

Contract for Professional Architectural and Engineering Services

Project W.O. 21-33 Babcock Boulevard Drainage Area Improvements

In consideration of the mutual promises herein, City of Billings and Advanced Engineering and Environmental Service, LLC (AE2S) agree as follows. This Contract consists of:

- Part I, consisting of 15 Sections of Special Provisions;
- Part II, consisting of 11 Sections of General Provisions;
- Appendix A consisting of 2 pages (Basic Services of Contractor);
- Appendix B consisting of 1 pages (Methods and Times of Payment);
- Appendix C consisting of 1 pages (Additional Services of Contractor);
- Appendix D consisting of 1 pages (Schedule of Professional Fees);
- Appendix E consisting of 1 pages (Project Schedule);
- Appendix F consisting of 2 pages (Certificate(s) of Insurance);

PART I SPECIAL PROVISIONS

Section 1. Definitions.

In this Contract:

- A. "Administrator" means the City Engineer of the Engineering Division of the Public Works Department or his designee.
- B. "Billings" means the City of Billings.
- C. "Contractor" means Advanced Engineering and Environmental Services, LLC (AE2S).

Section 2. Scope of Services.

- A. The Contractor shall perform professional services in accordance with Appendix A, which is attached hereto and incorporated in this Section by reference.
- B. Billings shall pay the Contractor in accordance with the Schedule of Professional Fees attached as Appendix D and incorporated herein by reference for services actually performed under this Contract.

- C. Billings shall not allow any claim for services other than those described in this Section. However, the Contractor may provide, at its own expense, any other services that are consistent with this Contract.
- D. The Engineer shall provide as-built drawings as approved by the City of Billings, to the Administrator within 30 days after the project completion date. Final payment will be withheld until the as-built drawings are received by the City of Billings. Requirements for submitting as constructed documents of completed Private Contracts, Work Orders, Special Improvement Districts and Site plans involving any City of Billings infrastructure: a point file; 1 (*.asc, *.txt, comma delimited; point number, northing, easting, elevation and description) / 2 (*.csv, with headings for; point number, northing, easting, elevation and description), with northings and eastings to the nearest tenth of a foot, elevations to the nearest hundredth of a foot, representing new, updated or relocated City of Billings infrastructure features such as, but not limited to Sanitary Sewer Manholes, Storm Drain Manholes, Water Valves, Water Bends, Signals, Street Light, etc., in the coordinates of Montana State Plane, Zone 2500 using NAD83(2011), Horizontal and NAVD88 Vertical, Horizontal units and Vertical units will be International feet, one half size paper copy to scale, one full size paper copy to scale, two CD's or DVD's with PDF files being half size to scale and full size to scale and AutoCAD DWG files as-constructed / as-built, Version 2016, or equivalent.
- E. The Contractor shall provide certified construction payrolls to the Administrator stating in writing that the payrolls have been reviewed and are acceptable.

Section 3. Time for Performance.

- A. This Contract becomes effective when signed on behalf of Billings.
- B. The Contractor shall commence performance of the Work described in Section 2 on receipt of written Notice to Proceed and complete that performance in accordance with the schedule set forth in Appendix E.
- C. This Contract shall terminate at midnight on December 31, 2024.

Section 4. Compensation; Method of Payment.

- A. Each month, or at the conclusion of each phase of the Work for which payment is due, as negotiated on a per-task basis, the Contractor shall present a bill to the Administrator describing the Work for which it seeks payment and documenting expenses and fees to the satisfaction of the Administrator. If any payment is withheld because the Contractor's performance is unsatisfactory, the Administrator must, within ten (10) days of the payment denial, notify the Contractor of the payment denial and set forth, with reasonable specificity, what was unsatisfactory and why. Billings will pay Contractor within 30 days of receiving an acceptable invoice.
- B. The Contractor is not entitled to any compensation under this Contract, other than is expressly provided for in this Section.
- C. As a condition of payment, the Contractor shall have paid all City taxes currently due and owing by the Contractor.

Section 5. Termination of the Contractor's Services.

The Contractor's services under Section 2 of this Part may be terminated:

- A. By mutual consent of the parties.
- B. For the convenience of Billings, provided that Billings notifies the Contractor in writing of its intent to terminate under this paragraph at least 10 days prior to the effective date of the termination.
- C. For cause, by either party where the other party fails in any material way to perform its obligations under this Contract. Termination under this Subsection is subject to the condition that the terminating party notifies the other party of its intent to terminate, stating with reasonable specificity the grounds therefor, and the other party fails to cure the default within 30 days after receiving the notice.

Section 6. Duties Upon Termination

- A. If Billings terminates the Contractor's services for convenience, Billings shall pay the Contractor for its actual costs reasonably incurred in performing before termination and Billings shall pay for services rendered prior to termination. Payment under this Subsection shall never exceed the total compensation allowable under Section 4 of this Part. All finished and unfinished documents and materials prepared by the Contractor shall become the property of Billings.
- B. If the Contractor's services are terminated for cause, Billings shall pay the Contractor the reasonable value of the services satisfactorily rendered prior to termination, less any damages suffered by Billings because of the Contractor's failure to perform satisfactorily. The reasonable value of the services rendered shall never exceed ninety percent (90%) of the total compensation allowable under Section 4 of this Part. Any finished or unfinished documents or materials prepared by the Contractor under this Contract shall become the property of Billings at its option.
- C. If the Contractor receives payments exceeding the amount to which it is entitled under Subsections A or B of this Section, he shall remit the excess to the Administrator within 30 days of receiving notice to do so.
- D. The Contractor shall not be entitled to any compensation under this Section until the Contractor has delivered to the Administrator all documents, records, Work product, materials and equipment owned by Billings and requested by the Administrator.
- E. If the Contractor's services are terminated for whatever reason the Contractor shall not claim any compensation under this Contract, other than that allowed under this Section.
- F. If a final audit has not been performed before the Contractor's services are terminated, Billings may recover any payments for costs disallowed as a result of the final audit.
- G. Except as provided in this Section, termination of the Contractor's services under Section 5 of this Part does not affect any other right or obligation of a party under this Contract.

Section 7. Insurance.

- A. The Contractor shall maintain in good standing the insurance described in Subsection B of this Section. Before rendering any services under this Contract, the Contractor shall furnish the Administrator with proof of insurance in accordance with Subsection B of this Section.
- B. The Contractor shall provide the following insurance:
 - 1. Workers' compensation and employer's liability coverage as required by Montana law.
 - 2. Commercial general liability, including contractual and personal injury coverage's -- \$1,500,000 per occurrence.
 - 3. Commercial automobile liability -- \$1,500,000 per accident.
 - 4. Professional liability in the amount of \$1,500,000 per claim.
- C. Each policy of insurance required by this Section shall provide for no less than 30 days' advance notice to Billings prior to cancellation.
- D. Billings SHALL be listed as an additional insured on all policies except Professional Liability and Worker's Compensation Policies. In addition, all policies except Professional Liability and Worker's Compensation shall contain a waiver of subrogation against Billings.

Section 8. Assignments.

Unless otherwise allowed by this Contract or in writing by the Administrator, any assignment by the Contractor of its interest in any part of this Contract or any delegation of duties under this Contract shall be void, and an attempt by the Contractor to assign any part of its interest or delegate duties under this Contract shall give Billings the right immediately to terminate this Contract without any liability for Work performed.

Section 9. Ownership; Publication, Reproduction and Use of Material.

- A. Except as otherwise provided herein, all data, documents and materials produced by the Contractor under this Contract shall be the property of Billings, which shall retain the exclusive right to publish, disclose, distribute and otherwise use, in whole or in part, any such data, documents, or other materials. Exclusive rights shall not be attributed to portions of such materials presently in the public domain or which are not subject to copyright. Contractor shall retain rights to pre-existing proprietary property including but not limited to interactive models. The Contractor shall have the right to include photographic or artistic representations of the design and construction of the Project among the Contractor's promotional and professional materials. The Contractor's materials shall not include Billings' confidential or proprietary information regardless of whether Billings has previously advised the Contractor in writing of the specific information considered by Billings to be confidential and proprietary.
- B. Equipment purchased by the Contractor with Contract funds: See Appendix A, Section 3. Scope of Work.
- C. Should Billings elect to reuse Work products provided under this Contract for other than the original project and/or purpose, Billings will indemnify and hold harmless

the Contractor from any and all claims, demands and causes of action of any kind or character arising as a result of reusing the documents developed under this contract. Additionally, any reuse of design drawings or specifications provided under this Contract must be limited to conceptual or preliminary use for adaptation, and the original Contractor's or subcontractor's signature, professional seals and dates removed. Such reuse of drawings and specifications, which require professional seals and dates removed, will be signed, sealed, and dated by the professional who is in direct supervisory control and responsible for adaptation.

Section 10. Notices.

Any notice required pertaining to the subject matter of this Contract shall be either sent via facsimile (FAX) or mailed by prepaid first class registered or certified mail, return receipt requested to the following addresses:

Billings: Tyler Westrope
City of Billings
Public Works Engineering
2224 Montana Avenue
Billings, Montana 59101

Contractor: AE2S
2624 Minnesota Avenue
Billings, MT 59101

Phone: (406) 702-7716

Notices are effective upon the earlier of receipt, proof of good transmission (facsimiles only), or 5 days after proof of proper posting.

Section 11. Contract Budget.

In connection with its performance under this Contract, the Contractor shall not make expenditures other than as provided in line items in the Contract budget.

Section 12. Force Majeure.

- A. Any failure to perform by either party due to force majeure shall not be deemed a violation or breach hereof.
- B. As used in this Contract, force majeure is an act or event of substantial magnitude, beyond the control of the delayed party, which delays the completion of this Contract, including without limitation:
 1. Any interruption, suspension or interference resulting solely from the act of Billings or neglect of Billings not otherwise governed by the terms of this Contract.
 2. Strikes or Work stoppages.
 3. Any interruption, suspension or interference with the project caused by acts of God, or acts of a public enemy, wars, blockades, insurrections, riots, arrests or restraints of governments and people, civil disturbances or similar occurrences.

4. Order of court, administrative agencies or governmental officers other than Billings.

Section 13. Financial Management System.

The Contractor shall establish and maintain a financial management system that:

- A. Provides accurate, current, and complete disclosure of all financial transactions relating to the Contract;
- B. Maintains separate accounts by source of funds for all revenues and expenditures and identifies the source and application of funds for the Contractor's performance under this Contract, including information pertaining to subcontracts, obligations, unobligated balances, assets, liabilities, outlays and income;
- C. Effectively controls and accounts for all municipal funds and Contract property;
- D. Compares actual expenditures with budgeted amounts and relates financial information to performance or productivity data including unit cost information where applicable;
- E. Allocates administrative costs to direct service delivery units;
- F. Minimizes the time between receipt of funds from Billings and their disbursement by the Contractor;
- G. Provides accounting records supported by source documentation; and
- H. Provides a systematic method assuring the timely and appropriate resolution of audit findings and recommendations.

Section 14. Funding Requirements.

In the event that any funding source for this Contract should impose additional requirements upon Billings for the use of those funds, the Contractor agrees to abide by those additional requirements immediately upon receipt of written notice thereof from Billings.

Section 15. Subcontracts.

The Contractor may enter into subcontracts for the purchase of goods and services necessary for the performance of this Contract, provided:

- A. Every subcontract shall be reduced to writing and contain a precise description of the services or goods to be provided and the nature of the consideration paid therefor.
- B. Every subcontract under which the Contractor delegates the provision of services shall be subject to review and approval by the Administrator before it is executed by the Contractor.
- C. Every subcontract in an amount exceeding \$1,000 shall require reasonable access to business records of the subcontractor relating to the purchase of goods or services pursuant to the subcontract.

PART II GENERAL CONTRACT PROVISIONS

Section 1. Relationship of Parties.

The Contractor shall perform its obligations hereunder as an independent Contractor of Billings. Billings may administer the Contract and monitor the Contractor's compliance with its obligations hereunder. Billings shall not supervise or direct the Contractor other than as provided in this Section.

Section 2. Nondiscrimination.

- A. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, ancestry, age, sex, or marital status or who is a "qualified individual with a disability" (as that phrase is defined in the Americans With Disabilities Act of 1990). The Contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, or mental or physical impairment/disability. Such action shall include, without limitation, employment, upgrading, demotion or transfer, recruitment or recruiting advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The Contractor agrees to post, in conspicuous places available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.
- B. The Contractor shall state, in all solicitations or advertisements for employees to Work on Contract jobs, that all qualified applicants will receive equal consideration for employment without regard to race, color, religion, national origin, ancestry, age, sex or marital status, or mental or physical impairment/disability.
- C. The Contractor shall comply with any and all reporting requirements that may apply to it which the City of Billings may establish by regulation.
- D. The Contractor shall include the provisions of Subsections A through C of this Section in every subcontract or purchase order under this Contract, so as to be binding upon every such subcontractor or vendor of the Contractor under this Contract.
- E. The Contractor shall comply with all applicable federal, state, and city laws concerning the prohibition of discrimination.
- F. The Contractor and subcontractor shall abide by the requirements of 41 CFR 60-300.5(a) and 41 CFR 60-741.5(a), which prohibit discrimination against qualified protected veterans and/or qualified individuals on the basis of disability, and requires affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans and individuals with disabilities.
- G. The Contractor and subcontractor shall abide by the requirements of 41 CRF 60-1.4, which states employees or applicates may not be discharges or in any other manner discriminated against because they have inquired about, discussed, or disclosed their own pay or the pay of another employee or applicant. However, employees who have access to the compensation information of other employees

or applicants as a part of their essential job functions cannot disclose the pay of other employees or applicants to individuals who do not otherwise have access to compensation information, unless the disclosure is (a) in response to a formal complaint or charge, (b) in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or (c) consistent with the contractor's legal duty to furnish information.

Section 3. Permits, Laws, and Taxes.

The Contractor shall acquire and maintain in good standing all permits, licenses and other entitlements necessary to its performance under this Contract. All actions taken by the Contractor under this Contract shall comply with all applicable statutes, ordinances, rules and regulations. The Contractor shall pay all taxes pertaining to its performance under this Contract.

Section 4. Nonwaiver.

The failure of either party at any time to enforce a provision of this Contract shall in no way constitute a waiver of the provision, nor in any way affect the validity of this Contract or any part hereof, or the right of such party thereafter to enforce each and every provision hereof.

Section 5. Amendment.

- A. This Contract shall only be amended, modified or changed by a writing, executed by authorized representatives of the parties, with the same formality as this Contract was executed.
- B. For the purposes of any amendment modification or change to the terms and conditions of this Contract, the only authorized representatives of the parties are:

Contractor: David Carlson, Operations Manager
(title of position)

Billings: City Council or Authorized Designee

- C. Any attempt to amend, modify, or change this Contract by either an unauthorized representative or unauthorized means shall be void.

Section 6. Jurisdiction; Choice of Law.

Any civil action rising from this Contract shall be brought in the District Court for the Thirteenth Judicial District of the State of Montana, Billings. The law of the State of Montana shall govern the rights and obligations of the parties under this Contract.

Section 7. Severability.

Any provision of this Contract decreed invalid by a court of competent jurisdiction shall not invalidate the remaining provisions of the Contract.

Section 8. Integration.

This instrument and all appendices and amendments hereto embody the entire agreement of the parties. There are no promises, terms, conditions or obligations other than those contained herein; and this Contract shall supersede all previous communications, representations or agreements, either oral or written, between the parties hereto.

Section 9. Liability.

The Contractor shall indemnify, defend, save, and hold Billings harmless from any and all claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses including reasonable attorneys' fees and costs, arising from any wrongful or negligent act, error or omission of the Contractor or any agent, employee or subcontractor as a result of the Contractor's or any subcontractor's performance pursuant to this Contract.

- A. The Contractor shall not indemnify, defend, save and hold Billings harmless from claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses or attorneys' fees and costs arising from wrongful or negligent acts, error or omission solely of Billings occurring during the course of or as a result of the performance of the Contract.
- B. Where claims, lawsuits or liability, including attorneys' fees and costs arise from wrongful or negligent act of both Billings and the Contractor, the Contractor shall indemnify, defend, save, and hold Billings harmless from only that portion of claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses including attorneys' fees and costs, which result from the Contractor's or any subcontractor's wrongful or negligent acts occurring as a result from the Contractor's performance pursuant to this Contract.

Section 10. Inspection and Retention of Records.

The Contractor shall, at any time during normal business hours and as often as Billings may deem necessary, make available to Billings, for examination, all of its records with respect to all matters covered by this Contract for a period ending three years after the date the Contractor is to complete performance in accordance with Section 2 of the Special Provisions. Upon request, and within a reasonable time, the Contractor shall submit such other information and reports relating to its activities under this Contract, to Billings, in such form and at such times as Billings may reasonably require. The Contractor shall permit Billings to audit, examine and make copies of such records, and to make audits of all invoices, materials, payrolls, records of personnel, and other data relating to all matters covered by this Contract. Billings may, at its option, permit the Contractor to submit its records to Billings in lieu of the retention requirements of this Section.

Section 11. Availability of Funds.

Payments under this Contract may require funds from future appropriations. If sufficient funds are not appropriated for payments required under this Contract, this Contract

shall terminate without penalty to Billings; and Billings shall not be obligated to make payments under this Contract beyond those which have previously been appropriated.

IN WITNESS WHEREOF, the parties have executed this Contract on the date and at the place shown below.

City of Billings

Contractor

William A. Cole, Mayor

Advanced Engineering and Environmental Services, LLC

Date: _____

Name: _____
Title: _____
Date: _____

ATTEST:

IRS Tax ID # _____

City Clerk

APPROVED AS TO FORM:

Date: _____

By _____
BRENT BROOKS, City Attorney

Appendix A

Basic Services of Engineer

Section 1. Engineer's Rights and Duties.

- A. To furnish all labor, materials, equipment, supplies, and incidentals necessary to conduct and complete the Engineer's portion of the project as defined in the scope of work and to prepare and deliver to Billings all plans, specifications, bid documents, and other material as designated herein.
- B. Ascertain such information as may have a bearing on the work from local units of government, utility companies, and private organizations and shall be authorized to procure information from other authorities besides Billings, but shall keep Billings advised as to the extent of these contacts and the results thereof.
- C. Prepare and present such information as may be pertinent and necessary in order for Billings to pass critical judgment on the features of the work. The Engineer shall make changes, amendments or revisions in the detail of the work as may be required by Billings. When alternates are being considered, Billings shall have the right of selection.
- D. Engineer's work shall be in accordance with the standards of sound engineering and present City, State, and National standards and policies currently in use.
- E. Conform to the requirements of the Montana Code Annotated Title 18 "Public Contracts" and more particularly Sections 18-2-121 and 18-2-122, and all other codes of the State of Montana applicable to providing professional services including codes and standards nationally recognized.
- F. The Engineer shall certify with the submission of final plans that the plans are in conformance with applicable sections of Title 69, Chapter 4, Part 5, of the Montana Code Annotated as pertaining to existing utilities.
- G. To perform professional services in connection with the project and will serve as Billings' representative in those phases of the project to which this agreement applies.
- H. Where Federal funds are involved, the necessary provisions to meet all requirements will be complied with and documents secured and placed in the bidding documents.
- I. Submit an estimated progress schedule as to time and costs at the beginning of the work, and monthly progress reports thereafter until complete. The reports will include any problems, potential problems, and delays as foreseen by the Engineer. Reports will be submitted in a timely manner to permit prompt resolution of problems.

- J. Name a Task Director who shall be the liaison between Billings and the Engineer. For this project the Task Director designated for the Engineer is David Carlson working under the Principal-in-Charge, Grant Meyer.

Section 2. Billings Rights and Duties.

- A. To furnish all labor, materials, equipment, supplies, and incidentals necessary to conduct and complete Billings' portion of the project as designated in the scope of work.
- B. Name a Task Director who shall be the liaison between the Engineer and Billings. For this project, the Task Director designated is David Carlson.

Section 3. Scope of Work.

Alternatives Analysis and Preliminary Design for Regional Improvements in the Babcock Boulevard, Nutter Boulevard, Wicks Lane, and Castle Rock Park Area

Final Design, Bidding & Construction for Improvements along Babcock Boulevard corridor (including Sourdough basin)

Phase 020 – Study and Report: Selecting Preferred Alternatives for Babcock Boulevard and Regional Drainage Improvements

Task 20-1 – Project Management and Meetings

Task Background / Goal

Completing the technical aspects of the project is only one component of a successful project. Keeping the client informed of project progress, particularly related to budget and schedule, and leading the team in the right direction throughout the entire project also drives project success.

Scope of Services

- Prepare for, attend, and prepare minutes for internal project meetings as follows:
 - o Kickoff Meeting
 - o 3 Project Progress / Review Meetings
 - o Meeting(s) with Parks Department
- Provide project management to monitor budget and schedule and keep Client informed of project progress with emailed monthly updates.

Task 20-1 Deliverables

- Agendas, minutes, and supporting materials for meetings
- Monthly project updates, including progress to date, upcoming tasks, any issues or concerns, and items needed from the client to continue progress.

Task 20-2 – Existing Conditions Analysis / Assessment

Task Background / Goal

Building on the preliminary analysis we completed as part of our proposal, the existing conditions analysis and assessment will identify flood risk areas and how the system performs relative to the City's drainage standards. Key areas of concern are:

1. Babcock Boulevard street drainage from about Nutter Boulevard to Wicks Lane due to a lack of storm sewer infrastructure and flat longitudinal slope along portions of the roadway.
2. Undersized storage / outlet capacity at Castle Rock Park causing roadway overtopping at Nutter and Babcock Boulevard downstream.
3. Undersized storage / pipe outlet capacity at Sourdough Basin.
4. Potential for roadway cross-flow across Wicks Lane at the intersection with Broadmoor Drive.

In order to understand the causes (and more importantly, potential solutions) for these four areas, the extents of the existing conditions assessment will include the watershed draining to the intersection of Wicks Lane and Lake Elmo Drive, since fixing Sourdough Basin capacity issues may include increasing pipe / storage capacity downstream.

Scope of Services

- Prepare rainfall-runoff-routing model for the area.
- Evaluate existing flow depths along Babcock Boulevard and compare to City of Billings standards.
- Evaluate overtopping frequency and severity at Nutter Boulevard and Babcock Boulevard and compare to City of Billings standards.
- Evaluate cross-flow potential at Wicks Lane and Broadmoor Drive.
- Evaluate flow versus storage / pipe capacity for the Sourdough Basin.
- Determine if any structures are inundated in the 100-year event along the drainage-way between Nutter and Babcock Boulevard.

Task 20-2 Deliverables

- Exhibits and tables summarizing the existing conditions analysis results including:
 - o 2-, 10-, and 100-year design storm peak flows (surface and conduit) at critical design locations
 - o 2-, 10-, and 100-year design storm depths/elevations at critical design locations (Babcock curblin throughout project area, Sourdough detention, culvert headwater, Castle Rock detention)
- Summary of findings and technical analysis documentation, to be included in report prepared as part of Task 5.

Task 20-3 – Alternatives Evaluation

Task Background / Goal

The goal for this task would be to identify and evaluate alternatives to address the concern areas listed in Task 2 in order to determine the most cost-effective, practical solution to move forward with.

Scope of Services

Babcock Boulevard Alternatives

- Evaluate up to three alternatives for Babcock Boulevard drainage improvements. Alternatives anticipated to be:
 1. Conventional inlets and storm sewer to meet standard City design requirements between Nutter Boulevard and Wicks Lane.
 2. Same as option 1 but capacity would be to a lower design standard.
 3. Design high-capacity inlets south of Nutter Boulevard to intercept the flow coming thru the sideyards between Declaration Avenue and Babcock Boulevard.
 4. Modify road profile to remove crest in Babcock Boulevard north of the intersection with Nutter Boulevard.
- Complete hydraulic sizing for connecting the surcharge inlets at Wicks Lane and Babcock Boulevard to a local storm sewer that discharges to the main drainage-way.
- Prepare plan view schematics of each alternative.
- Prepare opinions of probable costs for each alternative.
- Coordinate with City staff on selecting preferred alternative.

Undersized Storage / Pipe Outlet Capacity at Sourdough Basin

- Coordinate with City to determine appropriate performance standard
- Evaluate increasing pipe capacity from the Sourdough basin outlet to the intersection of Wicks Lane and Cody Drive, reversing pipe direction and increasing pipe size to the north along Cody Drive, and creating new regional detention facility in the open space north of Covert Lane and west of Cody Drive that would function as a surge basin for storm sewer flow running down Wicks Lane.
- Compare and summarize flow changes and feasibility.
- Prepare opinion of probable cost for alternative.
- Coordinate with City staff on findings.

Undersized Storage / Outlet Capacity at Castle Rock Park

- Evaluate up to four alternatives for regional drainage improvements. Alternatives anticipated to be:
 1. Increasing storage in Castle Rock Park
 2. Increasing conveyance capacity under Nutter Boulevard, Babcock Boulevard, and through the drainage-way.
 3. TBD but potentially hybrid of alternatives 1-3.
- Prepare plan view schematics of each alternative.
- Prepare conceptual landscape design / rendering for modifications to Castle Rock Park detention area.
- Compare and summarize flow changes, benefits, and drawbacks to each approach.
- Prepare opinions of probable costs for each alternative.
- Coordinate with City staff on selecting preferred alternative.

Wicks Lane at Broadmoor Drive Cross-Flow

- Coordinate with City to determine appropriate performance standard
- Evaluate potential to increase inlet capacity on Broadmoor Drive north of Wicks Lane to reduce cross-flow issues.

- Prepare schematic plan view of alternative.
- Prepare opinion of probable cost for alternative.
- Coordinate with City staff on findings.

Task 20-4 Deliverables

- Plan view schematics of each alternative.
- Conceptual landscape design / rendering for Castle Rock Park detention area .
- Opinions of probable costs.
- Narrative about each alternative, rationale for selecting preferred alternatives, included in technical memorandum (Task 5).

Task 20-5 – Alternatives Report

Task Background / Goal

Recognizing that regional improvements that are identified as part of Task 4 may not be constructed immediately, documenting the process for the recommended improvements is important, as city staff or elected officials may change. Further, for the improvements along and immediately adjacent to the Babcock Boulevard corridor documented in the report provides the basis of design that summarizes the hydraulic sizing and associated performance.

Scope of Services

- Prepare draft memorandum for City review and comment.
- Finalize memorandum based on City comments.

Task 20-5 Deliverables

- Draft memorandum
- Final memorandum

Phase 040 – Final Design for Babcock Boulevard Corridor Improvements (including Sourdough Basin)

Task 40-1 – Final Design

Task Background / Goal

Drainage improvements along Babcock Boulevard corridor, which will include the inlets and laterals, about 2,500' of new storm sewer pipeline, a new culvert crossing Babcock, and improvements to the sourdough outlet structure.

Scope of Services

- Data Collection and Review
 - o Review available data / information related to both Babcock Boulevard and regional drainage, including past reports, storm events, drawings, City utility GIS data, etc.
 - o Coordinate with One-Call (Montana811) to mark utilities along Babcock Boulevard and Sourdough Basin
 - o Collect survey data via both drone and conventional GPS/RTK methods.
 - o Collect 5 borings along Babcock Boulevard between Nutter Boulevard and Wicks Lane and two borings in Sourdough basin footprint with monitoring wells.
 - o Complete site visit to observe conditions and take photographs of key areas.
- Develop Final Plans and Specifications (MPWSS & City Mods)– Milestone review sets at 30% and 90% with informal interim check-ins.
- Coordinate Temporary Work Site Locations with City
- Prepare opinions of probable costs and note any significant changes at milestone review sets
- Prepare 100% plans and specifications based on City's 90% review comments.

- If upstream detention develops into a desired solution, AE2S will work with the City to revise scope, as reasonable, to stay within the contract amounts to include final design, bidding, and construction phase services of any improvements.

Deliverables

- Survey data for area shown in Exhibit A, in AutoCAD and ASCII file formats.
- Georeferenced photographs in ArcGIS geodatabase format
- Meeting agendas, minutes, and Drawings, Specifications and Construction Cost Estimates (30% and 90% reviews)
- Bidding Sets, Bid Tabs, Bid Award

Phase 050 - Bidding Services for Babcock Boulevard Corridor Improvements (including Sourdough Basin)

Task 50-1 – Bidding

Task Background / Goal

After completion of the final design phase, assist the City with bidding and contracting of the Project.

Scope of Services

- Prepare Electronic Bidding Sets
- Conduct Pre-Bid Meeting with City
- Prepare Addenda, as needed
- Prepare recommendation of award & final executed contract documents

Deliverables

- Bidding Sets, Bid Tabs, Bid Award

Phase 060 - Construction Services for Babcock Boulevard Corridor Improvements (including Sourdough Basin)

Task Background / Goal

After successful award of the Project, AE2S will assist the City in Construction Phase Services by providing daily onsite Resident Project Representatives (RPR) for construction observation, data collection, and provide field coordination with the Contractor to ensure QA/QC to the Plans and Specifications. It is anticipated that the Project will consist of about 90 Calendar Days of construction in 2022.

Scope of Services

- Facilitate Preconstruction Conference
- Conduct phone call progress meetings
- Review Shop Drawings, Pay Applications
- Provide On-Site Resident Project Representative (RPR) Services
- Certified Payroll Reviews
- Materials Testing (MPWSS Basis)
- Final Completion Certificates & Punchlist Walkthrough
- Electronic Asbuilt Plans Production
- At a later date, Construction Services may be removed entirely and/or revised to reflect the City provide Construction Phase Services.

Deliverables

- Construction Contracts, Submittals, Progress Meeting Agendas and Minutes, RPR reports, Electronic Asbuilts

Final Design, Bidding & Construction for Regional Drainage Improvements

Since the type and location for regional drainage improvements would be identified as part of the alternatives analysis described above (Phase 020), the scope for the final design, bidding, and construction for the regional drainage improvements will be determined at a future date. Further, because these improvements would likely be new City CIP projects, the timing of these projects are also unknown at this time.

Scope of Services

- To Be Determined

Deliverables

- To Be Determined

Key Assumptions

- To Be Determined

Appendix B

Methods and Times of Payment

Section 1. Payments for Basic Services.

Billings shall authorize payment to the Engineer for services performed under Appendix A of this Agreement. Partial payment shall be due the Engineer upon receipt of the Engineer's pay estimate, said estimate being proportioned to the work completed by the Engineer.

Partial payment shall be made to the Engineer upon receipt of the Engineer's pay estimate, said estimate being proportioned to the work completed by the Engineer. Billings shall deduct five percent (5%) from each monthly pay estimate to be held until the completion of the final scope of work. The final payment shall be made only after acceptance of final documents by Billings, and determination that the scope of work has been satisfactorily completed.

A. For services rendered prior to construction, Appendix A, the Engineer shall be paid based upon actual time accrued, but not to exceed the total contract amount.

1. Phase 020 Preliminary Design/Regional Alternatives Study	\$102,200
2. Phase 040 Final & Bidding Design of Babcock Boulevard	\$131,900
3. Phase 060 Construction Services of Babcock Boulevard	\$120,000

B. Final payment shall be the above stated basic fee less all previous payments.

Section 2. Payments for Extra Services when Authorized by Billings.

Requests made or conditions identified by interested groups at the agency or public meetings, which are beyond the scope and intent of this study shall be paid for on an hourly basis at the applicable fees in Appendix D.

Section 3. Corrections.

Costs of Billings work that is required for corrections to the Engineer's work which requires redoing by Billings shall be deducted from any payments due the Engineer, if the Engineer fails to make the required corrections.

Section 4. Fee Increases

For contracts and services that are expected to require more than one (1) year to complete, the above stated basic services payments may be reviewed and adjusted annually by mutual agreement of the parties, based upon documented evidence that the Engineer's costs and hourly rates as shown in Appendix D have increased for all comparable clients.

Appendix C

Additional Services of Engineer

Extra Services of the Engineer will be paid only with written prior authorization by Billings.

- A. Field and laboratory testing of materials and reports.
- B. Requests made or conditions identified by interested groups at the agency or public meetings, which are beyond the scope and intent of this study.
- C. Additional Landscape Architectural planning, if needed.

Appendix D

Schedule of Professional Fees

Current agreements for engineering services stipulate that the standard hourly rates are subject to review and adjustments. Hourly rates for services effective on the date of this Agreement are included below.

The itemized schedule provided below includes direct labor costs, normal payroll and overhead costs, transportation, furnishing equipment and materials normally required for performance of the work and reasonable profit. Direct project costs not itemized herein shall be paid for at actual cost.

ADVANCED ENGINEERING AND ENVIRONMENTAL SERVICES, LLC **2021 HOURLY FEE AND EXPENSE SCHEDULE**

Labor Rates*

Engineer I	\$119.00
Engineer II	\$141.00
Engineer III	\$168.00
Engineer IV	\$193.00
Engineer V	\$205.00
Engineer VI	\$223.00
Engineering Technician I	\$72.00
Engineering Technician II	\$92.00
Engineering Technician III	\$112.00
Engineering Technician IV	\$126.00
Engineering Technician V	\$143.00
Engineering Technician VI	\$158.00
GIS Specialist I	\$93.00
GIS Specialist II	\$112.00
GIS Specialist III	\$132.00

Reimbursable Expense Rates

Transportation	\$0.65/mile
Outside Services/Subconsultants	cost *1.10
Geotechnical Services	cost *1.10
Out of Pocket Expenses	cost*1.10
Project Specific Equipment	Negotiable

* Position titles are for labor rate grade purposes only.

These rates are subject to adjustment each year on January 1.

Appendix E

Project Schedule

Based on a notice to proceed by Billings date no later than June 28, 2021 the completion date for the Engineer's work through final design shall be:

A. Design Study and Regional Alternatives

1. Study Kickoff July 2021
2. Field Surveying and Data Collection July – August 2021
3. Completion and Recommendations November 2021

B. Final Design of Babcock Boulevard

1. Kickoff August 2021
2. Completion December 2021

C. Bidding Services Design of Babcock Boulevard

1. December 2021 – February 2022

D. Construction Services of Babcock Boulevard

1. Summer 2022 (Based on Award and Contractor Schedule) Anticipated to consist of 3 months of construction.

Delays affecting the completion of the work within the time specified of more than ninety (90) days, not attributable to or caused by the Parties hereto, may be considered as cause for the renegotiation or termination of this Contract.

If the Engineer is behind on this Contract due to no fault of Billings, then the Engineer hereby acknowledges the right of Billings to withhold future Contracts to the Engineer in addition to any other remedy until this Contract is brought back on schedule or otherwise resolved.