

EXHIBIT “A” – SCOPE OF WORK
ST3270RB Lake Havasu Avenue Reconstruction Construction Management Services

1. Project Services. Consultant agrees to perform construction management and inspection services for a project known and described as LHC Project ST3270RB Lake Havasu Avenue Reconstruction (**Project**) and is detailed in the following subtasks:

- 1.1 Construction Management: Consultant will manage the Project as the City’s Agent as described in the Contract Documents. Management will include monitoring elements of the construction for conformance with the Project’s intent and contract requirements as outlined in the following subtasks. Consultant will provide one (1) part-time Construction Manager and a Principal, as necessary, to assist the Construction Inspector in performing the Project Services.
 - A. Pre-Construction Meeting: Consultant will review construction bid documents and conduct the pre-construction conference for the Project. This includes preparing of an agenda, moderating the meeting, and issuing minutes. Consultant will provide interpretation of the requirements of the Contract Documents and answer other questions during the pre-construction meeting as directed by the City after coordination with the Project Engineer as needed. Consultant will submit written responses to City electronically.
 - B. Project Management and Reporting: Consultant will perform overall management of the Consultant’s services and overall management of the contractor’s contractual obligations to the City.
 - i. Weekly Construction Meetings: The Consultant’s Construction Inspector will attend and moderate all meetings, with these efforts included within the Construction Inspector’s fulltime time allocation. Assume twenty (20) meetings at two (2) hours each. Consultant will prepare meeting agendas prior to meetings and minutes after the meetings. Assume six (6) hours for Construction Manager and two (2) hours for Principal.
 - ii. Weekly Progress Reports: Consultant will prepare a Weekly Progress Report of Project status that summarizes construction activities to date; status of administrative items such submittals and requests for information (RFI); anticipated activities for the following week; a summary of change orders and claims; schedule status; and a summary of quantities, budgets and expenditures for construction. The Weekly Progress Report will include a matrix summarizing administrative metrics (submittal and RFI review duration), change order, schedule, and budget status. Consultant will submit Weekly Progress Reports on a weekly basis in electronic portable document format (PDF) by email. Assume two (2) hours per week for twenty-two (22) weeks hours for Construction Inspector, six (6) hours total for Construction Manager, and two (2) hours total for Principal.
 - C. Recommendation with Respect to Defective Work: Consultant will recommend to City that contractor's work be disapproved and rejected while it is in progress if, on the basis of such inspections, Consultant believes that such work will not produce

a completed Project that conforms generally to Contract Documents. Assume eight (8) hours for Construction Inspector, eight (8) hours for Construction Manager and two (2) hours for Principal.

- D. Clarification and Interpretations: Consultant will respond to reasonable and appropriate contractor RFI and issue necessary clarifications and interpretations of the Contract Documents to City as appropriate. Any orders authorizing variations from the Contract Documents will be made by City. Assume eight (18) hours for Designer, eight (8) hours for Construction Manager and two (2) hours for Principal.
- E. Shop Drawings and Samples: Consultant will review each submittal initially to evaluate shop drawings, samples, test results, certifications, O&M manuals, and other data provided by the contractor for completeness and readability. Consultant will return to the contractor any submittals found to be incomplete or illegible with appropriate comments describing reasons why the submittal was not reviewed. Consultant will perform a review of all submittals to determine conformance to the Contract Documents and will consult with the City and the design engineer to resolve apparent conflicts with the Contract Documents. Consultant's submittal review does not extend to means, methods, sequences, techniques, or procedures of construction selected by the contractor, or to safety precautions and programs associated thereto. Assume twenty-four (24) hours for Construction Inspector, four (4) hours for Construction Manager, and one (1) hour for Principal. Consultant will submit shop drawing review summary document to City electronically.
- F. Change Orders: Consultant may recommend Change Orders to City, and will review and make recommendations related to Change Orders submitted or proposed by the contractor. Scope assumes two (2) change orders. Assume four (4) hours for Designer, four (4) hours for Construction Manager, and two (2) hours for Principal.
- G. Substitutes and "Or-Equal": Consultant will evaluate and determine the acceptability of substitute and "or-equal" materials and equipment proposed by contractor in accordance with the Contract Documents, but subject to the provisions of applicable standards of state or local government entities. Scope assumes two (2) evaluations. Assume four (4) hours for Construction Manager.
- H. City/Contractor Disputes: Consultant will, if requested by City, render written decision on all claims of City and contractor relating to the acceptability of contractor's work or the interpretation of the requirements of the Contract Documents pertaining to the progress of contractor's work. In rendering such decisions, Consultant shall be fair and not show partiality to City or contractor and shall not be liable in connection with any decision rendered in good faith in such capacity. Scope assumes two (2) disputes. Assume eight (8) hours for Construction Inspector, eight (8) hours for Construction Manager, and two (2) hours for Principal.

- I. Payment Application Review: Consultant scope assumes five (5) payment applications. Assume two (2) hours per application for Construction Inspector, two (2) hours per application for Construction Manager, and one (1) hour for Principal.
- J. Substantial Completion: Consultant will manage the Substantial Completion process in accordance with the Contract Documents. In consultation with the City, the Consultant will, prior to issuing a Certificate of Substantial Completion, prepare a punch list of incomplete Work or Work that does not conform to the requirements of the Contract Documents. This list will be attached to the Certificate of Substantial Completion issued by the City to the contractor. Assume eight (8) hours for Construction Inspector and two (2) hours for Construction Manager.
- K. Final Acceptance: Consultant will determine the Final Acceptance in consultation with the City, based on Consultant's assessment of the contractor's work, and its compliance with the requirements for Final Acceptance set forth in the Contract Documents. The Consultant will prepare and submit to the City documents for Final Acceptance of the Work. The City will issue to the contractor documents for Final Acceptance of the Work. The Consultant will advise the City concerning final payment, release of retention, and release of insurance and bonds. Assume four (4) hours for Construction Inspector and four (4) hours for Construction Manager.
- L. As-BUILTs: Consultant shall receive full size red-lined documents prepared by the contractor with survey data if and when applicable. The Consultant will prepare As-BUILTs using the red-lines documents received by the contractor as well as through daily inspection documentation by Consultant. The redlines prepared by the contractor will periodically reviewed by the Consultant. The As-Built drawings will be submitted to the City in PDF and AutoCAD format. The City will provide the Consultant conformed (i.e., AutoCAD files incorporating bid phase changes on final design documents) Contract Documents at the beginning of the construction phase.

Consultant will coordinate with Arizona Department of Environmental Quality (ADEQ) in an effort to assist the City to acquire Authorization of Construction for sewer and water system improvements. The Consultant will prepare the Engineer's Certificate of Completion (ECC) and the supporting documentation to submit to ADEQ in digital format. Assume sixteen (16) hours for Construction Inspector, four (4) hours for Construction Manager, forty-eight (48) hours for Designer, eight (8) hours for clerical, and one (1) hour for Principal.

- 1.2 Construction Inspection: Consultant will perform inspection of the contractor's work to determine compliance with the Contract Documents. The inspection task is complementary to the Construction Management task. The Consultant will provide one (1) full-time Construction Inspector at forty (40) hours per week to perform this task.
 - A. Inspection of the Work: Consultant will inspect the contractor's work to confirm the work is performed in accordance with the Contract Documents; approve construction-phase clarifications and changes; and coordinate the City and design

engineer to resolve construction-phase issues. Consultant will provide Daily Record of Work reports describing work and work conditions observed by the Consultant. Daily Record of Work will be available to the City online in electronic format. Consultant's Daily Record of Work will include photographic documentation of the work.

- B. **Special Inspections and Testing:** Consultant may require special inspections or tests of Contractor's work as Consultant deems appropriate, and may receive and review certificates of inspections within Consultant's area of responsibility or of tests and approvals required by laws and regulations or the Contract Documents. Consultant's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents. Consultant shall be entitled to rely on the results of such tests and the facts being certified.

The Consultant will provide quality assurance material testing should it be requested by the City or deemed necessary due to inconsistent results of the contractor's required material testing. Quality assurance will be provided through a combination of the Consultant's certified personnel and/or special inspection firm(s). It is assumed the contractor will perform more frequent quality control testing for review by the Consultant. Materials testing, quality control and assurance include: concrete, earthwork and asphalt. Consultant will coordinate special inspections and reports performed and prepared by others as required by the Contract Documents. Special Inspection Reports will be available to the City online in electronic format.

- 2. **Schedule:** The Services will commence upon receipt of an executed Notice to Proceed (NTP). This Project is expected to have a duration of 150 calendar days from the NTP.

- 3. **Assumptions:** The fees for Services are conditional upon the following general assumptions:

- A. Services provided in this scope are for the Project schedule duration of 150 calendar days shown above. If construction efforts go beyond, a revised scope and fee will be required.
- B. Tasked items of cost within the Consultant's estimated fee schedule may be transferred one to another in order to maintain the overall Project budget as required.
- C. Arizona Department of Environmental Quality Authorization to Construct for water and Notice of Intent to Discharge for sewer have been approved and will be provided to Consultant.
- D. All regulatory review fees will be paid by others.
- E. Contractor is responsible for providing Quality Control testing.

- F. Additional meetings as required by construction progress or potential litigation or other matters of Project concern will require additional scope and fees.
- G. Services which are in addition to this Scope of Work will be invoiced according to the 2018 Hourly Rates Standard Rate Schedule contained in Exhibit B as requested by the City.

4. Services Not Included:

- A. Public Information and Outreach Meetings.
- B. Additional change orders (beyond the two change orders included above), material substitutions (beyond the two substitutions included above), or Contractor/City disputes (beyond the two dispute resolutions included above) beyond what is contained in this Scope of Work will require additional scope and fee negotiation.
- C. Consultant to provide Quality Assurance Materials Testing provided on an as needed basis.
- D. Construction Staking and/or Surveying.

EXHIBIT “B” – FEE SCHEDULE

ST3270RB Lake Havasu Avenue Reconstruction Services for	
Construction Management	\$56,119
<u>Construction Inspection</u>	<u>\$103,627</u>
 Total	 \$159,746

Travel Expenses included in fees above

CIVIL & ENVIRONMENTAL CONSULTANTS, INC. - 2018 HOURLY RATES

STANDARD RATE SCHEDULE

PRINCIPAL	\$205/HOUR
SENIOR CONSTRUCTION MANAGER	\$180/HOUR
CONSTRUCTION MANAGER	\$165/HOUR
PROJECT ENGINEER	\$165/HOUR
PROJECT MANAGER	\$140/HOUR
CONSTRUCTION INSPECTOR	\$131/HOUR
ASSISTANT PROJECT MANAGER	\$125/HOUR
SENIOR DESIGNER	\$120/HOUR
OFFICE MANAGER	\$85/HOUR
ENGINEERING INTERN	\$50/HOUR
EXPERT WITNESS TESTIMONY	\$390/HOUR