



**PURCHASING ITEM
FOR
COUNCIL AGENDA
Memo No. CA08-120**

1. Agenda Item Number:

43

2. Council Meeting Date:
January 17, 2008

TO: MAYOR & COUNCIL

3. Date Prepared: November 20, 2007

THROUGH: CITY MANAGER

4. Requesting Department: Public Works

5. SUBJECT: Award a design services contract to Dibble and Associates for Commonwealth Avenue Roadway Improvements, Project No. ST0717-201, in an amount not to exceed \$175,030.

6. RECOMMENDATION: Staff recommends that Council award a design services contract to Dibble and Associates for Commonwealth Avenue Roadway Improvements, Project No. ST0717-201, in an amount not to exceed \$175,030.

7. BACKGROUND/DISCUSSION: Commonwealth Avenue, between Hamilton Street and McQueen Road is currently on unpaved local street located adjacent to an Salt River Project (SRP) irrigation ditch. As part of a SRP separate aesthetics project the SRP ditch will be piped underground. This City project will pave a local street section from Hamilton Avenue to Ithica Place. Underground utilities, including water and sewer will be extended the length of the road improvements. A portion of the cost will be provided through CMAQ funding as the project will help the City comply with MAG PM-10 requirements for dust control.

8. EVALUATION: The consultant selection process was conducted in accordance with established City policies and procedures. On July 17, 2007, staff received statements of qualifications from seven (7) firms to provide design services for Commonwealth Ave. The selection committee consisted of:

- Chris Lamm, Project Manager
- David Fern, Streets Operations and Project Manager
- Ruthann Goemaat, Streets Superintendent
- Don Street, Resident

Staff recommends a contract award to Dibble and Associates. The costs proposed for this project were comparable to staff estimates and historical design services prices.

9. FINANCIAL IMPLICATIONS:

Cost: \$175,030
Savings: N/A
Long Term Costs: N/A
Fund Source:

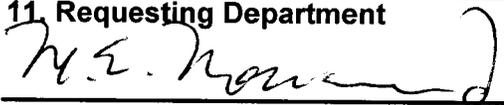
<u>Acct. No.:</u>	<u>Fund Name:</u>	<u>Program Name:</u>	<u>CIP</u> <u>Funded:</u>	<u>Amount:</u>
411.3310.0000.6517.7ST303	General Obligation Bonds	Street Construction – Various Improvements	FY 06/07	\$162,030
614.3910.0000.6814.8WW196	Wastewater SDF	Collection Systems Facility Improvement	FY 07/08	\$13,000

10. PROPOSED MOTION: Move that Council award a design services contract to Dibble and Associates for Commonwealth Avenue Roadway Improvements, Project No. ST0717-201, in an amount not to exceed \$175,030, and authorize the Mayor to sign the contract documents.

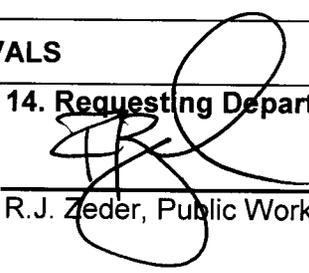
ATTACHMENTS: Location Map, Contract

APPROVALS

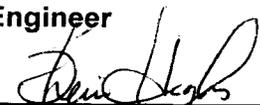
11. Requesting Department


Michael Normand, Acting Assistant Public Works Director/Transportation & Operations

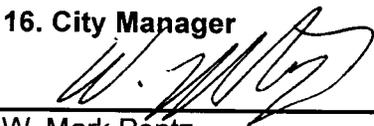
14. Requesting Department


R.J. Zeder, Public Works Director

13. City Engineer

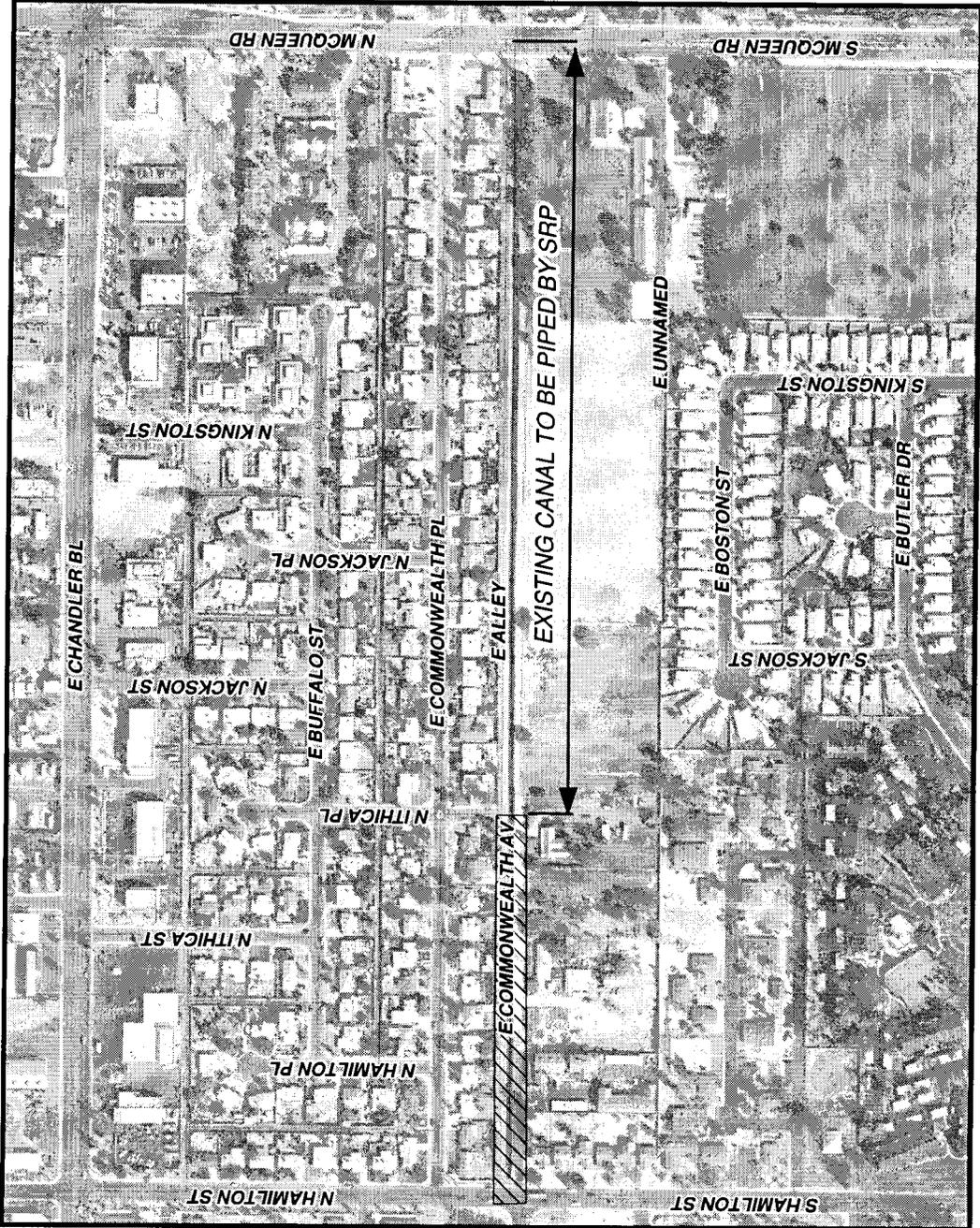
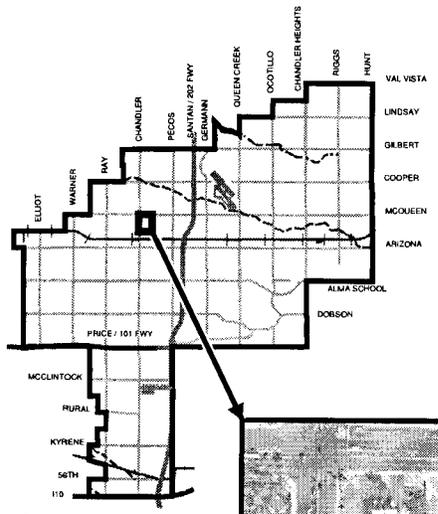

Sheina Hughes, Acting Assistant Public Works Director/City Engineer

16. City Manager


W. Mark Pentz



**COMMONWEALTH AVENUE ROADWAY IMPROVEMENTS
(HAMILTON TO ITHICA)
PROJECT NO. ST0717-201**



MEMO NO. CA08-120

LEGEND

 PROJECT LIMITS



DESIGN CONSULTANT SERVICES CONTRACT

PROJECT TITLE: **Commonwealth Avenue Roadway Improvements (Hamilton Street to Ithica Place)**

PROJECT NO: **ST0717-201**

This Agreement is made and entered into by and between the City of Chandler, Arizona, a municipal Corporation, hereinafter called the CITY, and Dibble & Associates Consulting Engineers, Inc., an Arizona Corporation doing business as Dibble Engineers, hereinafter called DESIGN CONSULTANT.

WHEREAS, DESIGN CONSULTANT represents DESIGN CONSULTANT has the expertise and is qualified to perform the services described in this Agreement; and

WHEREAS, the Mayor and City Council/City Manager of the City of Chandler are authorized and empowered by the provisions of the City Charter to execute Agreements for Professional Services;

NOW THEREFORE, for and in consideration of the mutual covenants and conditions hereinafter contained, it is agreed by and between the CITY and DESIGN CONSULTANT, as follows:

1. DESCRIPTION OF PROJECT: The Project known as the Commonwealth Avenue Roadway Improvements (Hamilton Street to Ithica Place) will be approximately 900 linear feet along Commonwealth Avenue between Hamilton Street and Ithica Place. The Project is more specifically described in Exhibit A attached hereto and incorporated herein by reference.

2. DEFINITIONS: Words used in this Agreement which are defined in CITY's General Conditions for Construction Contracts shall have the meaning stated therein. DESIGN CONSULTANT is the Project Designer as defined in said General Conditions.

3. SCOPE OF WORK: DESIGN CONSULTANT shall design the Project all as more specifically described in Exhibit A attached hereto and incorporated herein by reference.

4. PAYMENT SCHEDULE: For services described in paragraph 3 of this Agreement, the CITY shall pay DESIGN CONSULTANT a fee not to exceed a sum of **One Hundred Seventy Five Thousand Thirty** dollars (\$175,030) in accordance with the fee schedule attached hereto as Exhibit B-1 and made a part hereof by reference. Payment will be made monthly on the basis of progress reports. An Application and Certification for Payment Sheet must be provided. In addition, the following must also be included with each application for payment: a clear, detailed invoice reflecting items being billed for; a summary sheet showing percentage of work completed to date; amount/percent billed to date; current status of all tasks within a project; and any/all backup documentation supporting the above items. Work schedule updates shall also be included in the monthly progress payment requests.

5. PERIOD OF SERVICE:

A. Following receipt of a "Notice to Proceed" with the design work, DESIGN CONSULTANT shall complete the design and have all documents ready for bidding within **Two Hundred Forty Five (245)** calendar days of the date indicated on the Notice to Proceed.

B. The Bid and Award period will be approximately 30 days. Following the General Contractors "Notice To Proceed" with construction of the Project, DESIGN CONSULTANT shall perform the construction administration portion of this contract for approximately 120 days.

C. DESIGN CONSULTANT shall prepare and deliver to CITY record documents within 30 days of the date of receipt of the red line drawings from CITY.

D. DESIGN CONSULTANT shall complete all services specified herein in accordance with the Production Schedule and progress milestones included in Exhibit A attached herein. In the event delays are experienced beyond the control of DESIGN CONSULTANT, the completion date may be extended as mutually agreed upon by CITY and DESIGN CONSULTANT.

6. OPINIONS OF PROBABLE COSTS (ESTIMATES): Any opinions of probable project cost or probable construction cost provided by DESIGN CONSULTANT are made on the basis of information available to DESIGN CONSULTANT and on the basis of DESIGN CONSULTANT's experience and qualifications, and represents its best judgement as an experienced, licensed and qualified professional. However, since DESIGN CONSULTANT has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s) methods of determining prices, or over competitive bidding or market conditions, DESIGN CONSULTANT does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probable cost DESIGN CONSULTANT prepares.

7. REPORTS & APPROVALS: All work shall be subject to the approval by CITY and each phase of the work will be submitted to CITY in accordance with schedule included in Exhibit A-1 and in the format prescribed by CITY. When requested by CITY, DESIGN CONSULTANT will attend Council meetings and provide finished documents including correspondence for Council action, supporting charts, graphs, drawings and colored slides of same.

8. STANDARDS OF PERFORMANCE:

A. This design contract has been awarded to DESIGN CONSULTANT based on their proposal that those personnel and consultants listed in Exhibit A-2 attached hereto will perform the portions of the work listed on said Exhibit A-1. DESIGN CONSULTANT shall not deviate nor substitute any of these team members without prior written approval by CITY.

B. DESIGN CONSULTANT shall be responsible for the technical accuracy of its services and documents resulting therefrom, and CITY shall not be responsible for discovering deficiencies therein. DESIGN CONSULTANT shall correct any such deficiencies without additional compensation or cost to CITY, except to the extent any such deficiency is directly attributable to deficiencies in CITY-furnished information.

C. DESIGN CONSULTANT shall be familiar with CITY's Standard Details and Specifications and other relevant CITY regulations. DESIGN CONSULTANT shall ensure there are no conflicts among the Contract Documents including, but not limited to, the CITY's General and Supplementary Conditions for Construction Contracts, the plans and specifications prepared by DESIGN CONSULTANT, any standard details or specifications incorporated therein by reference, and the Construction Contract.

D. Correction of Mistakes: DESIGN CONSULTANT shall be responsible for the completeness and accuracy of the work prepared or compiled under DESIGN CONSULTANT's obligation for this project and shall correct, at DESIGN CONSULTANT's expense, all errors or omissions therein which

may be disclosed. Correction of errors disclosed and determined to exist during any construction of the project on architectural or engineering drawings and specifications shall be accomplished by DESIGN CONSULTANT. The cost of the design necessary to correct those errors attributable to DESIGN CONSULTANT and any damage incurred by CITY as a result of additional construction costs caused by such engineering or architectural errors shall be chargeable to DESIGN CONSULTANT and shall not be considered a cost of the Work. The fact that CITY has reviewed or approved DESIGN CONSULTANT'S work shall in no way relieve DESIGN CONSULTANT of any of its responsibilities.

9. INDEMNIFICATION

(a) For Professional Liability:

To the fullest extent permitted by law, DESIGN CONSULTANT shall defend, indemnify and hold harmless the City of Chandler, its agents, representatives, officers, directors, officials and employees, individually and collectively, (hereinafter CoC) from and against all losses, claims, damages, suits, actions, payments, judgments, demands, expenses, and costs, including but not limited to, attorney's fees, defense costs, court costs, and the cost of appellate proceedings, or actions of any kind and nature related to, arising out of, or alleged to have resulted from the errors, mistakes or omissions relating to professional services by DESIGN CONSULTANT, its employees, agents, or any tier of subcontractors in the performance of this Contract or of any other person for whose errors, mistakes or omissions DESIGN CONSULTANT may be legally liable. This indemnity shall not be construed to include losses, claims, damages, suits, or actions of any kind and nature, to the extent arising from or alleged to have resulted from the errors, mistakes or omissions of CoC (other than DESIGN CONSULTANT, its employees, agents, or any tier of subcontractors). The provisions of this paragraph shall survive termination of this Contract.

(b) For all Other Liabilities, Hazards and Exposures:

To the fullest extent permitted by law, DESIGN CONSULTANT shall defend, indemnify and hold harmless the City of Chandler, its agents, representatives, officers, directors, officials and employees, individually and collectively, (hereinafter CoC) from and against all losses, claims, damages, suits, actions, payments, judgments, demands, expenses, and costs, including but not limited to, attorney's fees, defense costs, court costs, and the cost of appellate proceedings, or actions of any kind and nature, wages or overtime compensation due employees in rendering service under this Contract and whether to any person or property, including natural resources and any claim made under the Fair Labor Standards Act or any other federal or state laws, related to, arising out of, or alleged to have resulted from the actions of DESIGN CONSULTANT and alleged to have been caused in whole or in part by any act or omission of DESIGN CONSULTANT, anyone directly or indirectly employed by them or anyone for whose acts DESIGN CONSULTANT may be legally liable, and from any claims or amounts arising or recovered under Workers' Compensation laws or any other law, bylaw, or ordinance, order or decree or any failure on the part of DESIGN CONSULTANT, its agents, employees or representatives to fulfill DESIGN CONSULTANT'S obligations under this Contract. This indemnity shall not be construed to include losses, claims, damages, suits, or actions of any kind and nature, to the extent arising from or alleged to have resulted from the errors, mistakes or omissions of CoC, (other than DESIGN CONSULTANT, its employees, agents, or any tier of subcontractors). The provisions of this paragraph shall survive termination of this Contract.

(c) Consequential Damages:

The parties intend that damages and/or costs and all other terms implying an amount tied to liability shall include consequential damages and loss of productivity limited to the total value of this contract in dollars as payable by the City of Chandler or twice the amount of aggregate insurance required by this Contract, whichever is greater.

(d) Insurance does not limit liability:

The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

10. INSURANCE REQUIREMENTS

10.1 General Requirements:

- A DESIGN CONSULTANT, at its own expense, shall purchase and maintain insurance of the types and amounts required in this section, with companies possessing a current A.M. Best, Inc. rating of B++6, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to CITY.
- B Policies written on a "Claims made" basis are not acceptable without written permission from the City's Risk Manager.
- C All insurance required herein shall be maintained in full force and effect until all work or services required to be performed under the terms of this Agreement is satisfactorily completed and formally accepted. Failure to do so may, at the sole discretion of CITY, constitute a material breach of this Agreement and may result in termination of this contract.
- D If any of the insurance policies are not renewed prior to expiration, payments to the DESIGN CONSULTANT may be withheld until these requirements have been met, or at the option of the City, the City may pay the Renewal Premium and withhold such payments from any monies due the DESIGN CONSULTANT.
- E All insurance policies, except Workers' Compensation and Professional Liability required by this Agreement, and self-insured retention or deductible portions, shall name, to the fullest extent permitted by law for claims arising out of the performance of this contract, the City of Chandler, its agents, representatives, officers, directors, officials and employees as Additional Insureds.
- F DESIGN CONSULTANT's insurance shall be primary insurance over any insurance available to the CITY and as to any claims resulting from this contract, it being the intention of the parties that the insurance policies so effected shall protect both parties and be primary coverage for any and all losses covered by the described insurance.
- G The insurance policies, except Workers' Compensation and Professional Liability, shall contain a waiver of transfer rights of recovery (subrogation) against CITY, its agents, representatives, officers, directors, officials and employees for any claims arising out of DESIGN CONSULTANT's acts, errors, mistakes, omissions, work or service.
- H The insurance policies may provide coverage which contain deductibles or self-insured retentions. Such deductible and/or self-insured retentions shall be assumed by and be for the account of, and at the sole risk of DESIGN CONSULTANT. DESIGN CONSULTANT shall be solely responsible for the deductible and/or self-insured retention. The amounts of any self-insured retentions shall be noted on the Certificate of Insurance. CITY, at its option, may require DESIGN CONSULTANT to secure payment of such deductibles or self-insured retentions by a Surety Bond or an irrevocable and unconditional letter of credit. Self-insured retentions (SIR) in

excess of \$25,000 will only be accepted with the permission of the Management Services Director/designee.

- I All policies and certificates shall contain an endorsement providing that the coverage afforded under such policies shall not be reduced, canceled or allowed to expire until at least thirty (30) days prior written notice has been given to CITY.
- J Information concerning reduction of coverage on account of revised limits or claims paid under the General Aggregate, or both, shall be furnished by the DESIGN CONSULTANT with reasonable promptness in accordance with the DESIGN CONSULTANT's information and belief.
- K In the event that claims in excess of the insured amounts provided herein, are filed by reason of any operations under this contract, the amount of excess of such claims, or any portion thereof, may be withheld from payment due or to become due the DESIGN CONSULTANT until such time as the DESIGN CONSULTANT shall furnish such additional security covering such claims as may be determined by the CITY.

10.2 Proof of Insurance - Certificates of Insurance

- A Prior to commencing work or services under this Agreement, DESIGN CONSULTANT shall furnish to CITY Certificates of Insurance, issued by DESIGN CONSULTANT's insurer(s), as evidence that policies providing the required coverages, conditions and limits required by this Agreement are in full force and effect and obtain from the City's Risk Management Division approval of such Certificates.
- B If a policy does expire during the life of this Agreement, a renewal certificate must be sent to the City of Chandler five (5) days prior to the expiration date.
- C All Certificates of Insurance shall identify the policies in effect on behalf of DESIGN CONSULTANT, their policy period(s), and limits of liability. Each Certificate shall include the job site and project number and title. Coverage shown on the Certificate of Insurance must coincide with the requirements in the text of the contract documents. Information required to be on the certificate of Insurance may be typed on the reverse of the Certificate and countersigned by an authorized representative of the insurance company.
- D CITY reserves the right to request and to receive, within 10 working days, certified copies of any or all of the herein required insurance policies and/or endorsements. CITY shall not be obligated, however, to review same or to advise DESIGN CONSULTANT of any deficiencies in such policies and endorsements, and such receipt shall not relieve DESIGN CONSULTANT from, or be deemed a waiver of CITY's right to insist on, strict fulfillment of DESIGN CONSULTANT's obligations under this Agreement.

10.3 Required Coverage

Such insurance shall protect DESIGN CONSULTANT from claims set forth below which may arise out of or result from the operations of DESIGN CONSULTANT under this Contract and for which DESIGN CONSULTANT may be legally liable, whether such operations be by the DESIGN CONSULTANT or by a Sub-consultant or subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. Coverage under the policy will be at least as broad as

Insurance Services Office, Inc., policy form CG00011093 or equivalent thereof, including but not limited to severability of interest and waiver of subrogation clauses.

- A Claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed;
- B Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
- C Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
- D Claims for damages insured by usual personal injury liability coverage;
- E Claims for damages, other than to Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
- F Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle; Coverage will be at least as broad as Insurance Service Office, Inc., coverage Code "I" "any auto" policy form CA00011293 or equivalent thereof.
- G Claims for bodily injury or property damage arising out of completed operations;
- H Claims involving contractual liability insurance applicable to the Contractor's obligations under the Indemnification Agreement;
- I Claims for injury or damages in connection with one's professional services;
- J Claims involving construction projects while they are in progress. Such insurance shall include coverage for loading and off loading hazards. If any hazardous material, as defined by any local, state or federal authorities are to be transported, MCS 90 endorsement shall be included.

10.3.1 Commercial General Liability - Minimum Coverage Limits:

The Commercial General Liability insurance required herein shall be written for not less than \$1,000,000 limits of liability or ten percent (10%) of the Contract Price, whichever coverage is greater. Any combination between general liability and excess general liability alone amounting to a minimum of \$1,000,000 per occurrence (or 10% per occurrence) and an aggregate of \$2,000,000 (or 20% whichever is greater) in coverage will be acceptable. The Commercial General Liability additional insured endorsement shall be as broad as the Insurance Services, Inc's (ISO) Additional Insured, Form B, CG 20101001, and shall include coverage for DESIGN CONSULTANT's operations and products, and completed operations.

10.3.2 General Liability - Minimum Coverage Limits

The General Liability insurance required herein, including, Comprehensive Form, Premises-Operations, Explosion and Collapse, Underground Hazard, Products/Completed Operations, Contractual Insurance, Broad Form Property Damage, Independent Contractors, and Personal Injury shall be written for Bodily

Injury and Property Damage Combined shall be written for not less than \$1,000,000 or 10% of the contract cost and with a \$2,000,000 aggregate.

10.3.3 Automobile Liability

DESIGN CONSULTANT shall maintain Commercial/Business Automobile Liability insurance with a combined single limit for bodily injury and property damage of not less than \$1,000,000 each occurrence with respect to any owned, hired, and non-owned vehicles assigned to or used in performance of the DESIGN CONSULTANT's work. Coverage shall be at least as broad as coverage code 1, "any auto", (Insurance Service Office, Inc. Policy Form CA 00011293, or any replacements thereof). Such insurance shall include coverage for loading and off loading hazards if hazardous substances, materials or wastes are to be transported and a MCS 90 endorsement shall be included with coverage limits of \$5,000,000 per accident for bodily injury and property damage.

10.3.4 Worker's Compensation and Employer's Liability:

DESIGN CONSULTANT shall maintain Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction over DESIGN CONSULTANT's employees engaged in the performance of the work or services; and, Employer's Liability insurance of not less than \$1,000,000 for each accident, \$1,000,000 disease coverage for each employee, and \$1,000,000 disease policy limit. In case any work is subcontracted, DESIGN CONSULTANT will require the Subcontractor to provide Workers' Compensation and Employer's Liability to at least the same extent as required of DESIGN CONSULTANT.

10.3.5 Professional Liability:

DESIGN CONSULTANT shall maintain Professional Liability insurance covering acts, errors, mistakes and omissions arising out of the work or services performed by DESIGN CONSULTANT, or any person employed by DESIGN CONSULTANT, with a claims made policy limit of not less than \$1,000,000.

11. DISPUTE RESOLUTION:

A. Disputed Invoices. In the event of a disputed or contested invoice, only that portion so contested may be withheld from payment, and the undisputed portion will be paid.

B. Disputed Items. CITY may temporarily delete any disputed items contained in DESIGN CONSULTANT's invoice, including items disputed due to lack of supporting documentation, and pay the remaining amount of the invoice. CITY shall promptly notify DESIGN CONSULTANT of the dispute and request clarification and/or remedial action. CITY may withhold payment on all disputed items until the issues are resolved. After any dispute has been settled, DESIGN CONSULTANT shall include the disputed item on a subsequent regularly scheduled invoice or on a special invoice for the disputed item only.

C. Good Faith Negotiation. CITY and DESIGN CONSULTANT agree to negotiate all disputes between them in good faith prior to exercising their rights under law.

D. Binding Special Arbitration. All claims, disputes and other matters in question between CITY and DESIGN CONSULTANT arising out of, or relating to this Agreement, or the breach thereof (except for claims which have been resolved pursuant to paragraphs 9 or 12 A, B and C herein above shall be decided by binding, unappealable special arbitration, as described below, if the claim for compensation,

costs or expenses, damages or reimbursement is equal to or less than \$50,000. Claims over \$50,000 shall have non-binding mediation as the first step to settling the dispute or claim.

E. Special Arbitration. All arbitration of claims shall be conducted in Chandler, Arizona, in accordance with the following rules:

- 1) Any time after the parties have attempted in good faith but without success to resolve one or more disputes, a party may notify the other in writing that they are at impasse (Notice of Impasse) and request immediate arbitration in accordance with the terms herein.
- 2) Within ten (10) days after the date of such Notice of Impasse, each party shall select an impartial intermediary, who shall, together, agree upon a third impartial person who will be the arbitrator. To be considered impartial an intermediary or arbitrator shall not have any previous or current relationship which would be considered a conflict of interest with either party, including, but not limited to, current or previous employment or contractual relationship, indebtedness or ownership interest.
- 3) The parties shall immediately cooperate with each other to draft together a short summary of the facts and a list of questions or issues to be resolved by the arbitrator. If the facts are in dispute, such disputed facts shall be listed as contentions by the party asserting them. In the event the parties are unable to agree upon a summary of the facts or a list of questions or issues, each party shall instead include a statement of facts and list of issues in that party's Position Paper submitted to the arbitrator. Such summary of facts and list of questions or issues shall be completed by the parties and submitted to the arbitrator within twenty (20) days of the date of the Notice of Impasse.
- 4) The parties shall cooperate to gather any documents and exhibits necessary to resolve the issues and provide them jointly to the arbitrator. In the event of a dispute between the parties regarding whether a document should be provided, the disputed document shall be submitted to the impartial intermediaries who will determine its appropriateness for submittal. Correspondence between the parties which discusses settlement or resolution of the issues shall be submitted. All such evidence shall be submitted to the arbitrator within twenty (20) days of the date of the Notice of Impasse.
- 5) Each party may submit a written Position Paper of no more than ten (10) pages, supporting or explaining that party's position and providing citations to relevant law. Any such Position Paper shall be submitted to the arbitrator within thirty (30) days of the date of the Notice of Impasse.
- 6) There shall be no hearing, no witnesses, no argument nor contact by the parties or their representatives with the arbitrator except for the joint submittals and each party's Position Paper.
- 7) The arbitrator may request additional information and may make any other orders necessary to resolve the entire matter.
- 8) The arbitrator shall issue a written decision resolving all the submitted issues within 30 days after receiving the Position Papers.

F. Nothing herein contained shall be so construed as to preclude DESIGN CONSULTANT or CITY from commencing a legal action in relation to claims in excess of \$50,000, but the sole legal remedy in

relation to claims of \$50,000 or less shall be binding, unappealable special arbitration as described above.

12. AMENDMENTS: Whenever a change in the Scope of Work contemplated in this Agreement is determined to be necessary, the work will be performed in accordance with this Agreement provided, however, that BEFORE such work is started, an Amendment shall be executed by CITY and DESIGN CONSULTANT. Additions to, modifications of, or deletions from the project provided herein may be made and the compensation to be paid to DESIGN CONSULTANT may be adjusted accordingly by mutual agreement of the contracting parties. It is agreed that no claim for extra work by DESIGN CONSULTANT will be allowed by CITY except as provided herein, nor shall DESIGN CONSULTANT do any work not covered by this Agreement unless such work is authorized through an executed amendment.
13. TERMINATION WITHOUT CAUSE: CITY may at any time and for any or no reason, at its convenience, terminate this Agreement or any part of the services to be rendered pursuant thereto by ten (10) day written notice to DESIGN CONSULTANT specifying the termination date. Immediately after receiving such notice, DESIGN CONSULTANT shall discontinue advancing the work under this Agreement and shall deliver to CITY all drawings, notes, calculations, sketches and other materials entirely or partially completed, together with all unused materials supplied by CITY.

DESIGN CONSULTANT shall receive as compensation in full for services performed to date of such termination, a fee for the percentage of work actually completed. This fee shall be a percentage of DESIGN CONSULTANT(S) fee described in this Agreement under paragraph 4 and shall be in an amount to be agreed mutually by DESIGN CONSULTANT and CITY. CITY shall make this final payment within sixty (60) days after DESIGN CONSULTANT has delivered the last of the partially completed items.

14. OWNERSHIP OF DOCUMENTS: All documents, including, but not limited to, preliminary designs, tracings, drawings, original mylars, estimates, field notes, investigations, design analysis and studies which are prepared in the performance of this Agreement are to be, and shall remain the property of CITY. DESIGN CONSULTANT shall furnish CITY, upon its request, originals or reproducible copies of technical specifications and copies of all other documents listed above. DESIGN CONSULTANT shall endorse, by his professional seal, all plans and engineering data furnished by it.
15. RE-USE OF DOCUMENTS: The parties agree the documents, drawings, specifications and designs, although the property of CITY, are prepared for this specific project and are not intended nor represented by DESIGN CONSULTANT to be suitable for re-use for any other project. Any reuse without written verification or adaptation by DESIGN CONSULTANT for the specific purpose intended will be at CITY's sole risk and without liability or legal exposure to DESIGN CONSULTANT.
16. NO KICK-BACK CERTIFICATION: DESIGN CONSULTANT warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage or contingent fee; and that no member of the City Council or any employee of the CITY has any interest, financially or otherwise, in the DESIGN CONSULTANT firm.

For breach or violation of this warranty, CITY shall have the right to annul this Agreement without liability, or at its discretion to deduct from the Agreement Price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

17. CONFLICT OF INTEREST: DESIGN CONSULTANT stipulates that its officers and employees do not now have a conflict of interest and it further agrees for itself, its officers and its employees that it will not contract for or accept employment for the performance of any work or services with any individual business, corporation or government unit that would create a conflict of interest in the performance of its obligations pursuant to this Agreement.

Pursuant to A.R.S. Section 38-511, CITY may cancel this Agreement within three (3) years after its execution, without penalty or further obligation by CITY if any person significantly involved in initiating, negotiating, securing, drafting or creating this Agreement on behalf of CITY is, at any time while this Agreement is in effect, an employee of any other party to this Agreement in any capacity, or a consultant to any other party of this Agreement with respect to the subject matter of this Agreement.

18. CONTROLLING LAW: The laws of the State of Arizona shall govern this agreement.

19. NO ASSIGNMENT: DESIGN CONSULTANT shall not assign, transfer, convey or subcontract this Agreement or the services to be rendered pursuant thereto without the prior written consent of CITY.

20. NOTICES: Any notice required under this Agreement shall be in writing, addressed to the appropriate party at its address on the signature page and given personally or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

IN WITNESS WHEREOF, the parties have hereunto subscribed their names to this
day of 20

CITY OF CHANDLER

DESIGN CONSULTANT

MAYOR Date

By: Kent M. Dibble
Title: President

ADDRESS FOR NOTICE
City of Chandler
P.O. Box 4008, Mail Stop 407
Chandler, AZ 85244-4008
480-782-3307

ADDRESS FOR NOTICE
Dibble Engineers
7500 N. Dreamy Draw Drive, Ste. 200
Phoenix, AZ 85020
Phone: (602) 957-1155

APPROVED AS TO FORM:

ATTEST: If Corporation

City Attorney by [Signature]

Kenneth L. Snyder
Secretary

ATTEST:

City Clerk

SEAL

EXHIBIT A-1
DETAILED DESCRIPTION OF CITY'S CONCEPT

PROJECT TITLE: Design Roadway Improvements on Commonwealth Ave
PROJECT NO.: ST0717-201

I. PROJECT DESCRIPTION & SCOPE OF CONSTRUCTION:

A. BACKGROUND

The purpose of the project is to prepare final design and construction documents for the improvements for approximately 900-feet of Commonwealth Avenue between Hamilton Street and Ithica Place for the City of Chandler, Arizona. The proposed improvements include local roadway design, pavement drainage design, water line and sewer line construction, landscaping, and street lights.

The approximate limits of the project are the full right of way along Commonwealth Ave from the intersection of Hamilton Street and Commonwealth Ave to Ithica Place.

Commonwealth Avenue will be designed as a 35-foot local roadway section with curb and gutter, sidewalk on the south side of the roadway, and a multi-use path on the north side. Improvements will be constructed within the existing 55-feet of right-of-way. A connection to Ithica Place will be provided at the east terminus of the project.

There is approximately 300-feet of existing 8-inch water line and 8-inch sewer line in Commonwealth Avenue from Hamilton Road. This project will extend the existing facilities approximately 600-feet to Ithica Place. DESIGN CONSULTANT will also evaluate the material of the existing utility lines in Commonwealth Avenue to determine if sub-standard materials are in place. If sub-standard materials exist, the design will include replacement of an additional 300-feet of 8-inch water line and sewer line.

Congestion Mitigation Air Quality (CMAQ) funds will be utilized to construct this project. DESIGN CONSULTANT will meet the requirements of the Federal Highway Administration (FHWA) and ADOT Local Government Section for federally funded projects. Some of the requirements include preparation of a design concept report, environmental report, right-of-way and utility clearances, and coordination with the ADOT Local Government Section.

Salt River Project (SRP) owns and operates an earthen irrigation ditch within the project limits. This open ditch will be tiled under separate contract; SRP will design and construct the improvements to the irrigation system. DESIGN CONSULTANT will coordinate the roadway improvements with SRP.

The project will include landscaping design from back of curb to the 55-foot right-of-way limit from Hamilton Street to Ithica Place. Additionally, an alternative will be developed to include landscaping of the adjacent 16-foot alley, located to the north of Commonwealth Avenue.

The proposed improvements will be constructed within the existing right-of-way. DESIGN CONSULTANT will research the existing right-of-way and provide legal descriptions and exhibits for up to 3 drainage or temporary construction easements.

Coordination with stakeholders, including City residents will be an important part of the project. It is anticipated that two (2) public meetings will be held to facilitate communication and disseminate information to the public and stakeholders.

Design survey and geotechnical investigation for pavement, water line, and sewer line design are also included in this scope of work.

B. GENERAL TASKS

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

- City of Chandler Standard Details and Specifications
- City of Chandler Technical Design Manual #1: Water System Design
- City of Chandler Technical Design Manual #2: Wastewater and Reclaimed Water System Design
- City of Chandler Technical Design Manual #3: Storm Drainage System Design
- City of Chandler Technical Design Manual #4: Street Design and Access Control
- City of Chandler Technical Design Manual #5: Traffic Signal Design
- City of Chandler Technical Design Manual #6: Street Light Design
- City of Chandler Technical Design Manual #7: Traffic Barricade Design
- City of Chandler Technical Design Manual #8: Landscape and Irrigation Design of Right Of Ways, Retention Basins and Parks
- MAG Uniform Standard Specifications and Details
- Manual of Uniform Traffic Control Devices for Streets and Highways (MUTCD)
- AASHTO *Policy on Geometric Design of Highways and Streets*
- The Code of the City of Chandler

B 2.0 DATA COLLECTION

1. CITY shall provide at no cost to DESIGN CONSULTANT the following existing information as available, but not necessarily limited to, as-built drawings, related design studies and reports, geotechnical investigations, traffic data and projections, maintenance records, drawings of developments planned within the project area, and title reports.
2. DESIGN CONSULTANT shall keep a log of all documents and information provided by CITY staff and related stakeholders.

B 3.0 UTILITY COORDINATION

1. DESIGN CONSULTANT shall coordinate with utility companies, private development 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 paving plan and profile sheets.

2. 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.
3. DESIGN CONSULTANT shall work with the CITY's Utility Coordinator to coordinate the early determination of facilities which may be abandoned or deactivated.
4. DESIGN CONSULTANT shall be responsible for field verifying the horizontal locations of all utilities within the project limits prior to the DCR 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.
5. DESIGN CONSULTANT shall specifically identify utility conflicts, with input from utility companies, which might affect alignment or grade and recommend alignment alternatives.
6. DESIGN CONSULTANT shall coordinate with SRP Irrigation for the relocation of the SRP irrigation ditch within the project limits. Coordination includes attendance at three (3) meetings, submittal of plans (DCR, 60%, 95%, Final), and transmittal of electronic files.
7. 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 two (2) sets each of 60%, 95%, and Final plans 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 planned roadway improvements.
8. 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 planned roadway improvement identifying a timeline for relocating their facilities.
9. 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.
10. DESIGN CONSULTANT shall work with the CITY's Utility Coordinator to facilitate utility coordination meetings upon notice to proceed and at each submittal (DCR, 60%, and 95%).
11. DESIGN CONSULTANT shall review all utility plans for constructability within the project limits.
12. DESIGN CONSULTANT shall prepare a utility clearance letter for submittal to ADOT Local Government.
13. 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. Utility relocation proposed construction schedules will be communicated to the CITY.

B 4.0 PROGRESS / STAKEHOLDER MEETINGS

1. DESIGN CONSULTANT shall hold the following progress meetings at the City of Chandler offices or project site.
 - a. A Design Kick-off Meeting will be held after the Notice to Proceed. Project stakeholders, such as ADOT Local Government and SRP will be invited to attend.
 - b. Comment Resolution Meetings shall be held no later than two (2) weeks after redlines are returned to DESIGN CONSULTANT at each plan submittal.
 - c. Up to three (3) utility coordination meetings with SRP shall be held, including a project kick-off meeting.
 - d. Up to two (2) coordination meetings with ADOT Local Government will be conducted.
 - e. Up to two (2) additional meetings for miscellaneous design coordination.
2. DESIGN CONSULTANT shall prepare and distribute meeting minutes for each Progress Meeting, including Action Items to be reviewed and updated at each Progress Meeting.

B 5.0 PUBLIC MEETINGS

1. DESIGN CONSULTANT shall prepare for and participate in two (2) Public Information Meetings. DESIGN CONSULTANT shall prepare a display board featuring the horizontal alignment and existing right-of-way from the most recent plan submittal. Display boards depicting the proposed typical roadway section, including the two landscaping alternatives will be provided by the DESIGN CONSULTANT.
2. DESIGN CONSULTANT shall be responsible for the following:
 - a. Develop and set-up display board(s).
 - b. Prepare a meeting sign-in sheet.
 - c. Give a brief presentation, and answer questions as needed.
 - d. Prepare and make available a public comment sheet at each meeting.
 - e. Provide snack foods and beverages for each public meeting.
3. CITY shall be responsible for the following:
 - a. Secure a location and time for each public meeting.
 - b. Prepare and distribute mailers/flyers to those residents within and adjacent to the project corridor, if required.
 - c. Prepare newspaper notice of meeting, if required.

B 6.0 STAKEHOLDER COORDINATION (ADOT Local Government)

1. DESIGN CONSULTANT shall coordinate with ADOT Local Government Section. Coordination includes transmitting plan submittals to ADOT, submitting utility and right-of-way clearance letters, attending two (2) ADOT comment resolution meetings, and submittal of an environmental report to qualify for a Categorical Exclusion.

B 7.0 PROJECT MANAGEMENT

1. DESIGN CONSULTANT shall prepare regular progress reports; perform regular budget and schedule monitoring; coordinate with utilities, CITY representatives and other project stakeholders; and manage sub-consultants.

B 8.0 DESIGN SURVEY

DESIGN CONSULTANT shall perform all project survey as detailed below:

1. DESIGN CONSULTANT shall perform a 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. The horizontal survey data used for the project shall be presented in State Plane Coordinates, North American Datum of 1983 (NAD 83) 1992 epoch, and Arizona Central Zone, International Foot Vertical datum shall be referenced to the North American Vertical Datum of 1988 (NAVD 88), International Foot.
2. DESIGN CONSULTANT shall establish the existing roadway centerline through Maricopa County Recorder's maps and land surveys in conjunction with existing street monuments.
3. DESIGN CONSULTANT shall perform a full topographic survey of all existing features 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, and plants and shrubs. Topographic survey limits will include the 55-foot right-of-way, the 16-foot alley, and 20-feet south of the right-of-way, totaling a cross section width of 91-feet.
4. DESIGN CONSULTANT shall take pavement/ground elevations at the centerline of Commonwealth Avenue at 50-foot intervals, beginning 200 feet west of the Hamilton Street centerline and extend east to 500 feet east of the centerline of Ithica Place. In addition, the DESIGN CONSULTANT shall take elevations at the gutter flow line and top of curb for all existing curb and gutter.
5. DESIGN CONSULTANT shall take elevations along the centerline and edges of each driveway beginning at the edge of roadway for a distance of 20 feet. DESIGN CONSULTANT shall take ground elevations at all grade breaks along each driveway centerline and edges, if applicable.
6. DESIGN CONSULTANT shall take elevations at the inverts of all catch basins, manholes, pipes, and all water valve nuts within the project units. DESIGN

CONSULTANT shall establish benchmarks at 500-foot intervals along Commonwealth Avenue for the length of the project.

7. DESIGN CONSULTANT shall provide a sketch showing each benchmark with a minimum of three (3) ties to features which will not be disturbed by construction.
8. DESIGN CONSULTANT shall provide a digital photo log of the project. The photos shall be taken looking up-station at no less than 50-foot increments along the proposed curb line. The photos shall also include intersections at all cross/intersecting streets, driveways, curb ramps, existing above-ground utilities, existing obstructions, drainage features, ditches, railroads, roadway signage, private signage, existing landscaping, streetlights, existing miscellaneous structures, walls, and any other features which may impact the design of the project. The photo log shall provide station, offset and/or direction of the picture or other identifying descriptions for each picture. DESIGN CONSULTANT shall provide the CITY two CDs of the photo log.

B 9.0 RIGHT-OF-WAY RESEARCH & EXHIBITS

1. DESIGN CONSULTANT shall perform right-of-way research and survey to determine the existing limits of right-of-way within the project limits. The right-of-way will be included in the base mapping and shown on the project plans. The CITY will provide Title Reports for this right-of-way research.
2. New right-of-way acquisition will not be required for this project, and is excluded from this scope of work. DESIGN CONSULTANT shall provide written legal descriptions and exhibits for up to three (3) drainage or temporary construction easements. If more than three (3) legal descriptions are necessary for these easements, the cost for such additional work will be paid from the allowance included in the Contract Price.
3. DESIGN CONSULTANT shall submit final easement documents to the CITY between 60% and 90% design completion. These documents shall include legal descriptions and exhibits. A right-of-way strip map is not included in this scope of work.
4. CITY will provide Title reports for parcels within the project limits. The CITY will conduct the work associated with the appraisal process, negotiations, acquisition, and document recording.

B 10.0 PLANS, SPECIFICATIONS, AND ESTIMATES

1. 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:
 - 1 Sheet: Cover Sheet
 - 1 Sheet: General Notes Sheets
 - 1 Sheet: Standard Sections Sheet
 - 4 Sheets: Paving Plans/Profiles (1"=20' H/1"=2' V) – See Task 11 for additional information
 - 4 Sheets: Drainage Plans – See Task 12 for additional information

- 3 Sheets: Striping and Signing Plans (1"=40') – See Task 13 for additional information
 - 4 Sheets: Lighting Plans – See Task 14 for additional information
 - 8 Sheets: Landscape and Irrigation Plans – See Task 15 for additional information
 - 4 Sheets: Waterline Plans (1"=20' H/1"=2' V) – See Task 17 for additional information
 - 4 Sheets: Sewer Plans (1"20' H/1"=2' V) – See Task 17 for additional information
 - **34 TOTAL SHEETS**
2. DESIGN CONSULTANT shall submit a Design Concept Report (DCR) including two roadway section alternatives. The DCR is required for the ADOT Local Government process and will include a brief background on the project, roadway cross sections, and roadway plan view including geometric layout. Cross sections and plan view with landscape renderings for each option will also be included in this submittal.
 3. DESIGN CONSULTANT shall submit plans at the 60%, 95%, and 100% stages. The plan submittals will follow the checklists provided by the CITY.
 3. At the DCR, 60% and 95% plan submittals, DESIGN CONSULTANT shall submit a CD containing complete improvement base files in AutoCAD .DWG format, and AutoCAD .DWF (Design Web Format) exports of each plan sheet or scanned .TIF images of each plan sheet.
 4. At the completion of the design, DESIGN CONSULTANT shall submit a CD containing complete improvement base files in AutoCAD .DWG format and scanned .TIF images of each plan sheet (signature set).
 5. Specifications will be in accordance with the MAG Standard Specifications and City of Chandler Standard Specifications. DESIGN CONSULTANT shall supply special provisions for all items not adequately covered by the standard specifications.
 6. DESIGN CONSULTANT shall prepare cost estimates for all pay items per the standard specifications and special provisions, except that volumetric measurements will not be used for pay items.
 7. Following each review, DESIGN CONSULTANT shall review the CITY's comments and complete the comment resolution forms provided by the CITY. DESIGN CONSULTANT will provide a matrix summarizing the comments and indicate whether the comments were incorporated or provide justification for not implementing the changes noted in the plan review comments. DESIGN CONSULTANT shall provide the comment matrix to the CITY one (1) week prior to the Comment Resolution Meeting. All comments will be incorporated unless otherwise authorized by the CITY.
 8. DESIGN CONSULTANT shall return redline comments with each plan submittal.
 9. 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 drainage easement delineation and completion of utility relocation design.

B 11.0 PAVING PLAN/PROFILES

1. 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 local street (City of Chandler Standard Detail C-213).
2. DESIGN CONSULTANT shall prepare paving and profile plans at a scale of 1"=20' horizontal and 1"=2' vertical 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.

B 12.0 DRAINAGE PLANS

1. DESIGN CONSULTANT shall prepare a drainage analysis to define the pavement runoff expected as a result of the Commonwealth Avenue construction and recommend the drainage improvements required.
2. DESIGN CONSULTANT shall prepare drainage calculations for the area within the City right-of-way. The properties adjacent to Commonwealth Avenue from Hamilton Street to Ithica Place are developed and currently retain off-site drainage. Off-site flow will not be considered in the drainage analysis.
3. DESIGN CONSULTANT shall design to provide pavement runoff up to the top of curb for the 10-year storm event using curb opening scuppers. A dry lane is not required for a local roadway section. Roadside retention basins may be necessary to store roadway runoff if suitable outfall does not exist for the area. An underground storm drain system is not anticipated for this project, and is not included in this scope of work.
4. DESIGN CONSULTANT shall perform drainage calculations and incorporate them into a Draft Drainage Letter Report to accompany the 60% plan submittal. DESIGN CONSULTANT shall verify any existing basins constructed along Commonwealth Avenue within the project limits match the as-built plans. The Draft Drainage Letter Report shall identify proposed retention basins and any required drainage easements. This report shall document all calculations certifying the proposed design meets the design criteria.
5. DESIGN CONSULTANT shall incorporate comments received from the Draft Drainage Letter Report into a Final Drainage Letter Report between the 60% and 90% plan submittals.

B 13.0 STRIPING AND SIGNING PLANS

1. DESIGN CONSULTANT shall develop preliminary traffic signing and striping plans for this project at the 60% plan stage. DESIGN CONSULTANT shall finalize the traffic signing and striping plans at the 95% plan stage. The Signing and Striping Design Plans shall be produced at 1"=40' scale and shall include the following sheets:
 - a. General Striping Notes sheet (including a striping quantities)

- b. General Signing Summary and Notes
- c. Striping and Signing plan sheets

B 14.0 STREET LIGHT PLANS

1. DESIGN CONSULTANT shall design street lighting along Commonwealth Avenue within the project limits in accordance with applicable City of Chandler Street Light Standards and Specifications.
2. DESIGN CONSULTANT shall perform a site visit and document to the extent possible the equipment and conditions related to the existing street lighting, the existing lighting control equipment and the existing underground conduit and conductor routes.
3. DESIGN CONSULTANT shall coordinate lighting design with Salt River Project (SRP) to define a power source to serve the lighting system.
4. DESIGN CONSULTANT shall provide a computer generated point-to-point foot-candle grid for Commonwealth Avenue and submit documents to CITY for approval.
5. DESIGN CONSULTANT shall prepare complete street lighting plans for Commonwealth Avenue, including new and relocated pole locations, service locations and circuiting at the 60% plan stage. The street light design shall match the existing streetlights. The first existing streetlight on each side of the roadway beyond the limit of the paving shall be shown on the plans.
6. DESIGN CONSULTANT shall provide detail drawings for the following:
 - a. Pole details (pole illustration, pole schedule and general notes)
 - b. Electrical details (control center, wiring schematic, and cable schedule)
 - c. Foundation details
 - d. Miscellaneous details (pole grounding, connectors)

B 15.0 LANDSCAPE & IRRIGATION PLANS

1. DESIGN CONSULTANT shall develop two (2) initial conceptual landscape designs in this scope of work. One concept will illustrate only development of the 55-foot roadway right-of-way. The second concept will illustrate the development of the 55-foot road right-of-way with the additional 16-foot alley. The two (2) designs will be conceptual in nature and identify the general areas of the site to be landscaped and proposed plant palette and landscape materials for the roadway. Plan view and cross section renderings will be included in the DCR and presented at the first Public Meeting.
2. DESIGN CONSULTANT shall develop construction documents for the landscape design of 55-feet of right-of-way. Landscape design of the additional 16-foot alley is included in this scope of work as an allowance.
3. DESIGN CONSULTANT shall inventory existing trees located via GPS survey and catalogue to determine if they are to remain in place, be salvaged for reuse or demolished. DESIGN CONSULTANT shall identify the tree species, record the caliper,

ascertain the general health, and record the viability for transplant. CITY shall provide an existing tree inventory and salvage plan.

4. 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.
5. DESIGN CONSULTANT shall coordinate with CITY's Landscape Architect to determine the desired types of plant material and irrigation equipment.
6. DESIGN CONSULTANT shall develop Landscape plans showing location and species of proposed new trees, existing trees to remain and salvaged and relocated trees. Plant schedule, landscape notes and City of Chandler standard landscape details shall be shown.
7. DESIGN CONSULTANT shall develop Irrigation plans showing the location, size, and type of controllers, water meters, backflow preventers, master control valves (if required), main lines, ball valves, control valves, laterals, and drip lines. A master irrigation control system is anticipated as part of the design of this project.
8. DESIGN CONSULTANT shall provide a table of contents identifying the specifications that shall be used at the 60% plan submittal, and develop an opinion of probable cost for each plan submittal.
9. 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.
10. Bioassay testing, archeology, soil fertility, and other tests to determine plant viability in existing conditions are not considered part of this scope of work.

B 16.0 WATERLINE AND SANITARY SEWER PLANS

1. DESIGN CONSULTANT shall design approximately 600-feet of 8-inch sanitary sewer lateral from the existing stub 300-feet east of Hamilton Street to Ithica Place. Stubs will be provided at adjacent parcels on the south side of Commonwealth Avenue.
2. DESIGN CONSULTANT shall design approximately 600-feet of 8-inch potable water lateral from the existing water line 300-feet east of Hamilton Street to Ithica Place.
3. If the 300-feet of existing sewer and water lines from Hamilton Street to the east are determined to be sub-standard material, DESIGN CONSULTANT shall prepare water and sewer plans/profiles for water lines and sewer lines needing rehabilitation or replacement for an additional 300-foot length.

B 17.0 GEOTECHNICAL

1. DESIGN CONSULTANT shall conduct a visual geologic reconnaissance of the project area and review available geologic literature and aerial photographs of the project site and shall conduct a visual pavement reconnaissance of the roadway segment in question.
2. DESIGN CONSULTANT shall establish test locations in the field and arrange for the mark-out of underground utilities through Arizona Blue Stake.
3. DESIGN CONSULTANT shall excavate up to two (2) borings using a truck-mounted drill rig, equipped with hollow-stem augers. These borings will extend approximately 10 feet below ground surface. DESIGN CONSULTANT shall collect ring samples and bulk samples for laboratory testing and will be responsible for preparation of field boring logs.
4. DESIGN CONSULTANT shall perform laboratory testing to evaluate the index, compressibility, expansion and chemical characteristics of the subsurface soils encountered.
5. DESIGN CONSULTANT shall prepare a geotechnical report to accompany the 60% submittal, which will contain the results of the field and laboratory analyses with presentations of the engineering parameters for design of the new pavement and recommendations for construction. In addition, the reports will contain vicinity maps depicting the project limits, plans showing the boring locations, narrative descriptions of the surface and subsurface conditions, laboratory test results and geotechnical recommendations related to excavation characteristics, bedding material, backfilling guidelines, subgrade support for new pavements, pavement design recommendations, pavement rehabilitation recommendations, and the re-use of on-site soils for engineered fill.

B 18.0 ENVIRONMENTAL DOCUMENT

1. DESIGN CONSULTANT shall prepare an environmental document according to the *ADOT Local Government Section/Transportation Enhancement and Scenic Roads Section Categorical Exclusion Checklist Completion Guidelines (Revised August 2007)* to qualify for a Categorical Exclusion (CE).
2. DESIGN CONSULTANT will perform the following tasks for the project area and the results will be documented in the CE checklist:
 - a. Biological Resources: review US Fish and Wildlife Service species list, contact Arizona Game and Fish Department, identify presence/absence of special status species habitats, identify presence/absence of native plants, survey for invasive species, survey for wetland and riparian habitat, and identify affected waters of the U.S.
 - b. Land Use: identify locations of affected existing and planned developments, and identify prime or unique farmlands
 - c. Visual Resources and Recreation Impacts: provide visual impact analysis (narrative), and prepare aesthetics mitigation plan

- d. Cultural Resources: detailed records review (Class 1), an intensive pedestrian survey (Class 3), and a report detailing the results of the survey
- e. Socioeconomics: identify residential/commercial development, and prepare narrative discussion addressing access, community concerns, and environmental justice
- f. Hazardous Materials: an allowance has been included should a Preliminary Initial Site Assessment be required
- g. Noise: a noise analysis should not be required and is not included in this scope of work.

C. CONSTRUCTION DOCUMENTS

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

Construction Document	60% Stage	95% Stage	100% Stage
Face Sheet	F	F	S
Design Sheet/Index	P	F	S
Special Detail Drawings	P	F	S
Typical Roadway Sections	F	F	S
Geometric Configuration	F	F	S
Paving Plan & Profile Sheets	F	F	S
Drainage Plans & Details	F	F	S
Intersection Plans & Details	F	F	S
Utility Plan/Profile/Details	F	F	S
Signing and Pavement Markings Plans & Details	P	F	S
Lighting Plans & Details	P	F	S
Landscape Plans & Details	P	F	S
Quantity & Cost Estimate	P	F	F
Drainage Letter Report	P	F	S
Geotechnical Report	F		
Environmental Report	F		
Right-of-Way Legal Descriptions (Easements)	P	F	

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

C 1.0 DESIGN CONCEPT REPORT (DCR)

1. DESIGN CONSULTANT shall submit to the CITY eight (8) copies of the Design Concept Report. Included in the report will be a brief background on the project, typical cross sections, roadway geometrics presented in plan view, and landscape renderings

(plan and cross section) of two (2) alternatives. In addition, DESIGN CONSULTANT shall send two (2) copies to ADOT Local Government.

C 2.0 RIGHT-OF-WAY SUBMITTAL

1. DESIGN CONSULTANT shall submit five (5) copies of the final legal descriptions and exhibits for drainage and temporary construction easements between the 60% and 90% submittals.

C 3.0 PRELIMINARY (60%) PLANS

1. DESIGN CONSULTANT shall incorporate any changes, corrections and/or additions as a result of the DCR review. DESIGN CONSULTANT shall submit to the CITY DCR redlines, ten (10) copies of DCR plan comments and annotated comment sheets, eight (8) full-size sets of construction plans, eight (8) half-size sets of construction plans, one (1) copy of the draft drainage letter report, five (5) copies of the final geotechnical report, six (6) copies of the construction cost estimates, six (6) copies of the technical special provision outline, plan checklists. In addition, DESIGN CONSULTANT shall send two (2) full-size sets of construction plans, along with conflict letters, to each utility company affected by the project and to ADOT Local Government.
2. DESIGN CONSULTANT shall submit a CD containing complete improvement base files in AutoCAD .DWG format and AutoCAD .DWF (Design Web Format) exports of each plan sheet or scanned .TIF images of each plan sheet.

C 4.0 PRE-FINAL (95%) PLANS

1. 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% redlines, ten (1) copies of 60% plan comments and annotated comment sheets, eight (8) full-size sets of construction plans, eight (8) half-size sets of construction plans, six (6) copies of the construction cost estimate, and six (6) copies of the final technical special provisions and plan checklists. In addition, DESIGN CONSULTANT shall send two (2) full-size sets of construction plans, along with conflict letters to each utility company affected by the project and to ADOT Local Government.
2. DESIGN CONSULTANT shall submit a CD containing complete improvement base files in AutoCAD .DWG format and AutoCAD .DWF (Design Web Format) exports of each plan sheet or scanned .TIF images of each plan sheet.

C 5.0 FINAL (100%) CONSTRUCTION DOCUMENTS

1. 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% redlines, one (1) copy of 95% plan comments and annotated comment sheets, one (1) sealed set of specifications, including technical special provisions, one (1) full-size set of sealed construction plans on reproducible 4 mil Mylar with coversheet signed by ADEQ or Maricopa Environmental Services, if applicable, and one (1) copy of the final construction cost estimate and bid schedule.

2. DESIGN CONSULTANT shall submit a CD containing complete improvement base files in AutoCAD .DWG format and AutoCAD .DWF (Design Web Format) exports of each plan sheet or scanned .TIF images of each plan sheet.

D. 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.

Notice to Proceed	NTP
Data Collection	NTP + 3 Weeks
Submit DCR	NTP + 7 Weeks
Public Meeting #1	NTP + 11 Weeks
Submit 60% Plans	NTP + 15 Weeks
Submit 95% Plans	NTP + 21 Weeks
Submit Final Plans	NTP + 29 Weeks
Bidding	NTP + 33 Weeks
Public Meeting #2	Before construction starts

1. 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 (1) week or more. Such adjusted schedules 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 actions necessary to get the project back on schedule, and CITY shall cooperate to assist DESIGN CONSULTANT.

E. QUALITY CONTROL

DESIGN CONSULTANT will be responsible for ensuring that an internal Quality Control Program is followed for this project.

Senior engineering staff, not part of the regular design effort of the project, will independently review the design for conformance to design standards, constructability, and quality at each design progress level prior to submittal to the CITY.

F. BIDDING ASSISTANCE

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. DESIGN CONSULTANT shall prepare and deliver to CITY necessary Addenda for clarification or correction of the construction documents.

G. ALLOWANCES

G 1.0 UTILITY LOCATING SERVICES (POTHOLING)

1. A contract allowance has been included to allow existing utilities which may be in conflict with the proposed design to be located. It is anticipated that the number of required potholes will not exceed 7. The CITY will be billed for the actual number of potholes completed (not to exceed 7).
2. DESIGN CONSULTANT shall conduct Subsurface Utility Engineering (SUE) per ASCE publication CI/ASCE 38-02 *"Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data"* at a "Quality Level C".
3. During the DCR phase, DESIGN CONSULTANT shall develop a suggested pothole list identifying stationing and offset. DESIGN CONSULTANT will provide the list to utility companies affected by the project, and facilitate coordination of a master pothole list.
4. Prior to completion of the 30% plans, DESIGN CONSULTANT shall provide vacuum excavation potholes (test holes) on existing subsurface utilities at locations identified on the master pothole list. Pertinent pothole data will be presented in spreadsheet format on a standard "Test Hole Data Summary" form which includes the depth, horizontal and vertical location, size, and material composition of the utility line exposed.
5. DESIGN CONSULTANT shall be responsible for the 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.
6. 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 Chandler permit for potholing.
7. For identified water and sewer lines while the pothole is excavated, representatives from the CITY's Water and Sewer Department and DESIGN CONSULTANT will perform visual inspection of the condition of the lines. Formal recommendations for potential rehabilitation or replacement will be developed by the CITY's Water and Sewer representatives and DESIGN CONSULTANT and provided to the CITY's project manager in memorandum form.

G 2.0 ADDITIONAL LEGAL DESCRIPTIONS & EXHIBITS

1. A contract allowance has been included for additional legal descriptions and exhibits that may be required. It is anticipated that no more than 5 additional legal descriptions and

exhibits will be required. The CITY will be billed for the actual number of legal descriptions and exhibits submitted (not to exceed 5).

G 3.0 ADDITIONAL LANDSCAPE DESIGN

1. A contract allowance has been included for landscape design for the 16-foot alley. DESIGN CONSULTANT shall prepare 60%, 95%, and Final landscape construction documents for the additional cross section width, if required after the DCR and Public Meeting. It is anticipated that no additional plan sheets will be required.

G 4.0 HAZARDOUS MATERIAL ASSESSMENT

1. A contract allowance has been included for Preliminary Initial Site Assessment (PISA). A PISA may be required by ADOT Local Government Section as part of the environmental documentation for the project.

G 5.0 POST DESIGN SERVICES

1. A contract allowance has been included for Post Design Services during construction of the project. This service would begin following bidding of the project.
2. DESIGN CONSULTANT shall assist the CITY during construction by answering RFIs.
3. Construction management or observation inspection or participation in construction meetings are not included in this scope of work.
4. DESIGN CONSULTANT shall draft as-built drawings from redlined plans provided by the CITY after the construction is complete. Certification of as-built drawings will be provided by the CITY.

H. EXCLUSIONS

- Traffic Signal Design
- Utility Relocation Design
- Sewer Capacity Calculations
- Traffic Control Plans
- Obtaining Title Reports (provided by CITY)
- Right-of-way Appraisals & Acquisitions (provided by CITY)
- Project Advertising and Public Bidding (provided by CITY)
- Construction Management/Observation

**EXHIBIT A-2
DESIGN TEAM AND THEIR ASSIGNMENTS**

Design Consultant's design team and their assignments are as follows:

Environmental Planning Group, Inc. - EPG

- Landscape Design and Environmental Services

Ninyo and Moore

- Geotechnical Investigation

Wright Engineering

- Roadway Lighting

**EXHIBIT B-1
FEE SCHEDULE**

DIRECT LABOR BREAKDOWN:

Classification	Hours	Direct Rate	Cost
Project Principal	8	\$ 150.00	\$ 1,200.00
Project Manager	112	\$ 135.00	\$ 15,120.00
Project Engineer	192	\$ 120.00	\$ 23,040.00
Engineer/Designer	172	\$ 95.00	\$ 16,340.00
Cadd Technician	232	\$ 105.00	\$ 24,360.00
Survey RLS	48	\$ 110.00	\$ 5,280.00
Survey Crew	48	\$ 130.00	\$ 6,240.00
Clerical	28	\$ 45.00	\$ 1,260.00
Total Hours	840		
Total Direct Labor			\$ 92,840.00

DIRECT EXPENSES BREAKDOWN:

MCESD Fees	\$ 2,200.00
Reproduction	\$ 2,890.00
Mileage	\$ 510.00
Total Direct Expenses	\$ 5,600.00

SUBCONSULTANTS:

Ninyo & Moore (Geotechnical)	\$ 4,900.00
Wright Engineering (Street Lighting)	\$ 3,185.00
Environmental Planning Group (EPG) (Landscape Conceptual Design)	\$ 7,330.00
Environmental Planning Group (EPG) (Landscape & Irrigation Construction Documents)	\$ 19,230.00
Environmental Planning Group (EPG) (Environmental)	\$ 16,290.00

SUBTOTAL, SUBCONSULTANTS:

\$ 50,935.00

TOTAL COST TO CONSULTANT:

\$ 149,375.00

TOTAL LUMP SUM DESIGN FEE (BASE CONTRACT):

\$ 149,375.00

ALLOWANCES:

Utility Potholing (7 Holes @ \$750/Hole)	\$ 5,250.00
Post Design Services	\$ 10,000.00
Additional Landscaping Design for 16' Alley	\$ 2,505.00
Additional Legal Descriptions & Exhibits (5 Descriptions @ \$1,100/Description)	\$ 5,500.00
Preliminary Initial Site Assessment (Hazmat)	\$ 2,400.00

SUBTOTAL, ALLOWANCES:

\$ 25,655.00

TOTAL PROPOSED FEE:

\$ 175,030.00