

## THIRD AMENDATORY AGREEMENT

**THIS THIRD AMENDATORY AGREEMENT** is made between the **CITY AND COUNTY OF DENVER**, a municipal corporation of the State of Colorado (the “City”) and **HDR ENGINEERING, INC.** (the “Design Consultant”), a Colorado corporation whose address is 1670 Broadway, Suite 3400, Denver, Colorado 80202, jointly (“the Parties”).

### RECITALS:

**A.** The Parties entered into Agreement dated February 7, 2018, a First Amendatory Agreement dated May 14, 2019, and a Second Amendatory Agreement dated January 13, 2020 (collectively, the “Agreement”) for sidewalk upgrades along the north side of Iowa Avenue (Santa Fe to Acoma Street), the west side of Santa Fe Drive (Florida Avenue to Jewell Ave) and at the intersection of the two streets.

**B.** The Parties wish to amend the Agreement to modify the scope of work, increase the maximum contract amount, extend the term, and update the Examination of Record provision.

**NOW THEREFORE**, in consideration of the premises and the Parties’ mutual covenants and obligations, the Parties agree as follows:

**1.** All references to “...Exhibit A, A-1 and A-2...” in the Agreement shall be amended to read: “...Exhibit A, A-1, A-2 and A-3...” as applicable. The scope of work marked as **Exhibit A-3** attached to this Third Amendatory Agreement is hereby incorporated by reference.

**2.** Section 3.05 of the Agreement entitled “**Maximum Contract Amount**” is amended to read as follows:

**“3.05 Maximum Contract Amount:**

(a) Notwithstanding any other provision of the Agreement, the City’s maximum payment obligation will not exceed **NINE HUNDRED THIRTY-FIVE THOUSAND FOUR HUNDRED SEVENTY DOLLARS AND TWO CENTS (\$935,470.02)** (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.”

**3.** Section 4.01 of the Agreement entitled **Term** is amended to read as follows:

**“4.01. Term:**

The Agreement will commence on February 7, 2018 and expire on December 31, 2022, unless sooner terminated.”

4. Section 5.04 of the Agreement entitled **Examination of Records** is amended to read as follows:

**“5.04. EXAMINATION OF RECORDS:**

Examination of Records and Audits: Any authorized agent of the City, including the City Auditor or his or her representative, has the right to access, and the right to examine, copy and retain copies, at City's election in paper or electronic form, any pertinent books, documents, papers and records related to HDR Engineering, Inc.'s performance pursuant to this Agreement, provision of any goods or services to the City, and any other transactions related to this Agreement. HDR Engineering, Inc. shall cooperate with City representatives and City representatives shall be granted access to the foregoing documents and information during reasonable business hours and until the latter of three (3) years after the final payment under the Agreement or expiration of the applicable statute of limitations. When conducting an audit of this Agreement, the City Auditor shall be subject to government auditing standards issued by the United States Government Accountability Office by the Comptroller General of the United States, including with respect to disclosure of information acquired during the course of an audit. No examination of records and audits pursuant to this paragraph shall require to make disclosures in violation of state or federal privacy laws. HDR Engineering, Inc. shall at all times comply with D.R.M.C. 20-276.”

5. As herein amended, the Agreement is affirmed and ratified in each and every particular.

6. This Third Amendatory Agreement will not be effective or binding on the City until it has been fully executed by all required signatories of the City and County of Denver, and if required by Charter, approved by the City Council.

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**Contract Control Number:** DOTI-202055745-03 [201737759-03]  
**Contractor Name:** HDR ENGINEERING, INC.

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:**

Attorney for the City and County of Denver

By:

By:

\_\_\_\_\_

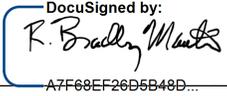
\_\_\_\_\_

By:

\_\_\_\_\_

**Contract Control Number:**  
**Contractor Name:**

DOTI-202055745-03 [201737759-03]  
HDR ENGINEERING, INC.

By:  \_\_\_\_\_  
A7F68EF26D5B48D...

Name: R Bradley Martin  
(please print)

Title: SVP  
(please print)

ATTEST: [if required]

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

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

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



10 June 2020

Brian McLaren, PE

Project Manager  
City and County of Denver  
Department of Transportation and Infrastructure  
201 W Colfax Ave  
Denver, CO 80202

RE: Professional Design Services: Iowa Underpass Change Order #3  
Contract No.: PWADM-201737759-00

Mr. McLaren,

HDR respectfully requests a change order which includes a time extension for this project and a change in scope and fee.

The HDR team proposes the following additions to the existing scope of work, further described in the attached scope of work and fee request:

1. The project team will split the project into two (2) distinct deliverable packages assumed to be designed concurrently.
  - For the Santa Fe Portion, the project team will:
    - Submit 100% plans, specifications, and estimate to CCD
      - CCD to distribute to CDOT
    - Attend a 100% review with CCD
    - Attend an FOR review with CDOT
    - Respond to 100% and FOR review comments
    - Submit Final Advertisement Package to CCD
    - Support CCD through CDOT Clearances
      - Provide support on forms, permits, and applications required
  - For the Iowa Portion, the project team will:
    - Submit 100% plans, specifications, and estimate to CCD
    - Attend a 100% review with CCD
      - Concurrent with Santa Fe 100% review meeting
    - Respond to 100% comments
    - Submit Final Advertisement Package to CCD
    - Support CCD with permits for the Iowa Package including railroad, drainage, and erosion control.
2. Support CCD through Advertisement process for both packages



- Assumes that the two packages are advertised at the same time
- 3. Provide Design Services During Construction (DSDC)
  - Includes responding to reviewing shop drawings and other submittals, Requests for Information "RFIs", field visits, and final punchlist
  - Includes Shannon & Wilson providing Quality Assurance Materials Testing

The requested amount of the change order is \$117,786.16 bringing the new contract total to \$935,470.02.

Additionally, the project team wishes to request an update to the contract category rates due to the project's unexpected duration and additional scope and schedule added herein. The current rate table reflects 2017 rates when the proposal was originally submitted.

HDR proposes that the new contract end date should be extended to December 31, 2022 to accommodate the additional design work and design services during construction.

If you have any questions, please contact me at 303-594-2041 or [charles.dyrsten@hdrinc.com](mailto:charles.dyrsten@hdrinc.com).

Sincerely,

  
\_\_\_\_\_  
R. Bradley Martin, Sr. Vice President  
Program Manager | HDR Engineering, Inc.

  
\_\_\_\_\_  
Date



## Iowa Underpass

**Master Contract Name: Professional Design Services: Iowa Underpass**

**Contract No.: PWADM-201737759-00**

### ***Change Order #3 – Scope of Work***

June 10, 2020

#### ***Background:***

In a letter dated 4 September 2019, the Colorado State Office of Archaeology and Historic Preservation did not agree with the assessment that the Iowa Avenue Subway is ineligible for listing on the National Register of Historic Places. This letter further stated that the proposed undertaking will significantly alter the pedestrian portion of the Subway, resulting in an adverse effect on historic properties. This unanticipated determination has caused a delay in project progress as well as created additional, unanticipated work for the project team.

Due to this determination, the project immediately halted progress on 9/27/2019 and began to formulate an approach to address the required Section 4(f) of the US Department of Transportation Act of 1966 documentation. Internal meetings between HDR and Pinyon as well as meetings between HDR, Pinyon, City and County of Denver, and CDOT staff were coordinated and attended.

Alternatives Analysis design was begun by HDR and Pinyon to work towards either a programmatic net benefit or an individual 4(f) for the project. Progress on this work was stopped on February 25, 2020 after communication from Kayla Lorentz, CCD's Project Manager at the time, revealed that the project would be partially defederalized.

Additional work on dividing the existing 90% cost estimate for the two packages and producing new project schedules was begun under new City Project Management from Brian McLaren. On April 14, 2020, the project was again put on hold due to City internal hesitation to release a portion of the federal funds. On May 22, 2020 the City completed their internal review and determined to proceed with splitting the projects.

This scope of work entails finalizing the original design and delivering two bid document packages as well as design services during construction as described below.

#### ***New scope items include:***

- **Split project into two packages**
  - a. Project team to divide the Iowa Underpass project into two packages, including the CAD, construction drawings, specifications, and cost estimates.
    - i. Specifications for both packages will be based on CDOT Standard Specifications for Road and Bridge Construction (2019)
  - b. Reports and other documentation to have addenda or cover sheets added to the existing documentation. Reports will not be split or duplicated.
  - c. Historic documentation will be revised based on new project boundaries



- **Task 1. Project Management and Administration (HDR)**
  - a. This task includes coordination and the day-to-day management of the project.
  - b. General Project Administration and Coordination
    - i. This task also includes the day-to-day, weekly, and monthly tasks associated with managing and coordinating the project. A project schedule will be developed, maintained, and updated monthly. HDR will assist the City with items on CDOT's form 1243. Invoices along with progress reports and project schedule will be generated on a monthly basis. Bi-monthly coordination office calls will be held with CCD staff to discuss project status, upcoming deliverables, and project issues.
  - c. Deliverables:
    - i. Monthly invoices including progress reports and project schedule
    - ii. Bi-weekly half-hour long project coordination calls during design and construction (32 in total)
- **Task 2. Survey and Right-of-Way (ROW) (HDR and Eugene Lynne)**
  - a. Prepare final ROW plans. (Eugene Lynne)
    - i. Assume a title sheet, a tabulation of properties sheet, a monumentation sheet, three plan sheets and an ownership sheet. Assuming no ROW monumentation set as part of this project. Revise and submit the ROW plans to CCD that address revisions resulting from negotiations during the ROW acquisition.
    - ii. Deliverables:
      - 1. ROW plans, if permanent easements or fee acquisitions are required (hard copy)
  - b. Right-of Way Acquisition (HDR)
    - i. This task includes actions necessary to acquire four temporary easements needed for the project on two properties. 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 the City and County of Denver.
    - ii. Assumptions:
      - 1. Internal permissions for portions of the trail to be located on the golf course property will be handled within CCD.
      - 2. The value of acquisitions from the private landowners will be less than \$25K and will not affect building structures. Appropriate releases will be obtained so they can be valued by waiver valuations (these used to be called value findings). This means appraisals to determine the amount of the offer will not be needed. If the value of acquisitions exceed \$25K or appropriate releases cannot be obtained, CCD will be required to obtain appraisals and have such appraisals reviewed. HDR's estimate does include the



cost of these appraisals. HDR will coordinate an appraisal on private properties only at the City and County of Denver Project Manager's direction.

3. The value of the acquisition from private landowners will be greater than \$5K, so these landowners will be advised of their right to get an appraisal and, if it meets certain criteria, CCD will be required to pay for it (as required by §38-1-121, C.R.S.). HDR's estimate does include the cost of these appraisals, if landowners request to obtain them. HDR will coordinate an appraisal on private properties only at the City and County of Denver Project Manager's direction.
4. CCD will retain a title company to provide title commitments for ROW plans development. CCD's contract with the title company will include fees for closings and costs directly.
5. New utility easements requiring ROW agreements are not anticipated.

iii. Tasks:

1. Create and maintain project scheduling information of land activities to show the progress of each parcel and to estimate segment completion against established milestone schedules.
2. Attend project meetings and coordinate tasks with City and County of Denver and CDOT. Advise designers of ROW issues during development of design.
3. Review ROW plans & legal descriptions for parcels. Review documents in preparation for negotiation.
4. Prepare waiver valuations using guidelines established by the CDOT appraisal manual.
5. Prepare the following documents: offer letter and summary of just compensation, final offer letter, conveyance documents, and 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.
6. Order/coordinate warrant requests, obtain partial releases/subordinations and tax pro-rations; coordinate real estate closings.
7. Prepare Acquisition Stage Relocation Plan (7-B Study) of affected properties. Prepare inventories, obtain moving estimates, and determine benefits for tenant relocations. Settle claims for moving costs.
8. Obtain ROW clearance from CDOT for concurrence to advertise.

iv. Deliverables:

1. Waiver valuations for affected properties
2. Final acquisition files, including negotiation logs
3. Acquisition Stage Relocation Plan



4. Final relocation files, including determinations and negotiation logs

- **Task 3. Geotechnical Investigations and Pavement Design (Shannon & Wilson)**

- a. This task includes the finalizing structural geotechnical and foundation recommendations for the project. The task also includes providing boring log plan sheets and materials related project specifications.

- b. Tasks:

- i. Finalize geotechnical considerations and incorporate them into the plans. Provide final reports to CCD for review.
- ii. Assist in writing project special provisions.
- iii. Conduct/Attend coordination meetings with CCD and CDOT. FOR/final review meetings.

- c. Deliverables:

- i. Final geotechnical report
- ii. Plans, project special provisions, and cost estimate input pertaining to geotechnical investigation and design elements.

- **Task 4. Streetscape and Landscape Design (HDR)**

- a. This task includes finalizing design and construction documents for streetscape features for the project described in the overview.

- b. Tasks:

- i. Finalize aesthetic treatments and details for structural features such as underpasses and retaining walls.
- ii. Finalize plans, specifications and cost estimate for streetscape as well as landscape within project limits.
- iii. Develop streetscape quantity tabulations for FOR/final review and bid. Provide unit costs for pay items in the tabulations.
- iv. Conduct/attend up to two (2) coordination meetings with CCD and CDOT on streetscape/landscaping as needed

- c. Deliverables:

- i. Plans, project special provisions, quantities, and cost estimate information for FOR/final review and bid.

- **Task 5. Sidewalk and Curb Design (HDR)**

- a. This task includes final design of sidewalk and curb and gutter elements.

- b. Tasks:

- i. Finalize plans for proposed sidewalk alignment, proposed curb and gutter installation, alignments, toes of slope and pertinent design features, including permanent and temporary impacts.
- ii. Finalize intersection geometrics and grading. Finalize removal plans where applicable.



- iii. If necessary, finalize document design variances including justification for each variance. Assist CCD with obtaining concurrence from affected agencies for design variances.
    - iv. Finalize cross-sections for the design. Finalize labels for slopes and grades, station and offset to grade breaks and show locations of existing and proposed utilities.
    - v. Develop final review and bid plans, specifications and cost estimate for sidewalk design.
    - vi. Finalize quantity tabulations for FOR/final review and bid plans. Conduct/Attend coordination meetings with CCD and CDOT pertaining to design.
  - c. Deliverables:
    - i. Plans, project special provisions, quantities, and cost estimate for FOR/final review and bid.
- **Task 6. Utility Coordination (Goodbye)**
  - a. 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 for the project.
  - b. Tasks:
    - i. Meet one-on-one with utility companies and jurisdictions to discuss utility conflicts and relocation and mitigation strategies as needed. Set up meetings, develop agendas, facilitate meetings, and develop meeting minutes.
    - ii. Prepare, coordinate, and obtain utility relocation agreements/clearance letters from Utility companies as applicable and provide to CCD and CDOT's R1 Utility Engineer.
    - iii. Conduct/attend utility coordination meetings with CCD, Denver Water, and CDOT, separate from one-on-one- utility meetings mentioned above.
    - iv. Finalize the utility specifications.
    - v. Prepare, coordinate, and submit CDOT Utility Clearance Report to CCD and CDOT's R1 Utility Engineer for concurrence to advertise.
    - vi. Finalize Xcel Energy work order request form and coordinate relocation of light poles with Xcel. Obtain estimates of probable cost for utility relocations that are a cost to the project.
  - c. Deliverables:
    - i. Utility meeting minutes
    - ii. Utility easements, agreements, and clearances
- **Task 7 - Utility Design (Goodbye)**
  - a. This task includes finalizing existing utility plans and the relocation design of affected wet and dry utilities within the project limits.
  - b. Tasks:



- i. Finalize existing utility plan sheets showing existing utility facilities, existing utility easements and conflicts with proposed construction.
      - ii. Finalize a summary table of utilities within the project limits, noting utility adjustments, relocations and/ or replacement.
      - iii. Develop FOR/final review and bid plans, tabulations, specifications and cost estimate for utility relocations.
      - iv. Develop utility relocation quantity tabulations for FOR/final review and bid.
    - c. Deliverables:
      - i. Plans, project special provisions, quantities, and cost estimate information for FOR/final review and bid.
- **Task 8 - Structural Engineering (HDR)**
  - a. This task includes finalizing design for the retrofit of an existing retaining wall and design of new retaining walls along the north side of Iowa Avenue for the project limits from the east side of Santa Fe Drive to the west side of Acoma. The pedestrian/bicycle railing, to be installed along the top of the retrofitted wall separating the new bicycle path and Iowa Avenue will be finalized.
  - b. Assumptions:
    - i. Structural design will be based on AASHTO LRFD Bridge Design Specifications, 7<sup>th</sup> Edition, with 2016 Interim Changes.
    - ii. It is assumed that replacement of full-height sections of the existing retaining walls immediately adjacent to Iowa Avenue will not be required. Thus, no redesign of Iowa Avenue due to wall construction is anticipated.
    - iii. Analysis of existing wall will be based off of dimensions shown in available as-built drawings dated January 26, 1926. Verification of dimensions will be performed on elements that are currently visible and accessible. Verification of buried or inaccessible wall components is not included in this scope.
    - iv. Rehabilitation of the overpassing Railroad and Light Rail bridge structures is not required.
    - v. Structural design of protective fence separating golf course from bikeway is not included.
    - vi. Structural design of the bicycle railing will be per AASHTO LRFD Section 13.9.
    - vii. Railroad submittal packages per Guidelines for Railroad Grade Separations section 3.10 are not included in this scope.
    - viii. Design of temporary shoring for construction is not included. This will be the responsibility of the Contractor.
    - ix. Modifications or analysis of the existing wall located along the south side of Iowa Avenue is not included.
  - c. Tasks:
    - i. Finalize extent of necessary sections of removal and repairs.



- ii. Finalize design for the retaining wall modifications and sections of new retaining wall, including necessary rehabilitation on the underpass wall limits, in accordance with CDOT and CCD requirements.
    - iii. Finalize aesthetic enhancement details as required on the walls and pedestrian/bicycle railing. Structural design and detailing of the pedestrian/bicycle railing will be performed.
    - iv. Finalize design calculations for the modified wall portions and the rehabilitation limits. The final design calculations shall be submitted upon the completion of the project. This shall include notes, hand-written calculations, spreadsheet printouts, and design program outputs as applicable.
    - v. Finalize FOR/final review and bid plans, specifications, quantities and cost estimate for the structural elements.
  - d. Deliverables:
    - i. Plans, project special provisions, quantities, and cost estimate information for FOR/final review and bid.
- **Task 9 – Electrical and Lighting Analysis & Design (Clanton)**
  - a. This task includes finalizing design of pedestrian and street lighting within the project limits. ADA/AASHTO compliant lighting for pedestrians and cyclists will be required.
  - b. Tasks:
    - i. Finalize electrical and lighting design within project limits.
    - ii. Develop FOR/final review and bid plans and specifications for electrical facilities and lighting, and associated removals of existing electrical and lighting equipment
    - iii. Develop electrical and lighting tabulations for FOR/final review and bid
  - c. Deliverables:
    - i. Plans, project special provisions, quantities, and cost estimate information for FOR/final review and bid.
- **Task 10 – Traffic Signal Plan (HDR)**
  - a. This task includes finalizing design for signing/stripping improvements to accommodate pedestrians and bicycles at the intersection of Santa Fe Drive and Iowa Avenue, along the north side of Iowa Avenue and on the west side of Santa Fe Drive. Trail connection to Florida Avenue and Jewell Avenue/Huron Street will also be incorporated.
  - b. Assumptions:
    - i. The proposed design improvements along Florida Avenue and Jewell Avenue/Huron Street will be limited to signing, striping, and wayfinding elements developed using aerial base files.
  - c. Tasks:
    - i. Finalize FOR/final review plans and specifications for signal design elements and removals if necessary.



- ii. Finalize signal, signing, and striping and removal quantity tabulations for 100% design.
        - iii. Finalize the traffic signal plans, inclusive of final signal interconnect locations, pull boxes, and other required infrastructure. Finalize tabulations.
      - d. Deliverables:
        - i. Plans, project special provisions, quantities, and cost estimate information for FOR/final review and bid.
- **Task 11 - Hydrology and Hydraulic Analysis & Design (Eugene Lynne)**
  - a. This task includes analysis and design as necessary in order to support the overall design of the project.
  - b. Tasks:
    - i. Finalize basic hydrologic analysis for Iowa underpass system and surface drainage redesign for Santa Fe sidewalk from Florida to Jewell. Existing storm drainage systems to be protected in place. No provisions for updates according to Denver Storm Drainage Master Plan (sump inlet was identified in study as major flooding location). No provisions for inlet modifications along Santa Fe Drive. No CLOMR or no-rise certification is included in estimation. Project impact is outside of mapped floodway, so no FEMA coordination is anticipated.
    - ii. Develop FOR/final review and bid plans, specifications, and cost estimate for necessary drainage design elements and removals.
    - iii. Develop drainage quantity tabulations for FOR/final review and bid plans and specifications. Prepare final drainage report for drainage facilities within the project limits.
  - c. Deliverables:
    - i. Final drainage memo
    - ii. Plans, project special provisions, quantities, and cost estimate information for FOR/final review and bid.
    - iii. Prepare floodplain permit for minor grading work within the floodplain.
- **Task 12 - Water Quality and Erosion Control Analysis & Design (Eugene Lynne)**
  - a. This task includes design of water quality features as necessary.
  - b. Tasks:
    - i. Develop FOR/final review and bid plans, specifications and cost estimate for construction and permanent erosion control and water quality BMP's.
    - ii. Develop water quality and erosion control quantity tabulations for FOR/final review and bid.
    - iii. Finalize water quality design information for final drainage report in conjunction with Task 11.



- iv. 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.
      - v. Prepare the CASDP and supporting plans. Assume CCD is MS4 administrator and FOR plans would inform the CASDP.
    - c. Deliverables:
      - i. Final water quality memo
      - ii. Plans, project special provisions, quantities, and cost estimate information for FOR/final review and bid.
- **Task 13 - Environmental Services (Pinyon)**
  - a. This task is in support of the City and County of Denver's compliance with the National Environmental Policy Act (NEPA) through CDOT for the Santa Fe portion of the project. The design team will assist CCD in obtaining an environmental clearance from CDOT, anticipated to be a Categorical Exclusion (CatEx) Determination.
  - b. See attached, from Pinyon Environmental, for a detailed Scope of Work.
- **Task 14 - Construction Traffic Control (HDR)**
  - a. This task includes developing a schedule of traffic control items for construction of the project including traffic and multimodal movements.
  - b. Tasks:
    - i. Finalize construction traffic control plans and specifications, which includes maintaining access to adjacent properties and multi-modal routes.
    - ii. Finalize a schedule of construction traffic control items based on traffic control required for detours and construction phasing.
  - c. Deliverables:
    - i. Plans, project special provisions, quantities, and cost estimate information for FOR/final review and bid.
- **Task 15 - Public Outreach and Information (HDR)**
  - a. This task is in support of the City and County of Denver's public outreach efforts for the project. (Primarily completed under previous task orders)
  - b. Assumptions:
    - i. The Client will host the webpage for the project and the social media channel/page for the project; content developed by Consultant.
  - c. Tasks (up to two updates through project advertisement are assumed):
    - i. Prepare content for project web page updates and social media content.
    - ii. Coordinate project updates with Denver Public Works and Denver Parks and Recreation.
- **Task 16 - Multi Agency Involvement & Coordination, Stakeholder Coordination (HDR)**



- a. This task is in support of the City and County of Denver's coordination efforts with outside agencies and area stakeholders (developers) related to the project. Efforts for Task 16 that are specific to a discipline, are contained within that discipline task. Additional Meetings are included under Task 1.
- b. Tasks:
  - i. Coordinate the design and concurrence with CCD Agencies/ Departments, Denver Water, CDOT, CDPHE, DRCOG, UPRR, BNSF, RTD and others.
  - ii. Coordinate with project stakeholders including: Metro and Maintenance Districts within the project corridor.
  - iii. Conduct/Attend coordination meetings with coordinating agencies. Submittals to affected agencies will be coordinated with CCD.
- c. Deliverables:
  - i. Documentation of calls or meetings with agencies/stakeholders
- **Task 17 – Design Progress / Coordination Meetings (All)**
  - a. This task covers project management coordination meetings, consultant team coordination meetings and miscellaneous meetings with CCD staff and outside entities. Efforts for Task 17 are incorporated under previous Tasks.
  - b. Tasks:
    - i. Attend project management meetings.
    - ii. Attend consultant team coordination meetings.
    - iii. Attend outside agency coordination meetings as described in other tasks.
    - iv. Attend pertinent meetings with CDOT including, but not limited to, NEPA Environmental Scoping, Access Coordination, Resource-specific meetings, FOR, and ROWPR.
    - v. Attend Final Review and FOR review meetings.
    - vi. Prepare agendas, exhibits, handouts, conduct and write minutes for above mentioned meetings. Minutes will be submitted within 7 days of the meetings.
- **Task 18 – Construction Services (Design Services During Construction “DSDC”) (All)**
  - a. This task covers services conducted during the construction project phases. The number of hours assumed for each of these tasks is reflected in the attached fee estimate.
  - b. This task assumes that construction for both projects is concurrent.
  - c. Tasks:
    - i. Review submittals and respond to inquiries from field staff as requested.
    - ii. Respond to RFI's (Request for Information) within three business days
    - iii. Attend project meetings (may be on site) when requested. Participate in Substantial Completion walk-through.



- iv. Provide Quality Assurance Materials Testing (S&W) (see details and assumptions in attached) Quality Assurance and field testing will only be completed upon direction from the CCD Project Manager.
  1. Moisture/Density field testing of embankment, aggregate base course, utility structures and trench backfill materials using nuclear gauge.
  2. Laboratory testing of soil and aggregate materials used on site.
  3. Density testing of placed asphalt.
  4. Laboratory testing of asphalt patching per CCD minimum testing frequency requirements.
  5. Field sampling and testing of Portland Cement Concrete Pavement (PCCP) (including trail and roadway), sidewalk, and curb and gutter.
  6. Perform compressive strength testing of concrete cylinder samples.
  7. Perform engineering review of testing reports and prepare for distribution.
- Miscellaneous Requirements
  - a. CAD files/designs shall be produced in AutoCAD Civil 3D 2018. CAD files shall be produced according to CCD CAD Standards and templates.
  - b. Electronic Files shall be transmitted to CCD upon completion of the project organized in accordance with the CCD file directory structure.
  - c. 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 (60% through Construction Bid documents will be required).
  - d. The Consultant will be required to develop design documents that are consistent with CDOT's requirements for FOR, ROWPR, design variances, and other submittals.

**City and County of Denver - Iowa Underpass Fee**  
**June 10, 2020 - Cost to Complete**

Project Team Member	PIC	QA/QC	Structural Lead	Structural PE	Sr. Project Professional	Design Engineer	PM/Design Engineer	Senior CAD	Civil RR PE	ROW Lead	ROW	ROW	PI Lead	CADD/PI Graphics	LA	Admin	Controller	Total Hours
CCD Labor Classification	Sr. PM 2	Sr. PM 2	Des. Eng 3	Des.Eng 2	Proj Prof 2	Des. Eng 2	Des. Eng 2	Sr Tech	Des. Eng 3	Sr. PM 2	ROW Acq II	ROW Acq I	PI Coord I	Technician	Site Design Co	PA I	Prj Ctr	Total Hours
	Heffron	Nguyen	Roberts	Sweenhart	Seyer	Baker	Dyrsten	Schawo	Beasley	Jamieson	Vallard	Pietri	Angel	McPhaul	Tieszen	Cresswell	Starett	
Billing Rate	\$ 195.00	\$ 195.00	\$ 140.00	\$ 125.00	\$ 170.00	\$ 125.00	\$ 125.00	\$ 120.00	\$ 140.00	\$ 195.00	\$ 100.00	\$ 85.00	\$ 115.00	\$ 100.00	\$ 110.00	\$ 70.00	\$ 110.00	
<b>Task 1. Project Management and Administration</b>																		
Project Management- Schedule, Invoicing, Reporting (18 months)	4						18									36	54	112
Meetings and Coordination																		
PM mtgs with CCD (32 of 0.5hr mtgs)	6						32											38
Team Coordination Mtgs (8 of 1hr mtgs)	8		8			8	12		2		6				4			48
Outside Agency Coordination Mtgs	2		2				10		4		6							24
100% Review/comment resolution Mtg	2		2			2	4											10
FOR Mtg	2		2			2	4											10
Pre-Bid Mtg	1						2											3
Subtotal Project Mgmt	25	0	14	0	0	12	82	0	6	0	12	0	0	0	4	36	54	245
Subtotal Project Mgmt Fee	\$ 4,875	\$ -	\$ 1,960	\$ -	\$ -	\$ 1,500	\$ 10,250	\$ -	\$ 840	\$ -	\$ 1,200	\$ -	\$ -	\$ -	\$ 440	\$ 2,520	\$ 5,940	\$ 29,525
<b>Task 2. Survey and Right-of-Way (ROW)</b>																		
Create and Maintain scheduling information											4							4
Coordinate tasks with and advise team										4	12							16
Review ROW plans & legal descriptions											2							2
Prepare waiver valuations											3	4						7
Prepare documents and conduct negotiations													28					28
Order/coordinate warrant requests, etc.													8					8
Prepare Acquisition Stage Relocation Plan. Prepare inventories											1	4						5
Coordinate Appraisals											2							2
Obtain ROW clearance from CDOT											2							2
Subtotal Task 2	0	0	0	0	0	0	0	0	0	4	26	44	0	0	0	0	0	74
Subtotal Task 2 Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 780	\$ 2,600	\$ 3,740	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,120
<b>Task 4. Streetscape and Landscape Design</b>																		
Incorporate and respond to 90% comments															0			0
Split Package - Plans and Specifications															4			4
Revise Santa Fe Dr Plan Set															4			4
Revise Iowa Ave Plan Set															4			4
QC of Santa Fe Dr Plan Set															2			2
QC of Iowa Ave Plan Set															2			2
Incorporate and respond to 100% comments															8			8
Final QC															2			2
Final Plans and Specs															8			8
Subtotal Task 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	0	0	34
Subtotal Task 4 Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,740	\$ -	\$ -	\$ 3,740
<b>Task 5. Sidewalk and Curb Design</b>																		
Design Elements																		
Additional design between Projects	1						4											5
Document design variances	1						1											2
Cross Sections							4							4				8
Subtotal Design Elements	2	0	0	0	0	0	9	0	0	0	0	0	0	4	0	0	0	15
<b>100% Final Bid Documents</b>																		
Split Package - Plans and Specifications							16							30				46
Revise and Finalize Santa Fe Dr Plan Set	1						6							10				17
Revise and Finalize Iowa Ave Plan Set	1						6							10				17

Finalize Santa Fe Dr Specification Package	1						8											9
Finalize Iowa Ave Specification Package	1						8											9
QC of Santa Fe Dr Plan Set		16												6				22
QC of Iowa Ave Plan Set		16												6				22
Finalize Santa Fe Dr Cost Estimate	1						2											3
Finalize Iowa Ave Cost Estimate	1						2											3
<b>Subtotal 100% Design</b>	<b>6</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>48</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>62</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>148</b>
<b>Final Bid Documents</b>																		
Incorporate and respond to 100% comments							6							8				14
Finalize Santa Fe Dr Specification Package	1						4											5
Finalize Iowa Ave Specification Package	1						4											5
QC of Santa Fe Dr Plan Set		6												2				8
QC of Iowa Ave Plan Set		6												2				8
Finalize Santa Fe Dr Cost Estimate							1											1
Finalize Iowa Ave Cost Estimate							1											1
<b>Subtotal Final Bid Design</b>	<b>2</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42</b>
<b>Advertisement Process</b>																		
Assist in CDOT clearance process	0.5						8											8.5
Package CADD files for release to contractors							4											4
Respond to Bid Questions	0.5						8											8.5
<b>Subtotal Advertisement Process</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21</b>
<b>Subtotal Task 5</b>	<b>11</b>	<b>44</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>93</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>78</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>226</b>
<b>Subtotal Task 5 Fee</b>	<b>\$ 2,145</b>	<b>\$ 8,580</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 11,625</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 7,800</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 30,150</b>
<b>Task 8. Structural Engineering</b>																		
FOR/90% plans, specs, estimate, QC			8	12				8										28
Final plans, specs, estimate, QC			4	16				4										24
<b>Subtotal Task 8</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>52</b>
<b>Subtotal Task 8 Fee</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,680</b>	<b>\$ 3,500</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,440</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 6,620</b>					
<b>Task 10. Traffic Signal Plans</b>																		
Split Package - Plans and Specifications						2								4				6
Revise Santa Fe Dr Plan Set														3				3
Revise Iowa Ave Plan Set														3				3
QC of Santa Fe Dr Plan Set					2													2
QC of Iowa Ave Plan Set					2													2
Incorporate and respond to 100% comments						2								2				4
Final QC					2													2
Final Plans and Specs						2								2				4
<b>Subtotal Task 10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26</b>
<b>Subtotal Task 10 Fee</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,020</b>	<b>\$ 750</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,400</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,170</b>
<b>Task 14. Construction Traffic Control</b>																		
Split Package - Plans and Specifications						2								4				6
Revise Santa Fe Dr Plan Set														2				2
Revise Iowa Ave Plan Set														2				2
QC of Santa Fe Dr Plan Set					2													2
QC of Iowa Ave Plan Set					2													2
Incorporate and respond to 100% comments						2								2				4
Final QC					2													2
Final Plans and Specs						2								2				4
<b>Subtotal Task 14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>
<b>Subtotal Task 14 Fee</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,020</b>	<b>\$ 750</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,200</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,970</b>
<b>Task 15. Public Outreach and Information</b>																		
Coordinate with CCD on website updates														2				2

Subtotal Task 15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
Subtotal Task 15 Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 230	\$ -	\$ -	\$ -	\$ -	\$ 230
<b>Task 18. Design Services During Construction</b>																		
Review Submittals	8		24			24	40								4			100
Respond to RFIs	4		10			10	32								4			60
Project mtgs on site	2		4			4	10											20
Subtotal DSDC	14	0	38	0	0	38	82	0	0	0	0	0	0	0	8	0	0	180
Subtotal DSDC fee	\$ 2,730	\$ -	\$ 5,320	\$ -	\$ -	\$ 4,750	\$ 10,250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 880	\$ -	\$ -	\$ 23,930
<b>PROJECT TOTALS</b>	<b>50</b>	<b>44</b>	<b>64</b>	<b>28</b>	<b>12</b>	<b>62</b>	<b>257</b>	<b>12</b>	<b>6</b>	<b>4</b>	<b>38</b>	<b>44</b>	<b>2</b>	<b>104</b>	<b>46</b>	<b>36</b>	<b>54</b>	<b>863</b>

**HDR LABOR COST** \$ 9,750 \$ 8,580 \$ 8,960 \$ 3,500 \$ 2,040 \$ 7,750 \$ 32,125 \$ 1,440 \$ 840 \$ 780 \$ 3,800 \$ 3,740 \$ 230 \$ 10,400 \$ 5,060 \$ 2,520 \$ 5,940 \$ 107,455.00

**OTHER DIRECT COSTS**  
 ROW Appraisal Fee \$ 15,000.00  
**TOTAL ODC'S** \$ 15,000.00

**SUBCONSULTANTS**  
 Clanton & Associates (DBE) - Labor \$ 4,205.00  
 Clanton & Associates (DBE) - Expenses \$ 50.00  
 Eugene Lynne (DBE) - Labor \$ -  
 Eugene Lynne (DBE) - Expenses \$ -  
 Goodbee (DBE) - Labor \$ 4,820.00  
 Goodbee (DBE) - Expenses \$ -  
 Pinyon Environmental (DBE) - Labor \$ -  
 Pinyon Environmental (DBE) - Expenses \$ -  
 Shannon & Wilson - Labor \$ 9,931.00  
 Shannon & Wilson - Expenses \$ 6,068.00

<b>TOTAL PROJECT COST TO COMPLETE</b>	\$ 147,529.00
<b>REMAINING HDR DESIGN FEE CARRYOVER FROM ORIGINAL FEE AND CHANGE ORDERS #1 AND #2</b>	\$ 29,742.84
<b>TOTAL CHANGE ORDER #3 REQUEST</b>	\$ 117,786.16

## CLANTON & ASSOCIATES

LIGHTING DESIGN AND ENGINEERING

April 9, 2020

Charlie Dyrsten  
**HDR Engineering**  
1670 Broadway, Suite #3400  
Denver, CO 80202  
[charlie.dyrsten@hdrinc.com](mailto:charlie.dyrsten@hdrinc.com)

Re: City and County of Denver Iowa Underpass  
Lighting and Electrical Design Consulting Proposal – Additional Scope  
HDR Change Order #3 - Task 18 - Construction Services

Clanton and Associates proposes to undertake the lighting and electrical consulting for the City and County of Denver Iowa Underpass Project in Denver, CO.

Estimated labor:	\$4,205
Estimated expenses:	\$ 50
<b>Total Fee (labor and expenses):</b>	<b>\$4,255</b>

The scope of work includes:

1. Iowa Railroad Underpass pedestrian lighting
2. Santa Fe from Florida to Evans Streetlighting

Design services shall include the following:

### Design Services During Construction

- Up to one team meeting in Denver or teleconference
- Review lighting equipment submittals (up to two (2) reviews included)
- Review electrical equipment submittals (up to two (2) reviews included)
- Respond to RFIs
- Up to one site visit during construction
- Up to one final site visit to punch out project
- Punch List

This scope of work is based upon normal project progress and within the time schedule agreed upon, without major redesign or change order work. Additional fees will be required if project timing is extended or project is put on hold and restarted at later date. If the project timing exceeds one year, additional services rates may increase.

Not included in this scope of work but is available for extra services:

- Additional meetings, site visits, or conference calls
- Additional design
- Any development, design, or detailing of custom luminaires

Specific exclusions from this scope are as follows:

- Structural engineering
- Equipment procurement
- Commissioning

Client will supply Clanton and Associates with review materials and backgrounds in AutoCAD or Micro Station format if needed. Reimbursable expenses shall include printing costs, overnight delivery and travel expenses associated with the project and shall be charged in addition to the compensation for professional services. Payment for services is expected within 30 days of invoice unless other arrangements are made in writing.

Additional services shall be charged at the following hourly rates:

Senior Principal	\$260 / hr
Senior Designer	\$180 / hr
Senior Engineer	\$115 / hr
Engineer	\$ 95 / hr
Designer	\$ 95 / hr
Intern	\$ 80 / hr
Production Manager	\$115 / hr
Senior CADD Technician	\$ 95 / hr
CADD Technician	\$ 70 / hr
Administration	\$ 65 / hr

This agreement is valid for 60 days.

  
 \_\_\_\_\_  
 CLANTON & ASSOCIATES

April 9, 2020  
 \_\_\_\_\_  
 DATE

\_\_\_\_\_  
 HDR ENGINEERING

\_\_\_\_\_  
 DATE

支 Eugene Lynne

**IOWA UNDERPASS CHANGE ORDER NO. 3 (May 27th, 2020)**

	Project Engineer	Subtotal	Notes
	\$135		
<b>Task 18 – Construction Services (Design Services During Construction)</b>			
Office	20	\$2,700	Review RFI's, Submittals, attend DSDC meetings
<b>Subtotal Change Order 3</b>		<b>\$2,700</b>	

## Goodbee and Associates, Inc.

Iowa Underpass  
Change Order #3 - Design Services During Construction

Scope and Fee Estimate  
4/12/2020 - Revised Final

Task	Description of Activities / Assumptions	Project Manager III	Project Manager III	CAD I	CAD I	Admin Assistant	Total Hrs.	Total Cost (2020 Rate Sheet)
		Harmon, Laura	Bijold, Dana	Elliott, Tyler	Lobato, Mary	Kiser, Elizabeth		
		\$150/hr	\$150/hr	\$80/hr	\$80/hr	\$80/hr		
<b>Project Mgmt.</b>	Monthly progress report and invoicing (assume 6 months)	4				4	8	\$920
<b>Task 6: Utility Coordination</b>	Additional support to develop utility agreements for two packages.	4		4			8	\$920
<b>Task 7: Utility Design</b>	Additional sheets and special provision for two packages.		4	6			10	\$1,080
<b>Task 17: Design Progress</b>	Incorporated under previous tasks						0	\$0
<b>Task 18: Design Services During Construction</b>	Review submittals and respond to inquiries from field staff as requested. Assume no more than 4 submittals/inquiries.	2		2			4	\$460
	Respond to RFIs (Request for Information) within three business days. Assume no more than 4 RFIs.	4		2			6	\$760
	Conduct and attend project meetings (may be on site) when requested (assume no more than 4 meetings). Participate in Substantial Completion walk-through.	4		1			5	\$680
<b>TOTAL LABOR</b>		<b>22</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>4</b>	<b>41</b>	<b>\$4,820</b>

**Assumptions and Exclusions:**

1. Assume one (1) year of performance to provide utility coordination support on Change Order #3 including limited design services during construction.
2. Goodbee providing Task 6, Task 7, and Task 18 on new scope item for two packages are primarily covered under remaining budget from current task orders.



Corporate Headquarters  
3222 South Vance Street, Lakewood, CO 80227  
T: 303.980.5200 F: 303.980.0089  
www.pinyon-env.com

June 2, 2020

Tammy Heffron, PE ENV SP  
HDR  
1670 Broadway Suite 3400  
Denver, CO 80202

Via eMail: Tammy.Heffron@hdrinc.com

Subject: Change Order to Complete Additional Environmental Clearance Support  
Project Name: Iowa and Santa Fe Pedestrian Improvement Project  
Project Location: South Santa Fe Drive and Iowa Avenue  
Project Contract Dated: February 20, 2018

Dear Ms. Heffron:

Pinyon Environmental, Inc. (Pinyon), respectfully submits this Change Order to complete environmental clearance support related to the defederalizing of the Iowa Avenue portion of the project.

The additional scope of services includes seven (7) resource report addendums for the following existing documentation: archeological resource memorandum, paleontological resource memorandum, biological resource memorandum, Modified Environmental Site Assessment, limited subsurface report, Materials Management Plan, and summary memorandum. In addition, the following Section 106 documentation will be revised/prepared:

1. Draft State Historic Preservation Office (SHPO) letter that clarifies the change in project scope, revised Area of Potential Effect (APE), associated map, effects, and an explanation for the scope change.
2. Draft Section 4(f) de minimis form to cover Overland Park, US 85 segment, and Ruby Hill Park, including the table with acreage impacts required for that form (form and examples provided by CDOT).
3. Draft Section 4(f) archaeology exception form for the brick sewer system (form and example provided by CDOT).

Twelve one-hour bi-monthly progress meetings are included in this scope and as well as billing and general project coordination. A task for minor support during construction is also included.

The project will no longer require a Net Benefit or Individual Section (4f) Evaluation for the "Subway Underpass" since this portion of the project area along Iowa Avenue has been defederalized.

The current approved project fee is **\$176,433.66**. Pinyon estimates the cost to complete the additional services identified above will be **\$17,910.00** utilizing 2020 Standard Rates. Pinyon will utilize a portion of the existing authorized fee for the historic adverse effect task for the addition services described above. No additional fee is being requested in accordance with this change order. Pinyon will invoice in accordance with our existing contract rates and terms.

Tammy Heffron, PE ENV SP

June 2, 2020

Page 2

To authorize the outlined scope of services, please sign and return one full copy of the attached Change Order Authorization. Should you have any questions or require additional information, please do not hesitate to call. Thank you for considering Pinyon for your environmental consulting needs.

Sincerely,

**PINYON ENVIRONMENTAL, INC.**

A handwritten signature in black ink, appearing to read "Robyn A. Kullas", with a long horizontal flourish extending to the right.

Robyn A. Kullas

Technical Group Manager - NEPA and Planning

File Location: Z:\PROJECTS\2018\11819101 CCOD Santa Fe and  
Iowa\PM\Scope\_fee\changer\_order\_3jun20\Iowa\_santafe\_changeorder\_3June20.docx



**Table I  
Summary of Estimated Costs**

<b>Task: Project Management, Coordination, and Meetings</b>				
<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Extension</b>
<b>Labor Rates</b>				
Project Manager I	20.0	hours	\$163.00	\$3,260.00
Administration	6.0	hours	\$64.00	\$384.00
<b>Task Subtotal</b>				<b>\$3,644.00</b>
<b>Task Historic Resources/Historic Section 4(f)/Archaeology</b>				
<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Extension</b>
<b>Labor Rates</b>				
Project Manager I	6.0	hours	\$163.00	\$978.00
Archaeologist/ Historian II	2.0	hours	\$150.00	\$300.00
Archaeologist/ Historian	24.0	hours	\$115.00	\$2,760.00
<b>Task Subtotal</b>				<b>\$4,038.00</b>
<b>Task Biological Resources - Addendum</b>				
<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Extension</b>
<b>Labor Rates</b>				
Project Manager I	1.0	hour	\$163.00	\$163.00
Scientist	4.0	hours	\$115.00	\$460.00
<b>Task Subtotal</b>				<b>\$623.00</b>
<b>Task Paleontology - Addendum</b>				
<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Extension</b>
<b>Labor Rates</b>				
Project Manager I	4.0	hours	\$163.00	\$652.00
<b>Task Subtotal</b>				<b>\$652.00</b>
<b>Task Environmental Clearance Summary Memorandum Update- Section 6(f), Air Quality, Noise</b>				
<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Extension</b>
<b>Labor Rates</b>				
Project Manager I	4.0	hours	\$163.00	\$652.00
Scientist I	4.0	hours	\$125.00	\$500.00
<b>Task Subtotal</b>				<b>\$1,152.00</b>
<b>Task Modified Environmental Site Assessment (MESA) Addendum</b>				
<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Extension</b>
<b>Labor Rates</b>				
Scientist II	2.0	hours	\$150.00	\$300.00
Scientist I	8.0	hours	\$125.00	\$1,000.00
<b>Task Subtotal</b>				<b>\$1,300.00</b>
<b>Task MMP and Subsurface Report Addendum</b>				
<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Extension</b>
<b>Labor Rates</b>				

**Table I (Continued)**  
**Summary of Estimated Costs**

Project Manager I	2.0	hours	\$163.00	\$326.00
Scientist III	2.0	hours	\$190.00	\$380.00
Scientist II	10.0	hours	\$150.00	\$1,500.00
Scientist	4.0	hours	\$115.00	\$460.00
<b>Task Subtotal</b>				<b>\$2,666.00</b>
<b>Task Construction Management</b>				
<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Rate</b>	<b>Extension</b>
<b>Labor Rates</b>				
Project Manager I	20.0	hours	\$163.00	\$3,260.00
Archaeologist/ Historian	5.0	hours	\$115.00	\$575.00
<b>Task Subtotal</b>				<b>\$3,835.00</b>
<b>Project Total</b>				<b>\$17,910.00</b>



**CHANGE ORDER AUTHORIZATION**

Client: Address:  Phone: Client Contact Email:	HDR 1670 Broadway Suite 3400 303-764-1526 Tammy Heffron, PE ENV SP Tammy.Heffron@hdrinc.com
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**PROJECT DESCRIPTION**

Project Name	Iowa and Santa Fe Pedestrian Improvement Project
Project Location	South Santa Fe Drive and Iowa Avenue
Pinyon Project Number	I/18-191-01
Scope of Work	Additional Environmental Clearance Support
Current Approved Fee	<b>\$176,433.66</b>
Change Order Fee	\$0
<b>Revised Total Project Fee</b>	<b>\$176,433.66</b>

The following attachments are hereby made a part of this AGREEMENT:

<input type="checkbox"/>	Project Contract Dated February 20, 2018
<input checked="" type="checkbox"/>	Pinyon Environmental, Inc. Change Order dated June 3, 2020.

<b>HDR</b>	<b>Pinyon Environmental, Inc.</b>
------------	-----------------------------------

By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

**GEOTECHNICAL COST ESTIMATE  
IOWA UNDERPASS - CONSTRUCTION SERVICES**

SHANNON & WILSON, INC.

**Earthwork Testing**

**Assumes 10 total site visits and laboratory testing as indicated below**

						<b>Expenses</b>	<b>Labor</b>
Technician II - Utilities, Sitework	10 trips	3 hrs/trip	30 hrs.	x	\$80 per hr.	=	\$2,400
Density Gauge			10 days	x	\$30 per day	=	\$300
Trip Charge			10 trips	x	\$35 ea	=	\$350
Standard Proctor Test			3 tests	x	\$205 ea	=	\$615
Surcharge for Cohesive Samples			3 tests	x	\$110 ea	=	\$330
Gradation Test			3 tests	x	\$120 ea	=	\$360
Atterberg Limits Test			3 tests	x	\$95 ea	=	\$285
Supervision and Review			5 hrs.	x	\$155 per hr.	=	\$775
<b>Total</b>							<b>\$2,240</b>
						<b>\$2,240</b>	<b>\$3,175</b>

**Aggregate Base Course Testing**

**Assumes 5 total site visits and laboratory testing as indicated below**

						<b>Expenses</b>	<b>Labor</b>
Technician II	5 trips	3 hrs/trip	15 hrs.	x	\$80 per hr.	=	\$1,200
Density Gauge			5 days	x	\$30 per day	=	\$150
Trip Charge			5 trips	x	\$35 ea.	=	\$175
Modified Proctor Test			1 tests	x	\$285 ea	=	\$285
Gradation Test			2 tests	x	\$130 ea	=	\$260
Atterberg Limits Test			1 tests	x	\$95 ea	=	\$95
R-Value Test			1 tests	x	\$475 ea	=	\$475
Supervision and Review			2.5 hrs.	x	\$155 per hr.	=	\$388
<b>Total</b>							<b>\$1,440</b>
						<b>\$1,440</b>	<b>\$1,588</b>

**Hot Mix Asphalt Patching**

**Assumes 2 total site visits and laboratory testing as indicated below**

						<b>Expenses</b>	<b>Labor</b>
Technician II	2 trips	3 hrs/trip	6 hrs.	x	\$80 per hr.	=	\$480
Trip Charge			2 hrs.	x	\$35 per hr.	=	\$70
Density Gauge			2 days	x	\$30 per day	=	\$60
Ignition AC Test/Gradation Test			2 tests	x	\$190 ea	=	\$380
Maximum Specific Gravity Test			2 tests	x	\$99 ea	=	\$198
Supervision and Review			1 hr.	x	\$155 per hr.	=	\$155
<b>Total</b>							<b>\$708</b>
						<b>\$708</b>	<b>\$635</b>

**GEOTECHNICAL COST ESTIMATE  
IOWA UNDERPASS - CONSTRUCTION SERVICES**

SHANNON & WILSON, INC.

**Concrete Testing**

**Assumes 10 total site visits and one set of cylinders per site visit.**

						<b>Expenses</b>	<b>Labor</b>
Technician II	10 trips	3 hrs/trip	30 hrs.	x	\$80 per hr.	=	\$2,400
Technician II -Cylinder Pick-up	10 trips	1 hr/trip	10 hrs.	x	\$80 per hr.	=	\$800
Trip Charge - Concrete			10 trips	x	\$35 ea.	=	\$350
Trip Charge - Cylinder Pick-Up			10 trips	x	\$35 ea.	=	\$350
Cylinder Testing		5 cyl./set	50 tests	x	\$19 ea.	=	\$950
Supervision and Review			5 hrs.	x	\$155 per hr.	=	\$775
<b>Total</b>							
						<b>\$1,650</b>	<b>\$3,975</b>

**Project Meetings, Submittal Review, and RFI Review**

**Assumes 16 hours of Submittal Review, 8 hours of RFI review, and 20 hours of meeting attendance**

						<b>Expenses</b>	<b>Labor</b>
Senior Professional II			36 hrs.	x	\$140 per hr.	=	\$5,040
Senior Associate			8 hrs.	x	\$200 per hr.	=	\$1,600
Senior Technician	6 trips	4 hrs/trip	24 hrs.	x	\$110 per hr.	=	\$2,640
Trip Charge			6 trips	x	\$35 ea	=	\$210
<b>Total</b>							
						<b>\$210</b>	<b>\$9,280</b>

		<b>Expenses</b>	<b>Labor</b>
		<b>\$6,248</b>	<b>\$18,653</b>
<b>Total (Construction Services)</b>		<b>\$24,901</b>	

		<b>Expenses</b>	<b>Labor</b>
<b>Fee Carryover from Original Fee and Change Orders #1 and #2</b>		<b>\$180</b>	<b>\$8,722</b>
		<b>\$8,902</b>	

		<b>Expenses</b>	<b>Labor</b>
<b>Change Order #3 Request Total (Construction Services)</b>		<b>\$6,068</b>	<b>\$9,931</b>
		<b>\$15,998</b>	



**2020 Fee Schedule**

**Hourly Rate**

Project Principal	\$140
Project Engineer (PE)	\$135
Project Surveyor (PLS)	\$126
Field Technician	\$125
Engineering Technician	\$ 90
Survey Technician	\$ 85
Drafting Technician	\$ 75

**SUB-CONSULTANT TEAM MEMBERS**Firm Name: Goodbee & Associates, Inc.

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

<b>Title/Classification</b>	<b>Responsibilities</b>	<b>Rate/Hr.</b>
President	Directs all aspects of the firm's operations	\$185
Principal	Directs all aspects of the firm's operations	\$185
Project Manager III	Leads and reviews technical work	\$150
Project Manager II	Leads and reviews technical work	\$135
Project Manager I	Leads and reviews technical work	\$125
Landscape Architect (Principal)	Leads and reviews technical work	\$175
Landscape Architect III	Leads and reviews technical work	\$150
Landscape Architect II	Leads and reviews technical work	\$130
Landscape Architect I	Leads and reviews technical work	\$110
Designer III	Completes technical work under direction of a PM/LA	\$115
Designer II	Completes technical work under direction of a PM/LA	\$110
Designer I	Completes technical work under direction of a PM/LA	\$100
CAD II	Completes technical work under direction of a PM/LA	\$100
CAD I	Completes technical work under direction of a PM/LA	\$80
Administrator	Bookkeeping and general administration	\$110
Administrative Assistant	General administration	\$80

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

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.

**ATTACHMENT 2**  
**CONSULTANT TEAM**  
**MEMBERS**

**PRIME CONSULTANT: HDR Engineering, Inc.**

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

LABOR CATEGORY	RESPONSIBILITIES	HOURLY BILLING RATE
Project Principal	A senior officer of the company; Signature authority; Authority to dedicate resources; Extensive knowledge of engineering practices; Knowledge of vast resources available within HDR	\$225
Senior Technical Expert	Extensive knowledge of individual transportation disciplines; Internal and/or national expert and presenter on transportation specialty; Oversees mid-level staff and provide technical quality review of their work; 15-30 years of experience	\$205
Senior Project Manger, Level II	Works to develop scopes and budgets; Manages multi-discipline task orders and coordinates between technical disciplines; Provides day-to-day technical management of task orders; Develops assignments for staff; Coordinates directly with the client task order manager on a day-to-day basis; More than 12 years of experience	\$195
Senior Project Manger, Level I	Works to develop scopes and budgets; Manages multi-discipline task orders and coordinates between technical disciplines; Provides day-to-day technical management of task orders; Coordinates directly with the client task order manager on a day-to-day basis; 8-12 years of experience	\$175
ROW Project Manager	Works collaboratively with design team to develop ROW scopes, schedules and budgets; Manages all aspects of the ROW process including surveying of ROW features, ROW plans development, valuation, negotiation and closing of all acquisitions. Provides day-to-day technical management of ROW specialty; Coordinates with design	\$180

	team and client; 8-12 years of ROW experience	
Senior Project Professional	Handles or directs the most complex issues within their discipline; Coordinates between technical disciplines; Performs technical work and manages technical staff; Often performs QC review and solve complex problems; More than 8 years of experience	\$185
Project Professional II	A registered professional engineer or accredited position; Fully trained within their discipline; Direct the work of junior staff; 10-15 years of experience	\$170
Project Professional I	A recent graduate who has technical training in design, planning, CAD and GIS; Capable of working productively under the direction of senior staff; Well trained within their discipline; 6-12 years of experience	\$160
Design Engineer, Level IV	A registered professional engineer; Fully trained within their respective discipline; Works to develop scopes and budgets; Manages technical resources and task orders; Directs the works of junior and mid-level staff; 15-20 years of experience	\$150
Design Engineer, Level III	A registered professional engineer; Manages technical resources and individual work tasks; Works to develop scopes and budgets; Well trained within their respective discipline; Directs the works of junior and mid-level staff; 10-15 years of experience	\$140
Design Engineer, Level II	A registered professional engineer; Manages individual work tasks; Works to develop scopes and budgets; Well trained within their respective discipline; Directs the works of junior staff; 5-10 years of experience	\$125
Design Engineer, Level I	A recent registered professional engineer; Performs work assigned by mid-level and senior staff; 4-6 years of experience	\$105
EIT	A recent college graduate; Performs work assigned by licensed mid-level and senior staff; 1-3 years of experience	\$95

Senior Transportation Planner	Manages individual task orders; Works to develop scopes and budgets; Directs technical work with junior staff and coordinates directly with CCD; 8+ years of experience	\$100
Transportation Planner II	Manages individual task orders; Works to develop scopes and budgets; Directs technical work with junior staff and coordinates directly with CCD; 4-8 years of experience	\$85
Transportation Planner I	Manages individual task orders; Works to develop scopes and budgets; Performs work assigned by mid-level and senior staff; Prepares technical reports, GIS maps, graphics; 0-4 years of experience	\$75
Principal Environmental Scientist	A graduate engineer or scientist with advanced experience in biological, historic, economic and social sciences. Typically requires more than 25 years of professional experience and an industry expert in knowledge of NEPA and other applicable agency regulations.	\$320
Senior Environmental Scientist, Level II	A graduate engineer or scientist with applicable training in biological, historic, economic and social sciences. Typically requires more than 15 years of professional experience and an in-depth knowledge of NEPA and other applicable regulations.	\$220
Senior Landscape Architect	A registered landscape architect with extensive knowledge of their respective discipline. Coordinates between technical disciplines. Oversees mid-level staff and provides technical quality review of their work. More than 10 years of experience.	\$200
Appraisal/Appraisal Reviewer	Prepares appraisals, completes review of appraisals for compliance with the CDOT ROW Manual and federal Uniform Act, assists with preparation of waiver valuations. Appraiser with Colorado Certified General Real Estate Appraisal License who is on CDOT approved list of eminent domain appraisers and appraisal reviewers, 6+ years of experience.	\$130
Right of Way Acquisition/Relocation Specialist II	Prepares waiver valuations, offer packets, final letters, closing packets and other required acquisition forms; Negotiates the acquisition of parcels needed for projects, works with title companies on closings, or closes	\$100

	transactions, as needed; Provides all relocation benefits to displaced occupants. Well trained within the ROW discipline; Provides QA/QC of all ROW deliverables; 4+ years of experience	
Right of Way Acquisition/Relocation Specialist I	Prepares waiver valuations, offer packets, final letters, closing packets and other required acquisition forms; Negotiates the acquisition of parcels needed for projects, works with title companies on closings, or closes transactions, as needed; Provides all relocation benefits to displaced occupants. Trained within the ROW discipline; 1+ years of experience	\$85
Senior Environmental Scientist, Level I	A graduate engineer or scientist with applicable training in biological, historic, economic and social sciences. Typically requires more than 8 years of professional experience and an in-depth knowledge of NEPA and other applicable regulations.	\$190
Environmental Scientist II	Works to develop scopes and budgets; Well trained within their respective discipline; Directs the works of junior and mid-level staff; Provides QA/QC of all environmental deliverables; 10+ years of experience	\$160
Environmental Scientist I	Manages individual work tasks; Works to develop scopes and budgets; Well trained within their respective discipline; Directs the works of junior staff; 5-10 years of experience	\$135
Public Involvement Manager	A senior professional who will develop and manage the outreach strategy for key stakeholders and the public; including content development, QA/QC, facilitation of meetings, oversight of public meeting development; innovative outreach techniques; 10+ years experience.	\$125
Environmental Technician	Performs work assigned by mid-level and senior staff; Performs field reconnaissance; 2-6 years of experience	\$95
Technical Writer	Interprets engineering plans and concepts to prepare written materials and specifications to be used during the design or construction phase of a project. Typically requires a B.S. degree and working knowledge of graphics and word processing software.	\$95

Senior Technician	A senior professional with specific experience in CAD design, mapping, technical graphics, GIS, and computer applications for transportation projects; Works on multi-discipline projects and leading the development of complex plan sets; 10-20 years of experience	\$120
Site Design Coordinator	A recent graduate who has training in landscape design, planning, CAD and 3D digital design. Capable of working productively under the direction of senior staff. Well trained within their discipline. 5-10 years of experience.	\$110
Technician	A professional with specific experience in CAD design, mapping, technical graphics, GIS, and computer applications for transportation projects; 2-10 years of experience	\$100
Transportation Intern	Performs work assigned by mid-level and senior staff; Performs research and data collection; Supports others in the preparation of technical reports, GIS maps, graphics; 0 years of experience	\$65
Project Controller	Project support personnel who provides support for invoicing, accounts payable/receivable, project controls, budgeting and scheduling	\$110
Public Involvement Coordinator, Level II	A professional with specific experience in agency and stakeholder outreach including public meetings and communications materials; 6+ years experience	\$115
Public Involvement Coordinator, Level I	A public involvement support staff with experience running public meeting logistics, public comment tracking, content development; 0-3 years experience	\$65
Public Involvement Graphics Coordinator	A professional graphic artist who transforms technical information into publicly-consumable visuals for meetings, websites, outreach events and other collateral; 8+ years experience	\$95
Project Administration, Level II	Administrative support personnel who provides support for work processing, spreadsheets, graphics, scheduling, budget control and communications; Develops project controls and leads internal project set up and review meetings; 8-15 years of experience	\$85

Project Administration, Level I	Administrative support personnel who provides support for work processing, spreadsheets, graphics, scheduling, budget control and communications; 0-8 years of experience	\$70
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Multiplier, which when multiplied by the direct labor rate yields the above hourly billing rate: 2.9.

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

**REIMBURSABLE EXPENSES**

PRIME CONSULTANT: HDR Engineering, Inc.

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

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

1. Actual cost of reproduction of drawings and specifications, requested by the city.
2. Travel cost for sub consultants not local to the project. Travel shall be pre-approved by the City PM.

**Actual Costs**

<u>Item</u>	<u>Charge Rate</u>
Copies (8 1/2 x 11")	\$.45/ each
Copies (8 1/2 x 14")	\$.75/ each
Red-line copies	\$.14/ S.F.
Reproducibles	\$.25/ page



## Schedule of Unit Rates – 2020

Labor/Employee Type	General Responsibilities	Rate
Administration	General project administration, project support.	\$64
Regulated Materials Specialist	Completes field services, including air clearances for asbestos/IH abatement or remediation projects, or field oversight for soil remediation projects such as asbestos with soil removal that requires an Air Monitoring Specialist.	\$81
Regulated Materials Specialist I	Completes more complicated tasks than the Regulated Materials Specialist, including small building inspection surveys, contractor oversight, and air clearances; will also complete or manage individual tasks assigned by others, and assemble data for reports.	\$89
Field Specialist / Project Assistant	Data management and administrative support, invoicing; maintain field equipment; administrative contract control.	\$85
Field Specialist / Project Assistant I	Task-level implementation related to data management and project support in both the field and office; assists in contract administration including subcontractor management and detailed contract controls.	\$92
Field Engineer/ Scientist	Conducts routine field surveys to support General Professional levels, as well as compilation of scientific data collection and research.	\$99
Field Engineer/ Scientist I	Conducts and supervises complex field surveys to support General Professional levels, as well as compilation of scientific data collection and research.	\$107
CAD/GIS Specialist	AutoCAD, floor plans, elevations, sections, scale drawings, layering and concept design for architects and engineers. Duties may include configuring and maintaining CAD libraries, engineering documentation management systems and CAD computer network systems. GIS Specialist Utilizes programs such as ESRI ArcGIS to graphically present data or create figures or maps.	\$89
CAD/GIS Specialist I	CAD Specialist I is responsible for supervising junior-level staff configuring and maintaining CAD libraries, engineering documentation management systems and CAD computer network systems. Individual may possess knowledge of 3-D High-Tech Animation for software 3-D Studio Maxx or 3-D Studio VIZ. GIS Specialist I is responsible for conducting GIS data acquisition, input, conversion, documentation, mapping, and analysis on projects.	\$115
CAD/GIS Specialist II	CAD Specialist II is responsible for supervising junior and mid-level staff configuring and maintaining CAD libraries, engineering documentation management systems and CAD computer network systems. Individual may possess knowledge of 3-D High-Tech Animation for software 3-D Studio Maxx or 3-D Studio VIZ. GIS Specialist I is responsible for conducting GIS data acquisition, input, conversion, documentation, mapping, and analysis on projects.	\$125
CAD/GIS Specialist III	Directs and gathers GIS data and prepares complex reporting and analysis. Oversight of technical products related to GIS project management support. Conducts GIS data conversion, documentation, mapping and analysis. Utilizes software such as ESRI ArcGIS, and interprets data for various technical disciplines (e.g., biology, economics, NEPA).	\$150
Assistant Historian	Conducts research and field services in support of a technical lead.	\$64
Field Historian	Conducts research to support evaluation and development of recommendations for the significance, effect, and treatment of cultural resources.	\$89
Archaeologist/ Historian	Conducts research to support evaluation and development of recommendations for the significance, effect, and treatment of cultural resources. Writes technical reports.	\$115
Archaeologist/ Historian I	Implements initial evaluations and recommendations for significance, effect, and treatment of cultural resources, and writes descriptive technical reports.	\$125
Archaeologist/ Historian II	Prepares complex reporting and analysis, including oversight of technical products related to historic, archeological, paleontological, Section 106 and Section 4(f) resources. Directs the implementation of initial evaluations and recommendations for significance, effect, and treatment of cultural resources.	\$150
Archaeologist/ Historian III	Responsible for technical completeness and competency of all submissions and work performed, including performance of junior- and mid-level archaeologists and historians; development of work plans, research designs, and mitigation proposals; adherence to professional standards; and integration of field data into comparative regional perspectives for analytical (evaluative) purposes.	\$183
Economist	Conducts data gathering; conducts analysis and performance of economic evaluations; conducts economic demographic analysis; prepares sections of technical reports.	\$115
Economist I	Conducts more complex analysis and economic evaluations; conducts economic demographic analysis; responsible for preparation and review of technical reports.	\$125
Economist II	Directs and gathers data and prepares complex reporting and analysis. Oversight of economic evaluations and economic demographic analysis.	\$150
Economist III	Responsible for technical completeness and competency of all submissions and work performed, including performance of junior- and mid-level staff conducting economic evaluations and report writing. Conducts complex economic analysis and report writing.	\$190
Engineer	Conducts the collection and initial interpretation of engineering, and assists with the preparation of figures, exhibits, charts and data tables.	\$115
Engineer I	Conducts data analysis and input, field data gathering, and miscellaneous field services related to environmental engineering, and writes descriptive technical reports.	\$125
Engineer II	Prepares complex reporting and analysis including oversight of technical products related to engineering studies, requirement development and programming, engineering site investigations and evaluation, facility criteria	\$150



## Schedule of Unit Rates – 2020

Labor/Employee Type	General Responsibilities	Rate
	development, facility requirements development, budget and programming support, environmental analyses and program execution.	
Engineer III	Responsible for technical completeness and competency of all submissions and work performed, including performance of junior- and mid-level engineers; performing engineering studies; developing requirements and programming; engineering site investigations and evaluation; facility criteria development; facility requirements development, budget and programming support; and environmental analyses and program execution.	\$190
Industrial Hygienist	Completes field services, including Certified Asbestos Building Inspection surveys, contractor bid development and support, and complicated oversight and air quality clearances.	\$115
Industrial Hygienist I	Conducts industrial hygiene and/or hazardous materials (e.g., asbestos, lead paint, mold) assessments and investigations, asbestos sampling, asbestos in soil evaluations/monitoring, and design. Gathers and correlates data and evaluates information for preparation of technical reports.	\$125
Industrial Hygienist II	Prepares complex reporting and analysis, including oversight of technical products related to regulated materials and industrial hygiene, workplace safety, asbestos, mold and lead. Directs field surveys related to industrial hygiene studies, such as asbestos, lead, mold or other regulated materials. Gathers and correlates data and evaluates information for preparation of technical reports.	\$150
Industrial Hygienist III	Responsible for technical completeness and competency of all submissions and work performed, including performance of junior- and mid-level industrial hygienists; development of work plans; complicated designs and mitigation; adherence to regulatory standards; and integration of field data into comprehensive documents.	\$190
Scientist	Conducts the collection and initial interpretation of scientific data, such as soil logging, soil and groundwater sampling, water-level surveying, scientific data, noise or air measurements.	\$115
Scientist I	Conducts data analysis and input, field data gathering, miscellaneous field services related to NEPA, air quality, noise, geology, chemistry and environmental science, and writes descriptive technical reports.	\$125
Scientist II	Directs the gathering of data and prepares complex reporting and analysis. Oversight of technical products and development of detailed studies related to NEPA, air quality, noise, environmental justice, biology, geology, chemistry and environmental science.	\$150
Scientist III	Responsible for technical completeness and competency of all submissions and work performed, including performance of junior- and mid-level planners and scientists. Conduct and supervise professional and technical staff to complete studies focused on planning, NEPA evaluations, air quality, noise, biology, geology, chemistry and environmental science.	\$190
Project Manager	Project management on routine projects. Develops project requirements, site investigations, facility requirements development, budget and programming support, analyses, and project execution. Familiar with planning, supervising and overseeing the overall project tasks.	\$150
Project Manager I	Project management on moderately complex projects, including coordination of multi-disciplinary teams, preparing responses to agency questions, and facilitates project meetings with client and regulators. Develops project requirements, site investigations, facility requirements development, budget and programming support, analyses and project execution.	\$163
Project Manager II	Project management, including coordination of multi-disciplinary teams, negotiating complex solutions with regulatory agencies and stakeholders, leads public information meetings, and develops and implements complex project strategies.	\$180
Program Manager	Responsible for planning, scheduling and overseeing the overall program as well as directing and coordinating various project tasks. The Program Manager also maintains a productive and effective client relationship with the most senior levels of the client organization.	\$188
Executive Management	Responsible for providing strategic direction, vision, and leadership. Performs senior-level QA/QC and conducts meetings and negotiations with regulatory and oversight agencies.	\$205
Expert Witness	Expert Witness Preparation and Deposition.	\$225

Lump Sum Equipment Charges	
General Field Visits (general projects, asbestos sampling kit [bulk sampling])	\$50/day
Biological Field Visit (includes sub-meter GPS, wetland flags, field notebook, and other incidentals)	\$250/day
Soil Logging/Screening (during drilling/test pits; includes PID or other instruments, GPS, and other incidentals)	\$250/day
Groundwater Sampling (includes YSI field measurements, water level meter, bailers, and other incidentals)	\$250/day
Noise Monitoring	\$250/day
Asbestos Air Monitoring Field Kit	\$115/day
Mileage (passenger car)	Current IRS rate
Outside Expenses (e.g., shipping, rental equipment, travel, subcontractor/subconsultant, laboratory fees)	Cost + 10%
<b>Specialty In-House Equipment Billed as Indicated in Project-specific Proposals</b>	