & Pavment Design Subsurface Investigation - (Test Holes + Laboratory Tests)		s .	4	\$ 640.00		s .		s -	16	\$ 1,600.00	180	\$ 15,300.00	28	\$ 2,380.00	192	\$ 11,904.00		٩ -		٩	420	\$ 31,824
Coordinate Survey of Test Holes		\$ -		\$ -		\$ -		\$- \$-	10	\$ -	8	\$ 680.00	20	\$ -	102	\$ -		\$ -		\$ -	8	\$ 680
- Final Structural Foundation Recommendation	1	\$ 180.00	16	\$ 2,560.00		\$ -		\$-	16	\$ 1,600.00	24	\$ 2,040.00		\$ -		\$ -		\$-		\$ -	57	\$ 6,380
- Final Pavement Design		\$-	12	\$ 1,920.00	16	\$ 1,840.00		\$-	8	\$ 800.00	8	\$ 680.00		\$-		\$-		\$-		\$-	44	\$ 5,24
- Final Geotech Report	1	\$ 180.00	8	\$ 1,280.00	16	\$ 1,840.00		\$-	12	\$ 1,200.00	24	\$ 2,040.00		\$-		\$-		\$		\$-	61	\$ 6,54
- Prepare Test Hole CAD Reference File		\$-		\$-	8	\$ 920.00	12	\$ 1,260.00		\$-	4	\$ 340.00		\$-		\$-		\$-		\$-	24	\$ 2,52
- Prepare Bridge and Wall Geotechnical Information Plan Sheets		\$-	6	\$ 960.00		\$-	12	\$ 1,260.00		\$-	4	\$ 340.00		\$-		\$-		\$-		\$-	22	\$ 2,56
- Assist with Materials Related Specifications		\$-	4	\$ 640.00		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-	4	\$ 64
- Geotechnical/Pavement Design Related Coordination Meetings		\$-	8	\$ 1,280.00		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$ -	8	\$ 1,28
Design Progress / Coordination Meetings																					54	\$ 7,68
- Project Management Meetings		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-	0	\$
- Consultant Team Coordination Meetings (assume 8)		\$-	24	\$ 3,840		\$-		\$-	8	\$ 800		\$-		\$-		\$-		\$-		\$-	32	\$ 4,64
- Miscellaneous Meetings (assume 2)		\$-	14	\$ 2,240		\$-		\$-	8	\$ 800		\$-		\$-		\$-		\$-		\$-	22	\$ 3,04
- 90% Review Meeting		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-	0	\$
- 90% Comment Resolution Meeting		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-	0	\$
- Agendas		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-	0	\$
- Meeting Handouts/Graphics		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-	0	\$
- Meeting Minutes		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-		\$-	0	\$
Totals	2	\$ 360.00	96	\$ 15,360.00	40	\$ 4,600.00	24	\$ 2,520.00	84	\$ 8,400.00	311	\$ 26,435.00	28	\$ 2,380.00	192	\$ 11,904.00	0	\$-	0	\$ -	777	\$ 71,95

CCD Project Control No. PWT2016-003

Fee Worksheet - Yeh & Associates Reimbursables

Reimbursables	Unit	Cost Per Unit	Number	C	Cost
Mileage	Miles			\$	-
Parking	Each			\$	-
Plotting Bond	SF			\$	-
Copies Black & White	Each			\$	-
Copies Color	Each			\$	-
Foam Core Exhibit Mounting Board	SF			\$	-
Postage for Major Mailings	Each			\$	-
Meeting Facility Rental	Each			\$	-
Catering for Public Meetings	Each			\$	-
Field Supplies for Materials Testing	Each			\$	-
Couriers	Each			\$	-
Overnight Deliveries	Each			\$	-
			Total		-

* At actual cost

Vendors		Cost
Drilling	\$	54,180.00
Traffic Control	\$	62,590.00
Tota	d 1	16,770.00

Additional Services	Cost
Miscellaneous as Requested By CCD Project Manager	\$-
Total	-

Attachment 5 CONSULTANT TEAM MEMBERS

PRIME CONSULTANT: Felsburg Holt & Ullevia

List <u>ALL</u> potential 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.

Title/Classification	Responsibilities	Rate/Hr.
Principal III	Execute contracts, project team performance oversight, Sr. advisor task support	\$235
Principal II	QA/QC, Technical/Task Leadership (civil design/multimodal/traffic/enviro/CM)	\$210
Principal I	QA/QC, Technical/Task Leadership (civil design/multimodal/traffic/enviro/CM)	\$190
Associate	Project Management, Task Lead (civil, multimodal/traffic/enviro/CM)	\$180
Sr. Engineer/Environmental Scien Planner/Transp. Planner/GIS	^{tist-} Public Involvement, Civil/Environmental/Traffic Engineering-Planning/CM	\$170
Engineer/Environmental Scientist- Planner/Transp. Planner/GIS V	Public Involvement, Civil/Environmental/Traffic Engineering-Planning/CM	\$150
Engineer/Environmental Scientist Planner/Transp. Planner/GIS IV	Public Involvement, Civil/Environmental/Traffic Engineering-Planning/CM	\$135
Engineer/Environmental Scientist- Planner/Transp. Planner/GIS III	Public Involvement, Civil/Environmental/Traffic Engineering-Planning/CM	\$115
Engineer/Environmental Scientist- Planner/Transp. Planner/GIS II	Public Involvement, Civil/Environmental/Traffic Engineering-Planning/CM	\$100
Engineer/Environmental Scientist Planner/Transp. Planner/GIS I	Public Involvement, Civil/Environmental/Traffic Engineering-Planning/CM	\$90
GIS Manager	QA/QC, GIS Task Leadership	\$180
Sr. Bridge/Lead Designer	Bridge/Civil design, plan production lead	\$150
Sr. Designer	Civil design, plan production	\$130
Designer V	Civil design, plan production	\$120
Designer IV	Civil design, plan production	\$115
Designer III	Civil design, plan production support	\$100
Designer II	Civil design, plan production support	\$85

Multiplier, which when multiplied by the direct labor rate yields the above hourly billing rate: 2.6116

Attachment 5 CONSULTANT TEAM MEMBERS

PRIME CONSULTANT: Felsburg Holt & Ullevia

List <u>ALL</u> potential 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.

Title/Classification	Responsibilities	Rate/Hr.
Designer I	Civil design, plan production support	\$75
Environmental Technician II	Environmental field work/documentation	\$85
Graphic Design Manager	Graphic Design, Project Illustrations/visualization	\$120
Graphic Design Specialist IV	Graphic Design, Project Illustrations/visualization	\$100
Graphic Design Specialist II	Graphic Design, Project Illustrations/visualization	\$90
Sr. Administrative Asst.	Technical Editing, Word Processing, Clerical Support	\$95
Administrative	Clerical Support	\$80
		2 6116

Multiplier, which when multiplied by the direct labor rate yields the above hourly billing rate: 2.6116

SUB CONSULTANT FORM

SUB-CONSULTANT TEAM MEMBERS

SUB-CONSULTANT: DESIGNWORKSHOP

List <u>ALL</u> potential 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.

Responsibilities	Rate/Hr.
Principal	\$175-250
Project Manager	\$110-175
PLA	\$100
Graphic Designer	\$100
Project Assistan	\$80
	Principal Project Manager PLA Graphic Designer

Multiplier, which when multiplied by the direct labor rate yields the above hourly billing rate: 3.2

SUB-CONSULTANT: GOODBEE & ASSOCIATES, INC.

List <u>ALL</u> potential 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.

Title/Classification	Responsibilities	Rate/Hr.
Owner	Direction of all aspects of the firm's operations	\$180
Principal	Assures technical, staff, & scheduling requirements	\$175
Project Manager III	Leads and reviews technical work	\$140
Project Manager II	Leads and reviews technical work	\$125
Project Manager I	Leads and reviews technical work	\$115
Designer	Completes technical work under direction of PM	\$100
Administrator	Bookkeeping and general administration	\$100
CAD I/Coordinator I	Completes technical work under direction of PM	\$75

Multiplier, which when multiplied by the direct labor rate yields the above hourly billing rate: 3.0

SUB-CONSULTANT:

List <u>ALL</u> potential 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.

Title/Classification	Responsibilities	Rate/Hr.

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

Firm Name: H.C. Peck & Associates, Inc.

List <u>ALL</u> potential firm personnel title/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	Overall project management; acquisition of property rights	145.30			
Sr. Project Mgr.	Day to day project management; acquisition	124.54			
Project Mgr.	Day to day project management; acquisition				
Sr. ROW Agent	Acquisition	103.78			
ROW Agent III	Acquisition	93.41			
ROW Agent II	Acquistion; acquisition support	83.03			
ROW Agent I	Acquisition; acquisition support	72.64			
Support Staff	Acquisition support	62.29			
Title Staff	Title work and curative; closings	115.2			
<u></u>					

Multiplier, which when multiplied by the direct labor rate yields the above hourly biling rate: N/A .

Unless expressly authorized by the City as part of any approved project proposal or specified in the contract, the City will not compensate the Consultant for expenses such as postage, travel, mileage, telephone, reproduction and messenger service costs incurred in connection with Work performed under this Agreement. 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 part of each on-call task order as a not-to-exceed reproducible expense and will be reimbursed at actual cost.

SUB-CONSULTANT: <u>Hermsen</u> <u>Consultants</u> List <u>ALL</u> potential 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.

Title/Classification	Responsibilities	Rate/Hr.
President / Owner	Conduct assessment, Prepare deliverables.	\$180
		n
	r	
Maldallan 1111	It is list by the direct labor rate wild the sheep last 1 1 111	

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

Unless expressly authorized by the City, the City will not compensate the Consultant for expenses such as postage, travel, mileage, telephone, reproduction and messenger service costs incurred in connection with Work performed under this Agreement. 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 reimbursed at actual cost.

Attachment Five

SUB_CONSULTANT: SSG MEP, Inc.

List <u>ALL</u> 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	As Principal in Charge, is responsible for establishing overall goals and	\$165
	objectives and coordinating implementation plans. Is responsible for	
	overall project goals and technical design.	
Project Manager	Responsible for administering all phases of project through	\$135
	construction. Has primary responsibility for budgeting, scheduling,	
	planning, design, specification, and working drawings on a given	
	project with authority to direct, control, and monitor all activities.	
	Normally requires registration, but breadth of individual experience	
	may replace registration.	
Senior Engineer	Fully competent engineer in all conventional aspects of subject matter	\$135
-	or functional area of assignments; plans and conducts work requiring	
	judgment in independent evaluation, selection, and substantial	
	adaptation/modification of standard techniques, procedures, and	
	criteria. Devises new solutions to problems encountered. Independently	
	performs most assignments with instruction only regarding general	
	expected results. Receives technical guidance for unusual or complex	
	problems and supervisory approval of proposed project plans.	
	Generally requires 2 years Engineer 3 or related experience.	
Staff Engineer	Junior-level professional requiring Bachelor's Degree in Engineering,	\$110
	or the equivalent (to a degree) in appropriate education and experience.	
	Works under close supervision; receives specific and detailed	
	instructions for required tasks and results expected. Performs a variety	
	of routine tasks, which provide experience and familiarity with	
	engineering staff, methods, practices, and programs.	
Designer	Has diversified design experience and ability to perform work of	\$95
-	greater complexity with minimal supervision. Normally has 10 years of	
	drafting and design experience.	
CAD./BIM Drafter	Junior-level individual with some specialized technology relating to	\$75
	CAD or engineering such as Associates Degree or CAD Drafter 1	
	experience. Copies detailed plans and drawings.	
Business Manager	Responsible for handling office administrative support activities (i.e.,	\$95
-	human resources, purchasing, facilities maintenance, leasing, clerical	
	support, etc.). Also serves as Accounting Manager in coordinating all	
	accounting functions.	
Clerical	Primary responsibility is answering phones, filing, incidental typing	\$55
	and/or routine clerical work as assigned.	1

Multiplier, which when multiplied by the direct labor rate yields the above hourly billing rate: ____2.3143_____

SUB-CONSULTANT: Pinyon Environmental, Inc.

List <u>ALL</u> potential 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). Provided additional sheets as necessary.

Title/Classification	Responsibilities	Rate/Hr.		
Expert Witness	Expert Witness Preparation and Deposition	\$215		
Principal Engineer/ Scientist	QA/QC by Principal or Senior Technical Reviewer, Meetings with Regulatory and Oversight Agencies	\$196		
Senior Engineer/ Scientist	Remediation, Engineering Design, Investigation Design, Development of Work Plans, Database Design, Training, Industrial Hygiene	\$174		
Project Manager	Project Management, Coordinates Multi-			
Project Specialist	Reports to Regulatory and Oversight Agencies, Preparation of Permits, GIS Library Development			
Project Engineer/ Scientist	Phase I ESA Site Visits/Reporting, Interpretation of Data, Collection of Non-Field Data, Development of Logs and Maps, Pilot Testing, Biological and Wetland Field Mapping, Preparation of Reports to Clients, GIS Data Collection/Processing/Presentation, Asbestos	\$110		
Staff II Engineer/ Scientist	Soil Logging, Monitoring Well Installation Oversight, Water-Level Surveying, Slug Tests, Field Oversight, Lead Driller, Miscellaneous Field Services, Asbestos Building Inspector	\$101		
Staff I Technician	f I Technician Groundwater Sampling, Sampling During UST Removals, Surveyor's Assistant			
Drafting	g Graphics – AutoCad or Microstation Drafting			
Field Technician/ Project Assistant	Maintain Field Equipment, Data Management	\$74		
Clerical	Word Processing, Clerical	\$58		

Multiplier, which when multiplied by the direct labor rate yields the above hourly billing rate: 2.667

Firm Name: Yeh and Associates

List <u>ALL</u> 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.

Title/Classification	Responsibilities	Rate/Hr.
Principal	Ensure project receives all needed support. Review schedule, budget.	\$180
Senior Project Manager	Responsible for day to day management of project.	\$160
Project Manager	Responsible for day to day management of limited scope projects.	\$135
Sr. Engineer/Geologist	Performs engineering/geological investigations.	\$115
Graphic Specialist	Prepares materials for public meetings, proposals, and deliverables.	\$105
Project Engineer/Geologist	Performs investigations, prepares reports.	\$100
Staff Engineer/Geologist	Performs calculations, sketches, checks drawings supplied by others.	\$85
Senior Field Inspector	Inspects construction, submits daily field reports.	\$105
Field Inspector	Provide construction inspection services, write field reports.	\$90
Senior Field Eng. Technician	Conducts tests on soils, concrete, asphalt. Is fully certified.	\$85
Field Eng. Technician	Samples and tests asphalt, concrete, aggregate, and soils.	\$68
Drafter	Prepares drawings and maps.	\$70
Laboratory Technician	Conducts tests on soils, concrete, asphalt.	\$62
Laboratory Supervisor	Organizes and oversees all lab activities for materials testing.	\$85

Multiplier, which when multiplied by the direct labor rate yields the above hourly billing rates: 2.6692

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Exhibit C



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

		_1\			DILI				7/28/2	016
C B	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.									
IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).										
	DUCER				CONTA NAME:	СТ				
USI	Colorado, LLC Prof Liab					o, Ext): 800-87	73-8500	FAX	303 8	31.5295
	. Box 7050				E-MAIL		3-0300	(A/C, No):	505.0	51.5235
Eng	lewood CO 80155				ADDRE					
						INSURER(S) AFFORDING COVERAGE				NAIC #
						RA: Traveler		· · · ·		25658
		FELS	BHC	DL				nce Company		37885
	sburg Holt & Ullevig, Inc.				INSURE	R c :Phoenix	Insurance	Company		25623
	0 S. Syracuse Way, #600 glewood CO 80111				INSURE	_{R D :} Farming	ton Casualt	y Company		41483
LI					INSURE	RE: Charter	Oak Fire Ins	surance Company		25615
					INSURE	RF:				
T IN C	COVERAGES CERTIFICATE NUMBER: 759733888 REVISION NUMBER: THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.									
LTR	I YPE OF INSURANCE	INSD		POLICY NUMBER		POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s	
С	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR	Y	Y	6802278L711		6/21/2016	6/21/2017	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence)	\$1,000 \$1,000	,
								MED EXP (Any one person)	\$10,00	0
								PERSONAL & ADV INJURY	\$1,000	,000
	GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGATE	\$2,000	,000
	POLICY X PRO- JECT LOC							PRODUCTS - COMP/OP AGG	\$2,000	.000
	OTHER:								\$,
Е	AUTOMOBILE LIABILITY	Y	Y	BA3008L260		6/21/2016	6/21/2017	COMBINED SINGLE LIMIT (Ea accident)	\$1,000	000
	X ANY AUTO							BODILY INJURY (Per person)	\$,000
								BODILY INJURY (Per accident)	\$	
	V NON-OWNED							PROPERTY DAMAGE	\$	
	AUTOS							(Per accident)	\$	
A		Y	Y	CUP6540Y22A		6/21/2016	6/21/2017		•	
A	X UMBRELLA LIAB X OCCUR	ľ	T	CUP0340122A		0/21/2010	0/21/2017	EACH OCCURRENCE	\$5,000	,
	EXCESS LIAB CLAIMS-MADE	-						AGGREGATE	\$5,000	,000
_	DED X RETENTION \$10,000							V PER OTH-	\$	
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N		Y	UB4281T356		6/21/2016	6/21/2017	X PER OTH- STATUTE ER		
	ANY PROPRIETOR/PARTNER/EXECUTIVE	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
В	Professional Liability incl Pollution Claims Made		Y	DPR9806128		6/21/2016	6/21/2017	Per Claim \$2,000,000 Annual Aggregate \$5,000,000 Deductible \$100,000		000
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) As required by written contract or written agreement, the following provisions apply subject to the policy terms, conditions, limitations and exclusions: The Certificate Holder and owner are included as Automatic Additional Insured's for ongoing and completed operations under General Liability; Designated Insured under Automobile Liability; and Additional Insured's under Umbrella / Excess Liability but only with respect to liability arising out of the Named Insured work performed on behalf of the certificate holder and owner. The General Liability, Automobile Liability, Umbrella/Excess insurance applies on a primary and non-contributory basis. A Blanket Waiver of Subrogation applies for General Liability, Automobile Liability, Umbrella/Excess Liability and Workers Compensation. The Umbrella / Excess Liability policy See Attached										
CE	RTIFICATE HOLDER				CANC	ELLATION				
City and County of Denver Attn: Mike Harmer, Senior Engineer 201 W Colfax Ave Dept 506				SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.						
	Denver CO 80202							0		I

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AGENCY CUSTOMER ID: FELSBHOL

LOC #: _____



ADDITIONAL REMARKS SCHEDULE

Page 1 of 1

AGENCY USI Colorado, LLC Prof Liab	NAMED INSURED Felsburg Holt & Ullevig, Inc. 6300 S. Syracuse Way, #600 Englewood CO 80111	
POLICY NUMBER		
NAIC COD		
		EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE

provides excess coverage over the General Liability, Automobile Liability and Employers Liability.

Please note that Additional Insured status does not apply to Professional Liability or Workers' Compensation. Project: Broadway Wedge Ramp Project As required by written contract, the City and County of Denver, its Elected and Appointed Officials, Employees and Volunteers are included as Additional Insured