

# Staff Summary Report



Council Meeting Date: 3/05/2009

Agenda Item Number: \_\_\_\_\_

**SUBJECT:** Request award of a professional services design contract with HDR Engineering, Inc. for the design of roadway and landscaping improvements along College Avenue between U.S. 60 and Apache Boulevard.

**DOCUMENT NAME:** 20090305PWTG02 TRANSPORTATION PLANNING (1101-01)  
**PROJECT NO. 6001941**

**SUPPORTING DOCS:** Yes.

**COMMENTS:** Total cost for this contract is \$339,477.

**PREPARED BY:** Theresa Galindo, Acting Engineering Contract Administrator (x8518)

**REVIEWED BY:** Andy Goh, Deputy PW Manager/City Engineer (x8896)

**APPROVED BY:** Glenn Kephart, Public Works Manager (x8205)

**LEGAL REVIEW BY:** Judi Morgan, Assistant City Attorney (x8227)

**FISCAL NOTE:** Sufficient funds are available in Capital Improvement Fund No. 6001941.

**RECOMMENDATION:** Award professional services contract.

**ADDITIONAL INFO:** The scope of work consists of the preparation of final design plans and specifications, and a construction cost estimate. The proposed design improvements will include pedestrian, bicycle, traffic calming and traffic control improvements along College Avenue between U.S. 60 and Apache Boulevard based on traffic calming testing and community input. In addition, the plan will also include removing unnecessary asphalt pavement and replacing it with landscaping.

The contract amount was negotiated by staff and is considered reasonable for the scope of services. HDR Engineering, Inc. was selected from our consultant on-call list based on a process pursuant to A.R.S. § 41-2578.



CITY OF TEMPE, ARIZONA  
PUBLIC WORKS DEPARTMENT  
DIVISION OF ENGINEERING

**CONTRACT FOR PROFESSIONAL SERVICES**

This Contract is made and entered into on the 5th day of March, 2009, by and between the City of Tempe, a municipal corporation ("City"), and **HDR Engineering, Inc.**, a Nebraska corporation ("Consultant").

The City engages the Consultant to perform professional services for a project known and described as **College Avenue Traffic Calming**, Project No. **6001941** ("Project").

**1. SERVICES OF THE CONSULTANT**

Consultant shall perform the following professional services to City in conformance with applicable professional standards and in accordance with the degree of care and skill that a registered professional in Arizona would exercise under similar conditions:

- 1.1. Consultant shall prepare final design plans, specifications, and a construction cost estimate, as described in Exhibit "A" attached.
- 1.2. Consultant has assigned Ben Spargo as the Project Manager for this Contract. Prior written approval by the City is required in the event the Consultant needs to change the Project Manager. Consultant shall submit the qualifications of the proposed substituted personnel to the City for approval prior to any substitution or change.
- 1.3. Consultant shall prepare and submit a detailed opinion of probable cost of the Project.
- 1.4. Consultant shall follow and comply with the Public Improvement Project Guide as directed by the City.
- 1.5. Consultant shall prepare plans and technical specifications per the requirements of the applicable chapters of the City's Engineering Design Criteria Manual, latest revision, and the Maricopa Association of Governments (MAG) Uniform Standard Details for Public Works Construction as amended by the City. All plans shall be prepared on CAD as required by the City. Final plans shall be submitted on 3 ml double matte black line mylar and shall be 24" x 36" in size.
- 1.6. Consultant shall submit all final construction documents in both hard copy and electronic format. Plans shall be MicroStation or AutoCAD compatible and all other documents shall be Microsoft Office compatible. The software version used shall be compatible to current City standards. Other support documents, for

example, structural calculations, drainage reports and geotechnical reports, shall be submitted in hard copy only.

- 1.7. Consultant shall obtain all necessary permits and licenses required for the performance of its work. Failure of Consultant to obtain said permits prior to the commencement of its work shall constitute a breach of this Contract.
- 1.8. Consultant shall perform the work in a manner and at times which do not impede or delay the City's operations and/or functions.
- 1.9. Consultant shall be solely responsible for any repair, replacement, remediation and/or clean-up of any damage done by Consultant including any impairment of access to City or other lawful invitees, by such work performed on this Project.

## **2. TERM OF CONTRACT**

Consultant shall complete all services within 450 calendar days of the date appearing on the "Notice to Proceed" issued by the City. In the event delays are experienced beyond the control of the Consultant, the schedule may be revised as determined by the City in its sole discretion.

## **3. CONSULTANT'S COMPENSATION**

- 3.1. The method of payment for this Contract is payment by installments. Total compensation for the services performed shall not exceed \$339,477.00 unless otherwise authorized by the City. This fee includes an amount not to exceed \$219,309.00 for design services based on hourly rates established in the attached Exhibit "A" incorporated hereby by this reference; an allowance of \$84,407.00 for sub-consulting services; an allowance of \$8,000.00 for utility locating; and an allowance of \$11,885.00 for reimbursable expenses, which in no event will ever be more than actual cost.
- 3.2. City shall pay Consultant by installments, each installment based upon monthly progress reports and related, detailed invoices submitted by the Consultant. If detailed invoice(s) are approved by the City, such installment payment shall be made within thirty (30) days after City's approval of the progress report and detailed invoice subject to the following limitations:
  - 3.2.1. Prior to approval of the preliminary design (60% plans), payments to Consultants shall not exceed 60% of the total Contract amount.
  - 3.2.2. Prior to approval of the final design documents, payments to Consultants shall not exceed 90% of the total Contract amount. The final approval and payment will be made within a reasonable period of time.
  - 3.2.3. Payment for reimbursable expenses shall be made during all phases based on actual expenses.

3.3. City at its discretion may, by written notification, waive the above limitations.

#### **4. CITY'S RESPONSIBILITIES**

4.1. City shall designate a Project manager during the term of this Contract. The Project manager has the authority to administer this Contract and shall monitor compliance with all terms and conditions stated herein. All requests for information from or a decision by the City on any aspect of the work shall be directed to the Project manager.

4.2. City shall review requests for information related to the Project by the Consultant and will endeavor to provide a prompt response to minimize delay in the progress of the Consultant's work. City will also endeavor to keep the Consultant advised concerning the progress of the City's review of the work. Consultant agrees that City's inspection, review, acceptance or approval of Consultant's work shall not relieve Consultant of its responsibility for errors or omissions of Consultant or its subconsultant(s).

4.3. Unless included in the Consultant's services as identified in Section 1, the City may furnish with or without charge, upon the Consultant's reasonable request, the following information to the extent it is within the City's possession or control:

4.3.1. One copy of its maps, records, laboratory tests, survey ties, and benchmarks, or other data pertinent to the services. However, the Consultant shall be solely responsible for searching the records and requesting specific drawings or information and independently verifying said information.

4.3.2. Available City data relative to policies, regulations, standards, criteria, studies, etc., relevant to the Project.

4.3.3. When required, title searches, legal descriptions, detailed ALTA Surveys, and environmental assessments.

#### **5. TERMINATION AND DEFAULT**

5.1. City shall be entitled to terminate this Contract at any time, in its discretion. In addition, the City may terminate this Contract for default, non-performance, breach or convenience, or abandon any portion of the Project for which services have not been fully or properly performed by the Consultant. Termination shall be commenced by delivery of written notice delivered to Consultant, personally or by certified mail at 3200 E. Camelback Road, Suite 350, Phoenix, AZ 85018. Termination shall be effective upon fourteen (14) days of delivery of notice to Consultant. In addition, this Contract may be terminated pursuant to A.R.S. § 38-511.

- 5.2. Upon the occurrence of Consultant's default, non-performance or breach of the Contract, City may recover any and all damages permitted by law or in equity against Consultant, in addition to termination of the Contract, including but not limited to compensatory damages, together with all costs and expenses as set forth in Section 12 herein.
- 5.3. In the event of Consultant's default, non-performance or breach, City agrees to, before exercising any right or remedy available to it, give Consultant written notice of the default, non-performance or breach. For the thirty (30) days following such notice, Consultant shall have the right to cure such default, non-performance or breach.
- 5.4. If Consultant fails to cure, immediately after receiving notice of termination from the City, the Consultant shall discontinue performance under this Contract and proceed to close said operations under this Contract. Consultant shall submit a detailed breakdown of completed work to the City for evaluation. City shall have the right to inspect the Consultant's work to analyze the services completed. Payment to Consultant shall be determined by City upon approval or disapproval of the services completed as of the date of delivery of notice of termination, and pursuant to Section 5.8.
- 5.5. Within ten (10) days of receipt of notice of termination as set forth herein, the Consultant shall deliver to the City all drawings, special provisions, field survey notes, reports, estimates and any and all other documents or work product generated by the Consultant under the Contract, entirely or partially completed, together with all unused materials supplied by the City.
- 5.6. In the event of such termination or abandonment, the Consultant shall be paid only for those services performed in a good and workmanlike manner, in accordance with all plans, specifications and governmental requirements completed prior to receipt of said notice of termination, subject to approval by City. To the extent permitted by this Contract, such payment may include reimbursable expenses then incurred by Consultant, in City's sole discretion.
- 5.7. If the remuneration scheduled hereunder is based upon a fixed fee or definitely ascertainable sum, the portion of such sum payable shall be proportionate to the percentage of services completed by the Consultant as approved by the City based upon the scope of work set forth in Exhibit "A." However, in no event shall the fee exceed that set forth in Section 3 of this Contract.
- 5.8. The parties agree that in the event of any damages suffered by City as a result of any delay, default, non-performance or breach by Consultant, Consultant agrees to reimburse City ten percent (10%) of the Contract amount per Section 3.1 for damages caused by its delay. This sum may be deducted from the Consultant's payment or anticipated payment for failure to deliver and/or perform as specified.

No premium will be awarded to the Consultant for delivery and/or performance within the Contract term. Waiver by City of any of the provisions contained in this Section 5.8, or by way of the extension of the Contract term, shall in no way be deemed to waive or diminish the City's rights available by law or in equity under the Contract.

- 5.9. City shall make a determination as to approval or denial of any requested final payment within sixty (60) days after the Consultant has delivered the last of the completed items and the final appraisal has been submitted to the City.

## 6. INSURANCE

Without limiting any obligations or liabilities, the Consultant, at its sole expense, shall purchase and maintain the minimum insurance specified below with companies duly licensed or otherwise approved by the State of Arizona, Department of Insurance, and with forms reasonably satisfactory to the City. Each insurer shall have a current A.M. Best Company, Inc. rating of not less than A-VII. Use of alternative insurers requires prior approval from the City.

### 6.1. General Clauses

- 6.1.1. Additional Insured. The insurance coverage, except workers' compensation and professional liability, required by this Contract, shall name the City, its agents, representatives, directors, officials, and employees, as additional insured, and shall specify that insurance afforded the Consultant shall be primary insurance, and that any self insured retention and/or insurance coverage carried by the City or its employees shall be excess coverage, and not contributory coverage to that provided by the Consultant.
- 6.1.2. Coverage Term. All insurance required herein shall be maintained in full force and effect until services required to be performed under the terms of this Contract are satisfactorily completed and formally accepted; failure to do so shall constitute a material breach of this Contract.
- 6.1.3. Primary Coverage. Consultant's insurance shall be primary insurance as respects the City, and any insurance or self insurance maintained by the City shall be in excess of the Consultant's insurance and shall not contribute to it.
- 6.1.4. Claim Reporting. Consultant shall not fail to comply with the claim reporting provisions of the policies or cause any breach of a policy warranty that would affect coverage afforded under the policy to protect the City.
- 6.1.5. Waiver. The policies for workers' compensation and general liability shall contain a waiver of transfer rights of recovery (subrogation) against

the City, its agents, representatives, directors, officers, and employees for any claims arising out of the work of the Consultant.

- 6.1.6. Deductible/Retention. The policies may provide coverage, which contains deductibles or self-insured retentions. Such deductible or self-insured retentions shall not be applicable with respect to the coverage provided to the City under such policies. Consultant shall be solely responsible for deductible or self-insured retentions and the City may require the Consultant to secure the payment of such deductible or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit.
- 6.1.7. Policies and Endorsements. City reserves the right to request and to receive, within ten (10) working days, information on any or all of the above policies or endorsements.
- 6.1.8. Certificates of Insurance. Prior to commencing services under this Contract, Consultant shall furnish the City with certificates of insurance, or formal endorsements as required by the Contract, issued by Consultant's insurer(s), as evidence that policies providing the required coverages, conditions, and limits required by this Contract are in full force and effect. Such certificates shall identify this Contract by referencing the Project number and/or Project name and shall provide for not less than thirty (30) days advance written notice by certified mail to City of cancellation or termination of insurance.
- 6.1.9. Subconsultants/Contractors. Consultant shall include all subconsultants and subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subconsultant and subcontractor.
- 6.2. Workers' Compensation. Consultant shall carry workers' compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Consultant's employees engaged in the performance of the services; and employer's liability insurance of not less than \$100,000 for each accident, \$100,000 disease for each employee, and \$500,000 disease policy limit.

In case services under this Contract are subcontracted, the Consultant shall require all subconsultant(s) to provide workers' compensation and employer's liability to at least the same extent as provided by the Consultant.

- 6.3. Automobile Liability. Consultant shall carry commercial/business automobile liability insurance with a combined single limit for bodily injury and property damages of not less than \$1,000,000 each occurrence regarding any owned, hired, and non-owned vehicles assigned to or used in performance of the Consultant services. Coverage will be at least as broad as coverage Code 1 "any auto" (Insurance Service Office policy form CA 0001 1/87 or any replacements

thereof). Such coverage shall include coverage for loading and unloading hazards.

- 6.4. Commercial General Liability. Consultant shall carry commercial general liability insurance with a combined single limit of not less than \$1,000,000. The policy shall be primary and include coverage for bodily injury, property damage, personal injury, products, completed operations, and blanket contractual covering, but not limited to, the liability assumed under the indemnification provisions of this Contract, which coverage will be at least as broad as Insurance Service Office policy form CG 0002 1-11-88 or any replacement thereof.

In the event the general liability insurance policy is written on a "claims made" basis, coverage shall extend for two (2) years past completion and acceptance of the services as evidenced by annual certificates of insurance.

Such policy shall contain a "severability of interests" provision (also known as "cross liability" and "separation of insured").

- 6.5. Professional Liability. Consultant retained by the City to provide the engineering services required by the Contract will maintain professional liability insurance covering errors and omissions arising out of the services performed by the Consultant or any person employed by it, with an unimpaired limit of not less than \$1,000,000 each claim and \$1,000,000 all claims, or 10% of the construction budget, whichever is larger. In the event the insurance policy is written on a "claims made" basis, coverage shall extend for two (2) years past completion and acceptance of services as evidenced by annual certificates of insurance.
- 6.6. Property Coverage – Valuable Papers. Consultant shall carry property coverage on all-risk, replacement cost, agreed amount form with valuable papers insurance sufficient to assure the restoration of any documents, memoranda, reports, or other similar data relating to the services of the Consultant used in the completion of this Contract.

## 7. HEALTH INSURANCE REQUIREMENTS

- 7.1. Consultant must certify that it has or will offer health insurance to all eligible employees working on services set forth in this Contract prior to the performance of any work or services. An affidavit certifying such offering must be signed in a form approved by the City. All required health insurance must be maintained during the entire time of the Contract with the City. Health insurance pursuant to this Section 7 is not required for temporary employees or students working part-time who are enrolled in a recognized educational institution.
- 7.2. The health insurance requirements herein shall apply to all of Consultant's eligible employees directly involved with the services set forth in this Contract, including support and administrative personnel.

- 7.3. Any and all complaints concerning violations of the health insurance requirements shall be filed, in writing, with the City's Public Works Department, within thirty (30) days from discovery of a potential violation. An administrative hearing will be held before the Public Works Manager, and a written decision of findings will be provided to the parties to the hearing within ten (10) days thereafter. Appeal from the decision of the Public Works Manager may be made within ten (10) days of the date of the decision by filing a notice of appeal in writing with the Public Works Department. If an appeal is timely filed, an administrative hearing will be held before an administrative hearing officer appointed by the City Manager. The decision of the administrative hearing officer shall be final.
- 7.4. Penalties for failing to comply with this Section 7 include, but are not limited to the following: Consultant may be barred from bidding on, or entering into any Public Works contract with the City for a period of three (3) years from the execution of the Contract.
- 7.5. All Consultants subject to the health insurance requirements shall post in English, notice of the health insurance requirements at their office and at the job site.

## **8. WORK FOR HIRE AND OWNERSHIP OF DELIVERABLES**

- 8.1. Consultant shall ensure that all the results and proceeds of Consultant's and any and all work on any Project and any related projects, including that of all agents, employees, officers, and contractors, shall be owned by the City, including the copyright thereto, as work for hire. In the event, for any reason, such results and proceeds are not deemed work for hire, Consultant shall be deemed hereby to have assigned to City all of its right, title and interest in such results and proceeds and content to City, without limitation.
- 8.2. All work products (electronically or manually generated), including but not limited to plans, specifications, cost estimates, tracings, studies, design analyses, original mylar drawings, computer aided drafting and design (CADD) file diskettes which reflect all final drawings, and other related products which are prepared in the performance of this Contract, are the property of the City and are to be delivered to the City on the particular type of storage media on which they are stored (e.g. CD, thumb drive, etc.) before the final payment is made to the Consultant. City shall retain ownership of these original works. If approved in writing by the City, the Consultant may retain the originals and supply the City with reproducible copies of the work. Any reuse of Consultant's work product on other projects not covered under this Contract shall be at the City's sole risk, without liability to Consultant.

## **9. CONFLICT OF INTEREST**

- 9.1. Consultant agrees to promptly disclose any and all financial and/or economic interest in the property, or any property affected by the work, or the Project itself other than as set forth herein, existing prior to the execution of this Contract. Further, the Consultant agrees to promptly disclose any financial or economic interest in the Project property or any property affected by the work, if the Consultant gains such interest during the course of this Contract.
- 9.2. If Consultant gains any financial or economic interest in the Project during the course of this Contract, this may be grounds for terminating this Contract at the sole discretion of the City.
- 9.3. Consultant shall not engage the services on this Contract of any present or former City employee who was involved as a decision-maker in the selection or approval processes, or who negotiated or approved billings or contract modifications for this Contract.
- 9.4. Consultant agrees that it shall not perform services on this Project for any other contractor, subcontractor, or any supplier, other than the City. In addition, Consultant shall not negotiate, contract, or make any agreement with a contractor, subcontractor, or any supplier with regard to any of the work under this Contract, or any services, equipment or facilities to be used on this Project other than with the City.

## **10. COVENANT AGAINST CONTINGENT FEES**

Consultant affirms that it has not employed or retained any company or person, other than a bona fide employee working for the Consultant to solicit or secure this Contract, and that it has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of the Contract. For breach or violation of this clause, the City may terminate this Contract without liability, or in its discretion may deduct from the Contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage brokerage fee, gift, or contingent fee.

## **11. INDEMNIFICATION**

To the fullest extent permitted by law, Consultant shall defend, indemnify and hold harmless City, its agents, officers, officials, and employees from and against all claims, damages, losses, liability and/or expenses, relating to, arising out of, or alleged to have resulted from the negligent acts, errors, mistakes or omissions in the work, services, or professional services of Consultant, its agents, employees, or any other person for whose negligent acts, errors, mistakes or omissions in the work, services, or professional services Consultant may be deemed legally liable in the performance of this Contract, or any breach of the Contract. Consultant's duty herein shall arise in connection with any and all claims for damage, loss, liability and/or expenses attributable to

bodily injury, sickness, disease, death, or injury to, impairment or destruction of any person or property including loss of use resulting therefrom. The amount and type of insurance coverage requirement set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

## **12. DISPUTE RESOLUTION**

In the event of a dispute concerning or in any way connected to the Contract or subject Project, the parties agree that the unsuccessful party shall pay to the prevailing party a reasonable sum for attorneys' fees, including taxable and non-taxable costs, fees, costs and disbursements of experts, professionals, paralegals, whether at trial, appeal and/or in bankruptcy court, all of which will be deemed to have accrued on the commencement of such action and shall be enforceable whether or not such action is prosecuted to judgment. In addition, should the City retain and/or utilize legal counsel as a result of a breach by Consultant of any term, covenant or provision of this Contract, in addition to paying any recovery owed to City and/or performing any obligation remaining to be performed, in order to fully cure such breach or default, Consultant shall reimburse the City for reasonable attorneys' fees, taxable and non-taxable costs and disbursements, incurred by the City in enforcing the Consultant's obligations, whether or not a legal action is commenced, including but not limited to the cost of preparing and presenting default notices, demand letters and similar non-judicial enforcement activities.

## **13. ADDITIONAL SERVICES**

Additional services which are outside the scope of basic services contained in this Contract shall not be performed by the Consultant without prior written authorization from the City, at the City's sole discretion. Additional services, when authorized by an executed contract or an amendment to this Contract shall be compensated for by a fee mutually agreed upon between the City and the Consultant.

## **14. PROHIBITION ON ASSIGNMENT**

This Contract and all duties and obligations of Consultant set forth in this Contract shall not be assignable except by prior written consent of the City, and such prohibition shall extend to and be binding upon the heirs, executors, administrators, successors, and assigns of the Consultant.

## **15. MISCELLANEOUS PROVISIONS**

- 15.1. Equal Opportunity. Consultant covenants for itself, its employees, agents, assigns and all persons claiming under or through it, that it shall comply with all applicable federal, state, and local laws and ordinances at the time of execution of this Contract and shall not discriminate against or segregate any person or group of persons any person on account of race, color, religion, gender, marital status, sexual orientation, national origin, ancestry, age, physical handicap or medical condition in the performance of this Contract and shall comply with the terms and intent of all applicable federal, state and local governance concerning nondiscrimination.

15.2. Legal Compliance. Consultant agrees and covenants that it will comply with any and all applicable governmental restrictions, regulations and rules of duly constituted authorities having jurisdiction insofar as the performance of the work and services pursuant to the Contract, and all applicable safety and employment laws, rules and regulations, including but not limited to, the Fair Labor Standards Act, the Walsh-Healey Act, and the Arizona Fair and Legal Employment Act, and all amendments thereto, along with all attendant laws, rules and regulations. Consultant acknowledges that a breach of this warranty is a material breach of this Contract and Consultant is subject to penalties for violation(s) of this provision, including termination of this Contract. City retains the legal right to inspect the documents of any and all Consultants, subconsultants and sub-subconsultants performing work and/or services relating to the Contract to ensure compliance with this warranty. Any and all costs associated with City inspection are the sole responsibility of Consultant. Consultant hereby agrees to indemnify, defend and hold City harmless for, from and against all losses and liabilities arising from any and all violations thereof.

15.3. Specially Designated Nationals and Blocked Persons List. Consultant represents and warrants to City that neither Consultant nor any affiliate or representative of Consultant (i) is listed on the Specially Designated Nationals and Blocked Persons List maintained by the Office of Foreign Asset Control, Department of the Treasury (OFAC) pursuant to Executive Order No. 13224, 66 Fed.Reg. 49079 (“Order”); (ii) is listed on any other list of terrorists or terrorist organizations maintained pursuant to the Order, the rules and regulations of OFAC or any other applicable requirements contained in any enabling legislation or other related Order(s); (iii) is engaged in activities prohibited in the Order; or (iv) has been convicted, pleaded *nolo contendere*, indicted, arraigned or custodially detained on charges involving money laundering or predicate crimes to money laundering. In addition, Contractor certifies that it does not have a scrutinized business operation in either Iran or Sudan.

Consultant further agrees to include the provisions set forth in Sections 15.2 and 15.3 in any and all subcontracts hereunder. Any violation of such provisions shall constitute a material breach of this Contract.

15.4. Effective Date. This Contract shall be in full force and effect only when it has been approved by the City Council of the City of Tempe, Arizona and when executed by the duly authorized City officials and the duly authorized agent of the Consultant.

15.5. Governing Law. This Contract shall be governed and interpreted by the laws of the State of Arizona.

- 15.6. Exhibits. All exhibits attached to this Contract are made a part of and are incorporated into, this Contract. If any inconsistencies exist between this Contract and any exhibit hereto, the terms of this Contract shall govern.
- 15.7. Force Majeure. Any prevention, delay or stoppage of this Project for a cause beyond the reasonable control of Consultant due to acts of God, acts of war or terrorism, fire or other casualty, shall, notwithstanding anything to the contrary contained herein, excuse the performance of Consultant, for a period equal to such prevention, delay or stoppage. For purposes of this Section 15.7, a cause shall not be deemed beyond a party's control if it is within the control of such party's agents, employees, assigns, contractors or subcontractors.
- 15.8. Entire Agreement. This Contract contains all of the agreements of the parties with respect to the Project and related matters, and no prior agreement, negotiations, postings, offerings, or understanding pertaining to any such matter shall be effective for any purpose unless expressly contained herein.
- 15.9. Consultant's Good Standing. Consultant hereby warrants and represents that it is an Arizona corporation, licensed to do business in the state of Arizona and currently in good standing, and that it is not now in violation of any agreement, instrument, contract, law, rule or regulation by which Consultant is bound.
- 15.10. Independent Contractor. Nothing contained in this Contract shall be deemed or construed by the parties hereto or otherwise, to create the relationship of principal and agent, partnership, joint venturer, employer and employee, or any association between City and Consultant. Consultant is an independent contractor and shall be solely responsible for any unemployment or disability insurance payments, or any social security, income tax or other withholdings, deductions or payments that may be required by federal, state or local law with respect to any compensation paid to the Consultant hereunder or for any and all services or materials provided by or rendered to Consultant hereunder in connection with the work set forth in this Contract.
- 15.11. Severability. If any provision of this Contract shall, to any extent, be determined by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Contract shall not be affected thereby, and every other term and provision of this Contract shall be valid and enforceable to the fullest extent permitted by law.
- 15.12. Time is of the Essence. Time is of the essence in this Contract and each and every provision herein, except as may expressly be provided in writing by the City.
- 15.13. No Waiver. No breach or default hereunder shall be deemed to have been waived the City, except by a writing to that effect signed on behalf of the City. No waiver of any such breach or default shall operate as a waiver of any other

succeeding or preceding breach or default or as a waiver of that breach or default after written notice thereof and demand by the City for strict performance of this Contract. Acceptance of partial or delinquent payments or performance shall not constitute the waiver of any right of the City.

- 15.14. Survival. Any and all representations, obligations, indemnities, warranties, covenants, conditions and agreements contained in this Contract which are expressed as surviving the expiration or earlier termination of this Contract, or by their nature, are to be performed, observed or survive, in whole or in part, after the termination or expiration of this Contract term, shall survive the termination or expiration of this Contract.
- 15.15. Retention of Records. City, through any authorized representative, will have access to and the right to examine and copy all records, books, papers or documents related to services rendered under this Contract. Consultant will retain all books and records related to the services performed for a period of not less than the greater of any applicable federal law retention requirement or five (5) years following termination of this Contract.
- 15.16. Antitrust Violations. City and Consultant recognize that in actual economic practice overcharges resulting from antitrust violations are in fact borne by the City. Therefore, the Consultant assigns to the City any and all claims for such overcharges. Consultant in all subcontracts shall require all subcontractors to likewise assign all claims for overcharges to the City.
- 15.17. Headings. The heading use in this Contract is for ease of reference only and shall not in any way be construed to limit or alter the meaning of any provision.
- 15.18. No Construction Against Drafting Party. Each party acknowledges that it has had an opportunity to review the Contract with counsel, and such documents shall not be construed against any party that is determined to have been the drafter of the documents.
- 15.19. Notices to Parties:

All notices pursuant to this Contract shall be made in writing and delivered or mailed by certified mail to the parties at the following addresses:

CITY:

Andy Goh, City Engineer  
City of Tempe  
Public Works/Engineering Dept.  
P.O. Box 5002  
Tempe, AZ 85280

CONSULTANT:

Ben Spargo  
HDR Engineering, Inc.  
3200 E. Camelback Road  
Suite 350  
Phoenix, AZ 85018

15.20. Non-Appropriation of Funds. If funds appropriated by the City Council or otherwise allocated to perform the work becomes unavailable for payment by the City under this Contract, the City may delay the work for a period up to six (6) months, after which date if no funds are legally available, City may terminate the Contract at the City's sole option. In case of any such delay by City, Consultant may suspend performance of work or services as applicable. However, nothing herein shall be construed to allow termination of the Contract by Consultant for such delay.

[SIGNATURE PAGE TO FOLLOW]

The Consultant warrants that the person who is signing this Contract on behalf of the Consultant is authorized to do so and to execute all other documents necessary to carry out the terms of this Contract.

DATED this 18th day of February, 2009.

CITY OF TEMPE, ARIZONA

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

By: \_\_\_\_\_  
Public Works Manager

ATTEST:

Recommended By:

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Deputy PW Manager/City Engineer

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

CONSULTANT  
HDR Engineering, Inc.



Name - Don P. Manthe

Vice President

Title

47-068-0568

Federal I.D. No./Social Security No.

Certified to be a true and exact copy.

\_\_\_\_\_  
Karen M. Fillmore  
Records Specialist

CITY OF TEMPE  
TEMPE, ARIZONA  
DEPARTMENT OF PUBLIC WORKS

AFFIDAVIT OF GENERAL CONTRACTOR / PRIME CONSULTANT  
REGARDING  
HEALTH INSURANCE

Phoenix,  
Arizona

Date February 18, 2009

College Avenue Traffic Calming  
Project No. 6001941

I hereby certify that HDR Engineering, Inc. (name of company) currently has, and all of its major subcontractors/subconsultants, defined as doing work in excess of \$30,000.00, will have, during the course of this contract, health insurance for all employees working on this project and will offer health insurance coverage to eligible dependents of such employees, as defined in the accompanying Guidelines. The company's health insurance is as follows:

Name of Insurance Company: Blue Cross/Blue Shield - Nebraska

Type of Insurance (PPO, HMO, POS, INDEMNITY): PPO

Policy No.: 04300 Group #

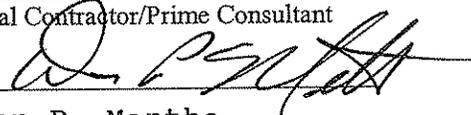
Policy Effective Date (MM/DD/YY): January 1, 2009

Policy Expiration Date (MM/DD/YY): December 31, 2009

Signed and dated at Phoenix, AZ, this 18th day of February, 2009.

HDR Engineering, Inc.

General Contractor/Prime Consultant

By: 

Don P. Manthe

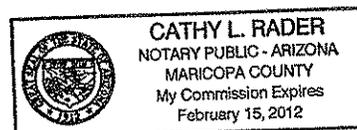
STATE OF ARIZONA            )  
  ) ss  
COUNTY OF MARICOPA    )

SUBSCRIBED AND SWORN to before me this 18<sup>th</sup> day of February, 2009.

Cathy L. Rader  
Notary Public

My commission expires:

2/15/2012



## **City of Tempe**

### **Guidelines for Implementation of Health Insurance**

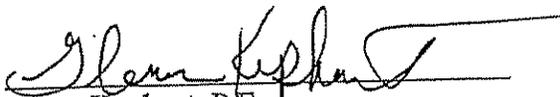
These Guidelines are provided for purposes of implementing Resolution No. 2000.73, which requires all employees of prime consultants, general contractors and major subconsultants and subcontractors to have health insurance and to offer health insurance to their eligible dependants, as determined at the start of each project. Questions regarding these guidelines should be directed to the City of Tempe Engineering Division at (480) 350-8200.

1. All Prime Consultants who enter into a Public Works contract or General Contractors who bid on Public Works projects that are advertised for bid and enter into a contract in excess of \$30,000 with the City of Tempe after January 1, 2001, are required to sign an affidavit in the form attached hereto. The prime consultant or general contractor shall require that all major subconsultants or subcontractors, defined as entities doing work in excess of \$30,000, comply with the health insurance requirements. In signing the affidavit, prime consultants and general contractors may refer to and rely upon these Guidelines for interpretation.
2. Health insurance is required for permanent employees who work for the consultant/contractor more than one hundred and twenty (120) days in any calendar year. A "work day" consists of any time within a twenty-four hour period, regardless of number of hours, that the individual is paid. This requirement excludes students working part-time who are enrolled in a recognized educational institution. Many companies have a grace period or a qualifying period prior to commencement of insurance coverage, which is acceptable so long as the employee coverage begins by the 120<sup>th</sup> day of contract signing. Temporary employees will be covered to the same extent as the City of Tempe covers temporary employees as determined at the start of each project.
3. If a contractor is a "Union" shop and withholds union dues from employees for health insurance coverage that is also offered to their eligible dependents and meets all City requirements, the Contractor may so note on the required affidavit.
4. The health insurance requirements herein apply to all employees that are directly involved with the City of Tempe project including support and administrative personnel.
5. Health insurance coverage must be maintained during the entire time of the contract, including any warranty periods, with the City.
6. All complaints concerning violations of the health insurance requirements shall be filed by an employee, in writing, with the Public Works Department, within thirty (30) days from discovery of the violation. An administrative hearing will be held before the Public Works Manager, and a written decision of findings will be provided to the parties to the hearing within ten (10) days thereafter. Appeal from the decision

of the Public Works Manager may be made within ten (10) days of the date of the decision by filing a notice of appeal in writing with the Public Works Department. If an appeal is timely filed, an administrative hearing will be held before an administrative hearing officer appointed by the City Manager. The decision of the administrative hearing officer shall be final.

7. In the event of a finding by the City of a violation of the insurance provisions, the company in violation of the provision shall be barred from bidding on, or entering into, any public works contract with the City for a minimum period of three (3) years.
8. All consultants and contractors subject to the health insurance requirements shall post, in English and Spanish, notice of the health insurance requirements at their office and at the job site. Signs for posting will be provided by the City.

These "Guidelines for Implementation of Health Insurance", issued and dated this 21st day of August, 2002, hereby amend all guidelines previously issued.



Glenn Kephart, P.E.  
Public Works Manager

## EXHIBIT A

November 20, 2008

Kent Clayton  
Public Works Department  
City of Tempe  
31 East Fifth Street  
Tempe, AZ 85281

Re: College Avenue Traffic Calming Project  
~~Phase 1 – Testing of planned improvements~~  
Phase 2 – Final design of planned improvements

Dear Kent:

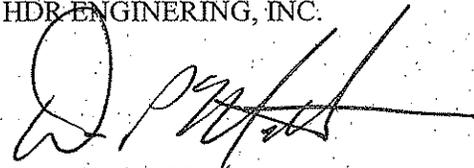
We are pleased to submit the scope of work and cost proposal for the final design stage of the College Avenue Traffic Calming Project.

The scope generally includes developing final design plans, specifications, and an engineer's cost estimate for the project. The tasks include survey, a geotechnical and drainage review, and landscaping and irrigation design.

We thank you for your consideration in receiving this proposals. Please call Ben Spargo at 602-522-7776 if you have any questions or require additional information.

Very truly yours,

HDR ENGINEERING, INC.



Don Manthe, PE  
Vice President, Managing Principal

cc: Bonnie Richardson  
Eric Iwerson

## SCOPE OF WORK

**PROJECT TITLE:** College Avenue Improvements, Design  
US 60 to Apache Boulevard

**PROJECT NO.:** 6001942

### I. PROJECT DESCRIPTION & SCOPE OF CONSTRUCTION

This Scope of Work describes the design services required for the roadway and landscaping improvements for College Avenue in the City of Tempe, Arizona (CITY). The proposed improvements consist of pedestrian, bicycle, traffic calming, and traffic control improvements along College Avenue between US 60 and Apache Boulevard. In addition to the traffic calming improvements, the plan is to remove asphalt pavement where it was not necessary and replacing with landscaping that will make the roadway more appealing for walking, biking and driving..

The design includes developing plans, specifications and estimates for modifying the existing roadway as defined in the College Avenue Traffic Calming Project --, City of Tempe Project Number 6001941. The City of Tempe is currently testing the proposed traffic calming measures from the Draft DCR. The Final DCR will incorporate any changes determined as a result of the testing. It is anticipated that the Final DCR will be complete in early 2009.

Because the Final DCR and thus the scope of the construction project has not been finalized, there are a few items within this cost proposal that are included as allowances pending the outcome of the testing and Final DCR development. They include:

- Traffic signal plans
- Lighting plans
- Utility locating

### A. BACKGROUND

The City of Tempe Transportation Division staff has developed the *Neighborhood Traffic Management Program* (NTMP) (Tempe 2007) to enhance and simplify existing traffic management programs. The College Avenue project was developed based on the goals of the NTMP which were to protect the neighborhoods from "unwanted" traffic, encourage broad-based resident participation, and reduce the speed and/or volume on the collector street.

### B. GENERAL TASKS

**1.0 GENERAL REQUIREMENTS** – The design and all work shall conform to the latest edition and amendments of the following:

- City of Tempe Standard Details
- The City of Phoenix Traffic Barricade Manual

- “MAG Specifications” is more particularly defined as the Maricopa Association of Governments (MAG), *Uniform Standard Specification and Details for Public Works Construction*
- U.S. Department of Transportation, *Manual on Uniform Traffic Control Devices* (MUTCD)
- Other applicable specifications and details required by a governmental agency or utility company (adjacent city, ADOT, MCDOT, SRP etc.)

## **2.0 DATA COLLECTION**

- a. It shall be the responsibility of the DESIGN CONSULTANT to determine, request and obtain specific data and information needed to perform the work. The DESIGN CONSULTANT shall provide all necessary research and data collection for determining and identifying all existing project utilities.
- b. CITY shall provide, upon request, at no cost to DESIGN CONSULTANT, the following existing information as available, not necessarily limited to, as-built drawings, related design studies and reports, geotechnical investigations, traffic data and projections, maintenance records, and drawings of developments planned within the project area.

## **3.0 PUBLIC UTILITY COORDINATION**

- a. DESIGN CONSULTANT shall coordinate with utility companies, private development, other agencies and the CITY to incorporate existing and proposed utilities into the construction plans, in accordance with the latest version of the Arizona Utility Coordinating Committee “Public Improvement Project Guide” (PIPG.) DESIGN CONSULTANT shall show all existing and proposed utilities on the traffic signal plan sheet.
- b. DESIGN CONSULTANT shall coordinate with each utility company to determine if the utilities have any need to upgrade their facilities before or during the project’s construction.
- c. DESIGN CONSULTANT shall work with the CITY’S Project Manager and CITY staff to coordinate the early determination of facilities that may be abandoned or deactivated.
- d. DESIGN CONSULTANT shall be responsible for field verifying the horizontal locations of all utilities within the project limits prior to the Preliminary (60%) design submittal. DESIGN CONSULTANT shall prepare base maps detailing all existing utility data and transmit them to the utility companies for verification and comment concerning the utility locations. DESIGN CONSULTANT shall incorporate the utility company comments into the base maps.
- e. DESIGN CONSULTANT shall specifically identify utility conflicts, with input from utility companies, which might affect the project. Utility conflicts may include, but are not limited to, overhead and subsurface features which may affect equipment or materials installation.

- f. At the 30% plan submittal stage, DESIGN CONSULTANT should review the records and Title Reports obtained by the CITY, as needed, to prepare necessary documents and advise the CITY and Utilities of need for new easements.
- g. DESIGN CONSULTANT shall send a letter to each utility company notifying them of the project and defining the project scope and timeline, and shall also send the appropriate amount of half-size or full size sets to the utility stakeholders at the 30%, 60%, 95%, and final (100%) design submittals to each utility company for their review along with a request for written response from each company to determine the disposition of their utility as it relates to the project.
- h. DESIGN CONSULTANT shall provide the utility companies with electronic base files or other pertinent information necessary for the utility companies to design the relocation of their facilities. DESIGN CONSULTANT shall coordinate with the utilities to facilitate the design to relocate their facilities. DESIGN CONSULTANT shall request a letter from each utility impacted by the project identifying a time line for relocating their facilities.
- i. DESIGN CONSULTANT shall coordinate potholing existing utilities as described in Section B 18.0 "UTILITY LOCATING SERVICES (POTHOLING)".
- j. Prior to 30% plan submittal, DESIGN CONSULTANT shall develop preliminary alignments of any utilities requiring relocation for which the CITY'S Utility Coordinator has requested an alignment design. DESIGN CONSULTANT shall submit preliminary locations to each utility for review along with a request for written response from each utility. DESIGN CONSULTANT shall make joint trenching recommendations for underground utilities, and submit those recommendations to the CITY'S Utility Coordinator for approval.
- k. For each submittal to the utility companies, DESIGN CONSULTANT shall provide the CITY'S Project Manager and Utility Coordinator each with a written record of receipt.
- l. Prior to submittal of Final (100%) construction documents, DESIGN CONSULTANT shall be responsible for ensuring all utility relocations have been designed and coordinated with proposed CITY and private installations, and that such relocations will not impact the proposed construction schedule of the CITY'S project.
- m. DESIGN CONSULTANT shall obtain ADOT style Utility Clearance letters from each utility stakeholder for the project.
- n. DESIGN CONSULTANT shall coordinate with nearby projects/stakeholders.

#### **4.0 PROGRESS MEETINGS**

- a. DESIGN CONSULTANT shall hold the following progress meetings at the CITY OF TEMPE offices or project site.
  - 1. Progress Meetings will take place after the 30%, 60% and the 95% submittals. DESIGN CONSULTANT will coordinate the progress meetings once all comments from the CITY have been evaluated and responded to by the DESIGN CONSULTANT.
  - 2. Comment Resolution Meetings may be held no later than two weeks after redlines are returned to DESIGN CONSULTANT at each plan submittal, with completed comment resolution forms.
- b. DESIGN CONSULTANT shall take notes, prepare and distribute meeting minutes for each Progress Meeting, including Action Items and responsible parties. The minutes are to be reviewed and approved by the CITY'S Project Manager prior to distribution and updated at each Progress Meeting.

#### **5.0 PUBLIC MEETINGS**

- a. DESIGN CONSULTANT shall prepare for and participate in two Public Information Meetings. DESIGN CONSULTANT shall prepare display boards that feature, but not limited to, the horizontal alignment and depict both existing and proposed right-of-way from the most recent plan submittal, and also a display board depicting the proposed improvements.
- b. DESIGN CONSULTANT shall be responsible for the following:
  - 1. Develop and setup display boards
  - 2. Answer questions as needed
- c. CITY shall be responsible for the following:
  - 1. Secure a location and time for each public meeting
  - 2. Prepare and distribute mailers/flyers to those residents within and adjacent to the project corridor, if required. Consultant should coordinate with CITY Public Relation, prepare fliers, and distribute prepared material. Prepare newspaper notice of meeting, if required.
  - 3. Give a brief presentation
  - 4. Prepare and make available a public comment sheet at each meeting
  - 5. Prepare and distribute meeting minutes
  - 6. Compile and summarize all public comments received at the meeting

## 6.0 PROJECT MANAGEMENT

- a. DESIGN CONSULTANT shall prepare monthly progress reports; perform regular budget and schedule monitoring; coordinate with utilities, CITY representatives and other project stakeholders; and manage sub-consultants.
  1. Project Schedule to be provided in MS Project Manager format at Notice to Proceed and upon significant deviation in accordance to Section E. PROJECT SCHEDULE.
- b. Provide Invoicing statements per CITY Of TEMPE requirements.

## 7.0 DESIGN SURVEY

- a. DESIGN CONSULTANT shall perform all project survey as detailed below, if deemed necessary, to complete the design. The survey limits begin south of Riveria Drive at the US 60 R/W boundary, northerly along College Avenue through and past the Apache Boulevard intersection approximately 300'. The total project length is approximately 2 miles of Roadway Design survey. Roadway surveys for crossroad intersections with College Avenue shall extend approximately 100' length in outside the radius returns.
- b. CONTROL: DESIGN CONSULTANT shall perform ground survey to establish horizontal and vertical control throughout the project limits based on the datum specified by the CITY. Survey control for the project shall be in accordance with CITY requirements.
- c. DESIGN CONSULTANT shall perform a full topographic and planimetric survey of all existing features in the areas between the existing Right-of-Way lines of College Avenue as defined in the project limits.
- d. Full topographic survey shall be performed including but not limited to curb and gutter, median curb, catch basins, scuppers, water meter boxes, water and gas valves, manholes, utility poles and guy wires, traffic signal poles, utility boxes, fences, trees, mailboxes, public and private irrigation, plants, shrubs, ground elevations at R/W line, valve nut elevations, and manhole inverts.
- e. Cross Sections shall be taken at 100' intervals and changes in terrain from R/W to R/W to establish an existing ground surface.
- f. Locate C/L and R/W monuments for determinations of centerlines. Survey all sewer lines, water mains, equipments, and storm drains with, size, type, and invert elevations.

- h. Location of utilities that can be determined by observed evidence in conjunction with as-built utility plans
- i. Locate within reason adjacent topographic features that may not appear in the scope but will aid in the design efforts.
- j. Locations of underground utilities (potholes) are not part of this survey task. If pot holing is required, the cost of additional work will be paid from the allowance included in the Contract Price.
- k. Construction survey and layout is not part of this task. If required for construction a contract modification will be required.
- l. Traffic control will be in accordance with survey traffic control guidelines. If the CITY requires an extensive traffic control requirement with Enforcement Officers in work areas, this additional cost will require a contract modification.

**8.0 RIGHT- OF-WAY SURVEY - Not Required**

**9.0 PLANS, SPECIFICATIONS AND ESTIMATES**

- a. DESIGN CONSULTANT shall prepare plans, specifications and estimates for the project in accordance with CITY standards. The plans shall include, but not be limited to:
  - Cover Sheet
  - General Notes Sheets
  - Standard Sections Sheet
  - Paving Plans/Profiles (1"=20'H/1"=2' V) – See Task 10 for additional information
  - Drainage Plans – See Task 11 for additional information
  - Striping and Signing Plans (1"=40') – BY THE CITY, See Task 12 for additional information
  - Traffic Signal Plans – See Task 13 for additional information
  - Utility Relocation Plans (if required, by others)
  - Landscape and Irrigation Plans – See Task 15 for additional information.
  - Storm Water Pollution Plans – see Task 16 for additional information.
  - Results of Survey and Control diagram
- b. DESIGN CONSULTANT shall submit plans at the 30%, 60% 95% and final (100%) stages. The plan submittals will follow the checklists provided by the CITY.
- c. At the final (100%) plan submittal, DESIGN CONSULTANT shall submit Final Mylar plans and a CD containing the complete cost estimate and bid tabs in Microsoft Excel format, improvement base files and plan sheets in Microstation V8 .DGN format, and plans, estimate, bid tabs, and technical specifications in Adobe Acrobat PDF format.

- d. Technical specifications will be in accordance with the MAG Standard Specifications and CITY OF TEMPE SPECIFICATIONS. DESIGN CONSULTANT shall supply technical specifications for all items not adequately covered by the standard specifications.
- e. DESIGN CONSULTANT shall prepare cost estimates and measurement and payment section (bid tabs) for all pay items per the technical specifications.
- f. Following each review, DESIGN CONSULTANT shall review the CITY'S comments. DESIGN CONSULTANT will summarize the comments and indicate whether the comment was incorporated or provide justification for not implementing the change and note on the plan review comments. All comments will be incorporated unless otherwise authorized by the CITY.
- g. DESIGN CONSULTANT shall return redline comments with each plan submittal.
- h. DESIGN CONSULTANT shall be responsible for delivering to the CITY a complete set of constructible plans and shall be responsible for ensuring constructability of such plans, including, but not limited to, completion of right-of-way, TCE, and easement acquisitions.

#### **10.0 PAVING PLANS / PROFILES**

- a. DESIGN CONSULTANT shall perform work necessary to create Typical Roadway Sections, Geometric Layout and Paving Plan & Profile Sheets using design right-of-way needs for a collector street.
- b. DESIGN CONSULTANT shall prepare paving and profile plans at a scale of 1"=20' horizontal and 1"=2' vertical (if required), to include base sheet preparation including survey control, topographic mapping, centerline stationing, curb and gutter, sidewalk, handicap ramps, driveways, turn lanes, intersecting streets, utilities, existing right-of-way, proposed right-of-way, existing utilities, construction notes, etc. Profiles shall show centerline stationing, existing ground, proposed curb and gutter grades, benchmarks and underground utilities.

#### **11.0 DRAINAGE PLANS**

- a. DESIGN CONSULTANT shall prepare a drainage analysis to define the new runoff expected as a result of construction and recommend the drainage improvements required. Assuming only minor adjustments to the existing drainage system, the drainage modifications will be included with the roadway plan. Profiles will be shown for all new storm sewers or drainage ditches.
- b. DESIGN CONSULTANT shall perform drainage calculations and incorporate them into a Draft Drainage Memorandum to accompany the 30% plan submittal if needed. The Draft Drainage Memorandum shall identify proposed drainage modifications and any required drainage easements if

required. This memo shall document all calculations certifying that the proposed design meets the design criteria.

- c. DESIGN CONSULTANT shall incorporate comments received from the Draft Drainage Memorandum into a Final Drainage Memorandum between the 30% and 60% plan submittals.

## **12.0 STRIPING AND SIGNING PLANS – By City**

### **13.0 TRAFFIC SIGNAL PLANS**

- a. DESIGN CONSULTANT shall design traffic signals modifications or removal for the intersection of College Avenue and Alameda Drive in accordance with applicable CITY OF TEMPE or MAG Traffic Signal Standards and Specifications.
- b. DESIGN CONSULTANT shall perform a site visit and document to the extent possible, the equipment and conditions related to the existing traffic signals and lighting, traffic control equipment, and existing underground conduits.
- c. DESIGN CONSULTANT shall design the layout of the signal pole and controller locations for the intersection described above at the 60% design stage. All other features, including the conductor schedule, shall be designed at the 95% plan stage. The Traffic Signal Design Plans shall be produced at a 1" = 20' scale and include the following information:
  - 1. Notes and Detail Sheet
  - 2. General Signal Layout Sheet w/general notes.
  - 3. Signal Interconnect/Fiber Optic Layout Plan Sheet
  - 4. Traffic Signal Quantity and Detail Sheet including Phasing Diagram, Cameras and Wiring Diagram w/construction notes, pole schedule, conductor schedule, foundations, illuminated street name signs, mast arms, and signal heads.
  - 5. Signing & Pavement Marking plan w/construction notes, general plan notes (if applicable), all signs existing to remain; to be removed, relocated and new to be shown. All pavement markings new, obliteration and match lines to be shown. Use MCDOT legend and notation callouts. Signing and marking may be included on the General Signal Layout Sheet.

### **14.0 STREET LIGHT PLANS**

- a. DESIGN CONSULTANT shall design potential new or modified lights to allow for adequate lighting of any new features constructed as a part of this project.
- b. DESIGN CONSULTANT shall perform a site visit and document to the extent possible, the equipment and conditions related to the existing lighting and existing underground conduits.

c. DESIGN CONSULTANT shall design the layout of the lighting and controller locations for any locations identified as lacking adequate lighting. All other features, including the conductor schedule, shall be designed at the 95% plan stage. The Lighting Plans shall be produced at a 1" = 20' scale and include the following information:

1. Notes and Detail Sheet
2. General Lighting Layout Sheet w/general notes.
3. Lighting Interconnect/Fiber Optic Layout Plan Sheet
4. Lighting Quantity and Detail Sheet including pole schedule, conductor schedule, and foundations
5. Lighting plan w/construction notes, general plan notes (if applicable), all lights existing to remain, to be removed, relocated and new to be shown.

## 15.0 LANDSCAPE & IRRIGATION PLANS

- a. DESIGN CONSULTANT shall review existing irrigation water meters, valves, mainline, controllers, and other major irrigation infrastructure locations to determine potential for salvage. Locations shall be derived from as-built and design plans provided by the CITY. DESIGN CONSULTANT shall overlay the existing irrigation location on the paving plan sheets.
- b. DESIGN CONSULTANT shall coordinate with the CITY to determine the desired types of plant material and irrigation equipment.
- c. DESIGN CONSULTANT shall develop 30% Landscape plans showing location and species of proposed new trees, existing trees to remain, and salvaged and relocated trees. Shrub massing shall be shown. Specific shrub species shall be shown at the 30% plan submittal. Plant schedule, landscape notes, and standard landscape details shall be shown. Plant quantities shall be shown at the 30% plan submittal.
- d. DESIGN CONSULTANT shall develop 30% Irrigation plans showing locations of existing infrastructure to remain in place and new locations of water meter(s), mainline, and valves.
- e. DESIGN CONSULTANT shall provide a table of contents identifying the specifications that shall be used at the 30% plan submittal, and develop an opinion of probable cost for each plan submittal.
- f. DESIGN CONSULTANT shall identify individual shrubs and develop irrigation laterals for the 95% plan submittal.
- g. DESIGN CONSULTANT shall generate Landscape and Irrigation specifications at the 95% plan stage.
- h. DESIGN CONSULTANT shall show the water taps for irrigation equipment on the utility plans or roadway plans, as appropriate. DESIGN CONSULTANT shall provide the complete design and all necessary details for these water taps and power for the irrigation controllers.

## 17.0 GEOTECHNICAL

- a. DESIGN CONSULTANT shall conduct a pavement condition survey and review available information related to existing as-built pavement sections for the area. The survey will document the type, extent, and severity of pavement distress visible along portions of each roadway segment. During the pavement condition survey, photographs and measurements will be taken and used in the evaluation of pavement conditions.
- b. DESIGN CONSULTANT shall prepare a summary of the documented pavement conditions observed within the project limits to accompany the 30% submittal. In addition, the report will contain a vicinity map depicting the project limits, plans showing the approximate locations of observed conditions with narrative descriptions, and recommendations for overlay or replacement.
- c. DESIGN CONSULTANT shall incorporate comments received on the draft pavement condition report into a final pavement condition report to accompany the 60% submittal.
- d. Provide soil testing to notify the adequacy of the structural design section and soils resistivity.

## 18.0 UTILITY LOCATING SERVICES (POTHOLING)

- a. DESIGN CONSULTANT shall conduct a Subsurface Utility Engineering (SUE) investigation per ASCE publication CI/ASCE 38-02 "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data" at a "Quality Level C".
- b. During the 30% design phase, DESIGN CONSULTANT shall develop a suggested pothole list that identifies stationing and offset. DESIGN CONSULTANT will provide the list to utility companies affected by the project, and facilitate coordination of a master pothole list.
- c. Prior to completion of the 60% plans, DESIGN CONSULTANT shall provide vacuum excavation potholes (testholes) on existing subsurface utilities at locations identified on the master pothole list. Pertinent pothole data will be presented in spreadsheet format on a standard "Testhole Data Summary" form that includes the depth, horizontal and vertical location, size and material composition of the utility line exposed.
- d. DESIGN CONSULTANT shall be responsible for field survey to initially stake the pothole location in white paint or white flagging for Blue Stake notification and as a reference point for the surveyed location of each pothole. DESIGN CONSULTANT shall identify the pothole number, northing, easting and elevation of the staked location. DESIGN CONSULTANT shall measure and record adjustments from the surveyed

location to the steel reference pin set above the centerline of each exposed utility.

- e. Vacuum excavation potholing will include mobilization, set-up, traffic control (excluding uniformed police officer, special barricading, permit fees or inspections required by any governmental agencies), pavement cut and removal (if any), pavement patch as specified in Streetcut Permit (if any), excavation, backfill and compaction, all information requested, and clean up. DESIGN CONSULTANT shall apply for and obtain CITY OF TEMPE permit for potholing.

**C. CONSTRUCTION DOCUMENTS**

DESIGN CONSULTANT shall prepare the construction documents for each design submittal listed in the table below.

Construction Document	30% Stage	60% Stage	95% Stage	100% Stage
Face Sheet	P	P	F	F/S
Design Sheet/Index	P	P	P	F/S
Special Detail Drawings		P	P	F/S
Typical Roadway Sections	P	P	F	F/S
Geometric Configuration	P	P	F	F/S
Paving Plan & Profile Sheets	P	P	F	F/S
Intersection Plans & Details	P	P	P	F/S
Traffic Signal Plans & Details		P	P	F/S
Signing and Pavement Marking Plans & Details		P	P	F/S
Lighting Plans & Details		P	P	F/S
Landscape Plans & Details		P	P	F/S
Roadway Cross Sections		NA	NA	NA
Quantity & Cost Estimate		P	P	F/S
Technical Specifications		P	P	F/S
Drainage Memo	P	F/S		
Utility Location Memo	P	F		

P – Denotes Preliminary, F – Denotes Final, S – Denotes Sealed –

**1.0 PRELIMINARY (30%) PLANS**

- a. DESIGN CONSULTANT shall submit to the CITY three (3) half size set (scalable 11"x17") of construction plans, three (3) copies of the draft pavement conditions report, three (3) copies of the construction cost estimate, three (3) copies of the outline technical specifications, and plan checklists and three (3) Engineer's estimates. In addition, DESIGN CONSULTANT shall send two (2) full size sets of construction plans, along with conflict letters, or a CD if requested, to each utility company affected by the project.

## **2.0 PRELIMINARY (60%) PLANS**

- a. DESIGN CONSULTANT shall submit to the CITY three (3) half-size sets (scalable 11"x17") of construction plans, three (3) copies of the technical specifications including measure and payment section outline, plan checklists, and three (3) copies of the Engineer's estimates. In addition, DESIGN CONSULTANT shall send two (2) sets of construction plans, along with conflict letters, or a CD if requested, to each utility company affected by the project.

## **3.0 PRE-FINAL (95%) PLANS**

- a. DESIGN CONSULTANT shall incorporate any changes, corrections and/or additions as a result of the preliminary plan review. DESIGN CONSULTANT shall submit to the CITY 60% annotated redlines and annotated comment sheets, three (3) half size sets (scalable 11"x17") of construction plans, three (3) copies of the technical specifications including measure and payment section, plan checklists, and three (3) Engineer's Estimates. In addition, DESIGN CONSULTANT shall send two (2) sets of construction plans, along with conflict letters, or a CD if requested, to each utility company affected by the project.

## **4.0 FINAL (100%) CONSTRUCTION DOCUMENTS**

- a. DESIGN CONSULTANT shall incorporate any changes, corrections and/or additions as a result of the pre-final plan review. DESIGN CONSULTANT shall submit to the CITY 95% annotated redlines and annotated comment sheets, one (1) sealed set of technical specifications including measure and payment section, one (1) full size set of sealed construction plans on reproducible 4 mil Mylar with cover sheet signed by ADEQ or Maricopa Environmental Services, if applicable, one (1) copy of the final construction cost estimate and bid schedule, and one (1) Engineer's Estimate.
- b. DESIGN CONSULTANT shall submit a CD containing complete improvement base files Microstation V8 .DGN format and plans, technical specifications, and estimate in Adobe Acrobat PDF format.

## **D. POST DESIGN SERVICES**

- a. DESIGN CONSULTANT shall attend and actively participate in a pre-bid meeting, DESIGN CONSULTANT shall give a brief overview of the project and address questions related to the construction documents.
- b. DESIGN CONSULTANT shall attend and actively participate in a pre-construction meeting and bi-monthly construction progress meetings.
- c. DESIGN CONSULTANT shall attend and actively participate in a pre-construction meeting and bi-monthly construction progress meetings.

**E. PROJECT SCHEDULE**

The following schedule was developed based on past experience and is indexed to the notice to proceed date. It has been assumed that all agencies have a three week review period which is included in this schedule.

Notice To Proceed	0
Data Collection/Surveys	NTP + 7 Weeks
Submit 30% Plans	NTP + 12 Weeks
Submit 60% Plans	NTP + 17 Weeks
Submit 95% Plans	NTP + 22 Weeks
Submit Final Plans	NTP + 27 Weeks
Bidding	NTP + 32 Weeks

- a. DESIGN CONSULTANT shall adhere to the production schedule established for the project and such schedule may not be modified or deviated from without written consent by the CITY. DESIGN CONSULTANT shall revise and submit for review an updated schedule whenever completion of the project design, or any of the partial completion points listed in the schedule are delayed by one week or more. Such adjusted schedule shall include a written explanation stating the reasons for the schedule change and a plan for getting back on schedule. DESIGN CONSULTANT shall take all reasonable action necessary to get the project back on schedule and CITY shall cooperate to assist DESIGN CONSULTANT.

**F. QUALITY CONTROL**

DESIGN CONSULTANT shall institute and comply with the Design Quality Control Plan established for the project. The scope package should include the Design Quality Control Plan that the DESIGN CONSULTANT has established.

**G. FEE SCHEDULE**

DESIGN CONSULTANT shall submit a fee and man-hour breakdown by task for each team member and their associated billing rate. Man-hour breakdown should include the hours allocated to each team member for each of the tasks appropriate for the completion of the project including implementation of the Design Quality Control Plan.

**H. PROJECT COMPLETION**

The CITY has provided a cursory review of the project scope. The DESIGN CONSULTANT is ultimately responsible to deliver a finalized PS & E package. Any omission of tasks or activities required to deliver the finalized PS & E package will be the responsibility of the DESIGN CONSULTANT.



Task	16	2	16	36	64	134	\$13,802			
<b>Task 5.0 Pre-Final Design (95%)</b>										
4.1 Prepare 95% Roadway Plans (21)	16	2	16	36	64	134	\$13,802			
4.2 Intersection Staking Plan (2)	4		4	4	8	20	\$2,112			
4.3 Prepare 95% Signing & Striping Plans (10)										
4.4 Prepare 95% Landscape Plans (21)										
4.5 Prepare 95% Lighting Plans (10)	4	1	10	12	32	59	\$6,067			
4.6 Prepare 95% Signal Plans (4)	4	1	10	12	32	59	\$6,067			
4.7 95% Quantities/Specs/Cost Estimate	4	1	24			29	\$3,625			
LABOR SUBTOTAL	0	32	30	64	148	383	\$41,077			
EXPENSES										
SUBTOTAL										
<b>Task 6.0 Final Design (100%)</b>										
6.1 Prepare 100% Roadway Plans (21)	16	2	16	36	64	134	\$13,802			
6.2 Prepare 100% Signing & Striping Plans (10)										
6.3 Prepare 100% Landscape Plans (21)										
6.4 Prepare 100% Lighting Plans (10)	4	1	5	6	16	32	\$3,346			
6.5 Prepare 100% Signal Plans (4)	4	1	5	6	16	32	\$3,346			
6.6 Prepare 100% X-Sections (18)	4	1	12	24	40	40	\$4,456			
6.7 Final 100% Quantities/Specs/Cost Estimates	4	1	24			29	\$3,625			
6.8 Submit Final Plans for Review	2					3	\$286			
6.9 Final Corrections (56)	8	1	16	16	16	59	\$6,591			
LABOR SUBTOTAL	2	42	40	78	120	409	\$45,036			
EXPENSES										
SUBTOTAL										
<b>Task 7.0 Construction Coordination (Hourly Rate NOT to Exceed)</b>										
7.1 Pre-Bid Meeting	3	3				6	\$900			
7.2 Pre-Construction Meeting	3					6	\$900			
7.3 Progress Meeting (18)	36					36	\$4,140			
7.4 RFIs / ASI	16			16		32	\$3,312			
7.5 Shop Drawings Submittal	16			16		32	\$3,312			
7.6 As-Builts	16			16		32	\$3,312			
LABOR SUBTOTAL	6	90	0	0	48	144	\$15,876			
EXPENSES										
SUBTOTAL										
LABOR TOTAL	42	325	62	142	358	505	658	43	2,135	\$235,185

TOTAL FEE	
Amount Not To Exceed Labor Cost Amount of Allowance of	\$ 219,309
Hourly Not To Exceed Amount of Allowance Not To Exceed Amount of Allowance Not To Exceed Amount of Allowance Not To Exceed Amount of	\$ 11,865
	\$ 15,876
	\$ 59,912
	\$ 24,495
	\$ 8,000
<b>TOTAL</b>	<b>\$ 339,477</b>

for Final Design Service  
for Reimbursable Expenses (see attached sheet)  
for Construction Coordination Engineering Allowance Survey  
for Subconsultant Services (Alpha Engineering Survey)  
for Subconsultant Services (Coates Irrigation - Irrigation Design)  
for Subconsultant Services (Utility Locating)