



**PURCHASING ITEM
FOR
COUNCIL AGENDA**

1. Agenda Item Number:

30

2. Council Meeting Date:
August 9, 2007

TO: MAYOR & COUNCIL

3. Date Prepared: July 17, 2007

THROUGH: CITY MANAGER

4. Requesting Department: City Manager

5. SUBJECT: Approval of an agreement to provide Land Information System (LIS) migration services from EI Technologies in an amount not to exceed \$546,825.

6. RECOMMENDATION: Recommend approval of an agreement to provide Land Information System (LIS) migration services from EI Technologies in an amount not to exceed \$546,825.

7. HISTORICAL BACKGROUND/DISCUSSION: To continue the growth and use the City's Geographical Information System (GIS), it is required that its foundational components continue to keep up with GIS technology standards and best practices set forth by Environmental Systems Research Institute (ESRI) and industry. Currently, the technology used for the City's GIS based Land Information System (LIS) is aging and falling out of compliance with industry best practices and standards. For this reason, current applications and future projects at the City are suffering and will continue to do so until the City's GIS is fully compliant with ESRI/industry standards.

The City's Land Information System is the key foundational component of the City's GIS Enterprise Database System.

It is a relational database that encompasses the GIS data model, technical design, data maintenance applications and software for the most important GIS data sets required and used by all other GIS applications within the City. It is the City's database of record for parcels, addresses, streets and other land related data. City boundary information that pertains to the municipal boundary areas of city limits, county islands and changes to those boundaries through annexation are all managed through the LIS.

All GIS applications require and are dependant upon at least some component of the data that is contained in and managed within the LIS. Because the data is the foundation to many of the mission critical and strategic uses of GIS, the LIS is mission critical as well.

8. EVALUATION PROCESS: In April 2006, Council awarded an agreement for Phase I of the LIS Migration to EI Technologies based on responses received from Request for Qualifications and Experience (RFQE) IT6-918-2238. This agreement is for Phase II of the LIS migration process. Because of EI Technologies' qualifications and expertise with Land Information Systems and their particular knowledge of the City from Phase I, it is recommended that the migration project continue with EI Technologies.

9. FINANCIAL IMPLICATIONS: Funds for this project are available from General Fund, IT Capital, Other Professional Services, LIS Migration (GIS) Phase 1 Project 101.1285.0000.5219.6IT012 and General Fund, IT Capital, Other Professional Services, LIS Migration (GIS) Phase Project 101.1285.0000.5219.7IT012.

10. PROPOSED MOTION: Move to approve an agreement to provide Land Information System (LIS) migration services from EI Technologies in an amount not to exceed \$546,825.

APPROVALS

11. Requesting Department

Rick Taylor
Rick Taylor, Applications Manager

12. Department Head

Patrick Hait
Patrick Hait, Acting Chief Information Officer

13. Procurement Officer

Carolee Stees
Carolee Stees, CPPB

14. City Manager

W. Mark Pentz
W. Mark Pentz

**CITY OF CHANDLER
PROFESSIONAL SERVICES AGREEMENT**

Project Name: **LAND INFORMATION SYSTEMS (LIS) MIGRATION – PHASE 2**

THIS AGREEMENT is made and entered into this _____ day of July, 2007, by and between the City of Chandler, a Municipal Corporation of the State of Arizona, hereinafter referred to as "CITY", and **EI TECHNOLOGIES LLC**, a limited liability company of the State of Colorado, hereinafter referred to as "CONSULTANT".

WHEREAS, the Mayor and City Council of the City of Chandler is authorized and empowered by provisions of the City Charter to execute contracts for professional services; and

WHEREAS, CONSULTANT represents that CONSULTANT has the expertise and is qualified to perform the services described in the Agreement.

NOW THEREFORE, in consideration of the mutual promises and obligations set forth herein, the parties hereto agree as follows:

1. CONTRACT ADMINISTRATOR

1.1. To provide the professional services required by this Agreement CONSULTANT shall act under the authority and approval of Juan Padilla, IT Project Manager or designee, (the Contract Administrator), who shall oversee the execution of this Agreement, assist the CONSULTANT with any necessary information, audit billings, and approve payments. The CONSULTANT shall channel reports and special requests through the Contract Administrator.

1.2. CITY reserves the right to review and approve any/all changes to CONSULTANT'S key staff assigned to the CITY project by the firm during the term of this Agreement.

2. SCOPE OF WORK: CONSULTANT shall provide those services described in Exhibit A attached hereto and made a part hereof by reference.

3. ACCEPTANCE AND DOCUMENTATION: Each task shall be reviewed and approved by CITY to determine acceptable completion. All documents, including but not limited to, data compilations, studies, and reports which are prepared in the performance of this Agreement, shall be and remain the property of CITY and shall be delivered to CITY before final payment is made to CONSULTANT.

4. FEE SCHEDULE: For the services described in paragraph 2 of this Agreement, CITY shall pay CONSULTANT a fee not to exceed the sum of Five Hundred Forty-Six Thousand Eight Hundred Twenty-Five (\$546,825) Dollars in accordance with the fee schedule attached hereto as Exhibit B and incorporated herein by reference.

5. TERM: Following execution of this Agreement by CITY, CONSULTANT shall commence work upon notice to proceed and shall complete all services described herein within eighteen (18) months from the date of the notice to proceed.

6. TERMINATION: CITY reserves the right to terminate this Agreement or any part thereof for its sole convenience with fifteen (15) days written notice. In the event of such termination, CONSULTANT shall immediately stop all work hereunder, and shall immediately cause any of its suppliers and subconsultants to cease such work. As

compensation in full for services performed to the date of such termination, the CONSULTANT shall receive a fee for the percentage of services actually completed.

7. **INDEMNIFICATION:** The Consultant agrees to indemnify, defend, and save harmless the City of Chandler, its Mayor and Council, appointed boards and commissions, officials, officers, employees, individually and collectively; from all losses, claims, suits, actions, payments and judgments, demands, expenses, attorney's fees, defense costs, or actions of any kind and nature resulting from personal injury to any person, including employees of the Consultant or of any Sub Consultant employed by the Consultant (including bodily injury and death) or damages to any property, arising or alleged to have arisen out of the negligent performance of the Consultant for the work to be performed hereunder, except any such injury or damages arising out of the sole negligence of the City, its officers, agents or employees. IT IS THE INTENTION OF THE PARTIES to this contract that the City of Chandler, its Mayor and Council, appointed boards and commissions, officials, officers, employees, individually and collectively, are to be indemnified against their own negligence unless and except their negligence is found to be the sole cause of the injury to persons or damages to property.

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.

8. **INSURANCE REQUIREMENTS:** CONSULTANT shall provide and maintain the insurance as listed in Exhibit C attached hereto and made a part hereof by reference.
9. **ENTIRE AGREEMENT:** This Agreement constitutes the entire understanding of the parties and supersedes all previous representations, written or oral, with respect to the services specified herein. This Agreement may not be modified or amended except by a written document, signed by authorized representatives or each party.
10. **ARIZONA LAW:** This Agreement shall be governed and interpreted according to the laws of the State of Arizona.
11. **CONFLICT OF INTEREST**
- 11.1. **No Kickback:** CONTRACTOR 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 firm unless this interest has been declared pursuant to the provisions of A.R.S. Section 38-501. Any such interests were disclosed in CONTRACTOR'S proposal to the CITY.
- 11.2. **Kickback Termination:** CITY may cancel any contract or agreement, without penalty or obligation, if any person significantly involved in initiating, negotiating, securing, drafting or creating the agreement on behalf of the CITY'S departments or agencies is, at any time while the Agreement or any extension of the Agreement is in effect, an employee of any other party to the Agreement in any capacity or a CONTRACTOR to any other party to the Agreement with respect to the subject matter of the Agreement. The cancellation shall be effective when written notice from the CITY is received by all other parties to the Agreement, unless the notice specifies a later time (A.R.S. §38-511).
- 11.3. **No Conflict:** CONTRACTOR 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 project.

12. **NOTICES:** All notices or demands required to be given pursuant to the terms of this Agreement shall be given to the other party in writing, delivered by hand or registered or certified mail, at the addresses set forth below, or to such other address as the parties may substitute by written notice given in the manner prescribed in this paragraph.

In the case of City:
City of Chandler
Purchasing Division
P.O. Box 4008, Mail Stop 901
Chandler, AZ 85244-4008
480.782. 2400

In the case of CONSULTANT:
EI Technologies, LLC
Nirav Shah
19750 E. Parker Square Drive #100
Parker, CO 80134
720-851-1717

Notices shall be deemed received on date delivered, if delivered by hand, and on the delivery date indicated on receipt if delivered by certified or registered mail.

IN WITNESS WHEREOF, the parties have hereunto subscribed their names to this day of July 2007.
CITY OF CHANDLER

Mayor Date

CONSULTANT

By: _____
Title: NIRAV SHAH PRESIDENT

APPROVE AS TO FORM

City Attorney

ATTEST: If Corporation

Secretary

ATTEST:

City Clerk

SEAL

EXHIBIT A SCOPE OF WORK

Glossary

Geodatabase: The common data storage and management framework for ArcGIS that can be utilized wherever it is needed—on desktops, in servers (including the Web), or in mobile devices. It supports all the different types of data that can be used by ArcGIS such as: attribute tables, geographic features, surface modeling data, survey measurements, etc.

Assumption

Consultant assumes the City will provide a lead technical person as a liaison to work with Consultant to provide feedback on design issues.

PART I

1. Geodatabase Design and Development

- The City shall provide the Consultant with sampling of source data and a data dictionary for the data as it exists before the migration
- The Consultant shall propose a Geodatabase Design that shall satisfy LIS data requirements and allow the customized application add-ons described in statement of work Part II (Applications Development) to function
- The Consultant shall organize and participate in a geodatabase design session(s) with City staff at the GIS offices to review geodatabase needs of GIS users
- The Consultant shall provide the City with a description of all the data fields that will be included in the final geodatabase. These attributes will be determined from the existing landbase and interviews used in the Phase I Migration Project.
- The Consultant shall provide the City a description of how non-spatial data will be represented in the geodatabase
- The Consultant shall provide the City a description of the properties and attributes of landbase features that will be stored in the geodatabase
- The Consultant shall provide the City a description of relationship between tables (one-to-one, one-to-many and many-to-many relationships)
- The Consultant shall provide the City a description establishing the relationships using primary and foreign keys
- The Consultant shall use knowledge of government operations

Deliverables (All deliverables shall be in MS Excel / Word / Visio for this task)

- Source data and a data dictionary (before the migration)
- Proposed Geodatabase Design
- Description of all data fields in the geodatabase
- Attributes, including domain lists
- Non-spatial data description(s)
- Relationship between tables (one-to-one, one-to-many and many-to-many relationships)
- Relationships using primary and foreign keys

2. Physical Geodatabase Modeling

- The Consultant shall provide the City a detailed description of the recommended implementation of the geodatabase
- The Consultant shall provide the City a detailed description of the proposed geodatabase model in a Visio diagram (illustration of the functionality of the Geodatabase Design)

- The Consultant shall provide the City documentation that includes the properties and attributes of landbase features; relationships; connectivity; and behavior rules; annotation properties; non-spatial objects and primary key identifiers structures
- The Consultant shall provide the City a Visio diagram(s) detailing the fields for each feature class in the geodatabase. At a minimum, each field in a feature will be defined a field name, data type, primary key, default value, field size, and domain and the feature classes definitions for subtypes
- The Consultant shall create a City-approved "empty" geodatabase in Personal Geodatabase (model will be ArcGIS model and will be based on ESRI sample models. However they will be customized for City needs and will not be valuable to distinguish from ESRI model database format)

Deliverables

- Recommended implementation of the geodatabase
- Visio diagram (illustration of the functionality of the Geodatabase Design
- Documentation of properties and attributes of landbase features; relationships; connectivity; behavior rules; annotation properties; non-spatial objects and primary key identifiers structures
- Empty geodatabase in Personal Geodatabase format

3. Impact Mapping

- The Consultant shall provide the City a diagram illustrating the impact on downstream processes / projects based on changes in a specific layer
- The City shall provide Consultant with necessary information to create such an impact diagram

Deliverables

- Impact map

4. Pilot Migration Area Selection

- The City shall select two (2) areas from the Geodatabase described above to represent the City
- The Consultant shall, with the City's assistance, select areas that cover all potential scenarios

Deliverables

- Pilot area polygons
- Criteria for Acceptance
- Shapefile of pilot area polygons

5. Pilot Data Migration

- The City shall provide Consultant with data for pilot area described above
- The Consultant shall review data for completeness and report missing data or discrepancies
- The Consultant shall perform the following cleanup:

- Snapping of features
- Creating or correcting the topology of the data
- Merging data from different parts of the city
- Correcting directional attributes where obvious or by using specific guidelines provided by the City
- Converting data into the appropriate coordinate system and datum
- Correcting identifiable errors which can be fixed in an automated fashion
- Creating street segments from intersection to intersection from current fragmented segments
- Creating dynamic segmentation for the street centerline layer
- Update zipcode layer and relationships
- Update Zip + 4 attributes
- Create "True Centerline" layer
- The Consultant shall migrate the data into ArcSDE geodatabase according to the geodatabase design
- The Consultant shall make manual spatial adjustments of annotations
- The Consultant shall modify the geodatabase design as necessary to achieve the desired functionality
- The Consultant shall use feature-linked annotations to save time and effort when creating and updating existing data.
- The Consultant shall implement relates to the as-built and proposed project CADD

Deliverables

- Report missing data or discrepancies
- Cleanup of pilot data
- Migration of data into ArcSDE geodatabase

Acceptance Criteria for Deliverables

- i. Cartographic quality of data
- ii. Geometric network integrity
- iii. Compliance with the Geodatabase Design

6. Pilot Data Loading

- The Consultant shall install ArcSDE in the Oracle development database
- The Consultant shall setup user accounts under ArcSDE
- The Consultant shall tune the Oracle database for ArcSDE according to ESRI performance guidelines
- The Consultant shall create an empty geodatabase using UMLs created for City along with manual process and shall load the pilot data on City servers
- The City shall assign a database administrator to assist in the installation of ArcSDE and to understand the installation process
- The Consultant shall load the pilot data on the City's servers for internal review and acceptance

Deliverables

- Installation of ArcSDE in the Oracle development database
- Setup user accounts under ArcSDE
- Tuned Oracle database for ArcSDE
- Empty geodatabase using UMLs
- Loaded pilot data

Acceptance Criteria for Deliverables

- i. Functional ArcSDE Geodatabase with pilot data
- ii. Revised Geodatabase Design as applicable

7. Application Requirements Specifications

- The Consultant shall provide the City with documentation stating in precise and explicit language the functionality and capabilities of the new LIS migration application. This document will serve as a blueprint for designing and developing an application that will perform all the data maintenance and management operations that are identified in Phase 1 of the LIS Migration Project.
- This Application Requirements Specifications document will serve as guidance for the preparation of the applications design specifications, statement of work, software architecture specifications, testing and validation plans, and documentation plans

Deliverables

- Document stating in precise and explicit language the functionality and capabilities of the new LIS migration application
- Application Requirements Specifications document

8. Metadata Standards

- The Consultant shall provide metadata standards document to the City for LIS data

Deliverables

- Document stating in precise and explicit language the functionality and capabilities of the new LIS migration application
- Application Requirements Specifications document

PART II

9. Landbase Application Design

- The Consultant shall provide the City a shell for the landbase application. The shell shall consist of a series of non-functioning screenshots.

Deliverables

- Face-to-face demonstration to the LIS Migration committee

10. Landbase Application Development

- The Consultant shall, with the City's assistance, prepare a detailed design specifications document for review and acceptance. This document shall include the design specifications, design and code, and the preliminary version of the landbase application (alpha version).
- The Consultant shall submit to the City a beta version of the LIS application for review and preliminary acceptance
- The City shall beta test the application at the completion of each development phase
- The Consultant shall provide Problem Resolution Report (PRR) forms to the City to allow users to report bugs, design problems, and any other problems at the end of each phase of the development process
- The Consultant shall submit the application add-ons in stages for user testing as they are developed

Deliverables

- Detailed design specifications document
- Beta version of the LIS application

11. Landbase Application Testing and Acceptance

- The Consultant shall, with the City's assistance, create an acceptance criteria document

- The City shall test the application, and review the documentation and pilot data against the acceptance criteria. The acceptance criteria will include a completely functional application, complete documentation, and error-free data

Deliverables

- Acceptance criteria document
- Functional application, complete documentation, and error-free data

12. Landbase Application Documentation

- The Consultant shall provide the City with detailed documentation in the form of online help, user's guide, and a system administrator's guide. Online help and the users guide will be available to all end users and at a minimum will explain the functionality available to end users, and how to use the various tools
- The Consultant shall provide the City with a system administrator's guide to include, but not be limited to, the following:
 - Installation procedures and configuration specifications according the City environment;
 - Version update installation procedures;
 - Architecture diagrams, to include but not be limited to a description of the interaction of the add-on DLLs, etc. with ESRI and with each other manufacturers;
 - Code compilation procedures; and
 - System-level and user-level error log dictionary describing the nature of each error

Deliverables

- Online help and the user's guide which will explain the functionality available to end users and how to use the various tools
- Detailed system administrator's guide

13. Landbase & QC Application User Training

- The Consultant shall provide six (6) days data maintenance and data QC training to the data maintainers.
- The Consultant shall provide the City with electronic versions of the training manuals used for data maintainers (Data Maintenance Guide), data users (User's Manual), and system administrators (System Administrator's Guide) as detailed above
- The Consultant shall ensure that data maintainer(s) understand how to check the completeness, attribution, topology and other critical data characteristics of landbase data.
- The City's Administrator shall ensure that technologists in IT/GIS understand how to install, configure, and tune the geodatabase, ArcSDE, and Oracle

Deliverables

- Six (6) days data maintenance training to the data maintainers

14. QC Application Design and Development

- The Consultant shall design and develop the QC application in the same rigorous manner used to design and develop the Map Maintenance Application

Deliverables

- QC application

PART III

15. Full Data Migration

- The City shall provide the Consultant with the final source data to be migrated
- The Consultant shall review data for completeness and report missing data or discrepancies
- Consultant shall perform the following cleanup:
 - Snapping of features
 - Creating or correcting the topology of the data
 - Merging data from different parts of the city
 - Correcting directional attributes where obvious or by using specific guidelines provided by the City)
 - Converting data into the appropriate coordinate system and datum
 - Correcting identifiable errors which can be fixed in an automated fashion
 - Creating street segments from intersection to intersection from current fragmented segments
 - Creating dynamic segmentation for the street centerline layer
 - Update zipcode layer and relationships
 - Update Zip + 4 attributes
 - Create "True Centerline" layer
- The Consultant shall migrate the data into ArcSDE geodatabase according to the geodatabase design
- The Consultant shall make manual spatial adjustments of annotations
- The Consultant shall modify the geodatabase design as necessary to achieve the desired functionality
- The Consultant shall use feature-linked annotations to save time and effort when creating and updating existing data
- The Consultant shall implement relates to the as-built and proposed project CADD

Deliverables

- Report missing data or discrepancies
- Cleanup of all data
- Migration of data into ArcSDE geodatabase

Acceptance Criteria for Deliverables

- i. Cartographic quality of data
- ii. Geometric network integrity
- iii. Compliance with the Geodatabase Design

16. Feature Class Geodatabase Loading

- The Consultant shall load the complete geodatabase onsite, and verify and validate the data
- The Consultant shall test and ensure that all data are loaded correctly and that they match the geodatabase design
- The Consultant shall ensure the customized applications work as designed for a fully populated LIS dataset

Deliverables

- Final geodatabase loaded
- Test of data are loaded correctly and that they match the geodatabase design
- Customized applications work as designed

17. Systems Administrator Training

- The Consultant shall provide three (3) days of ArcGIS/ArcSDE 9.2 training in the following subjects: installation, configuration, and maintenance of customized applications and out-of-the-box programs

Deliverables

- Three (3) days of ArcGIS/ArcSDE 9.2 training in the following subjects: installation, configuration, and maintenance of customized applications and out-of-the-box programs

18. Data Maintainers Training

- The Consultant shall provide onsite training to designated data maintainers in Public Works and the IT/GIS departments.
- The Consultant shall provide training which includes; methods for migrating CADD data from AutoCAD files into ArcGIS format, removing data errors, enabling versioning and archiving, and the performance of other data maintenance tasks using customized and out-of-the-box tools

Deliverables

- Onsite training to designated data maintainers in Public Works and the IT/GIS departments.
- Training which includes; methods for migrating CADD data from AutoCAD files into ArcGIS format, removing data errors, enabling versioning and archiving, and the performance of other data maintenance tasks using customized and out-of-the-box tools.

**EXHIBIT B
FEE SCHEDULE**

Consultant shall be compensated for all work described in Exhibit A in an amount not to exceed \$546,825.00, which includes all costs and expenses.

Consultant shall be compensated in the amount of \$54,682.50 (10% of total contract amount) upon signing of this contract. Consultant shall be compensated in the amounts outlined below upon City acceptance and sign-off by the City's Project Manager of each task and associated deliverables.

LIS Migration Project	Cost
Contract Signed	\$54,682.50
Geodatabase Design & Development	\$34,812.00
Physical Geodatabase Model	\$16,092.00
Impact Mapping	\$8,460.00
Pilot Migration Area Selection	\$1,350.00
Pilot Migration	\$25,074.00
Pilot Data Loading	\$2,700.00
Application Requirements Specifications	\$33,210.00
Metadata Standards	\$8,748.00
Landbase Application Design	\$24,165.00
Landbase Application Development	\$105,570.00
Landbase Application Testing and Acceptance	\$22,860.00
Landbase Application Documentation	\$10,890.00
Landbase & QC Application User Training	\$11,745.00
QC Application Design and Development	\$49,612.50
Full Data Cleanup and Migration	\$107,910.00
Feature Class Geodatabase Loading	\$14,490.00
System Administrator Training	\$7,704.00
Data Maintainer Training	\$6,750.00
Total Cost	\$546,825.00

EXHIBIT C
INSURANCE REQUIREMENTS

1. 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.
2. Policies written on a "Claims made" basis are not acceptable without written permission from the City's Risk Manager.
3. 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.
4. If any of the insurance policies are not renewed prior to expiration, payments to the 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 CONSULTANT.
5. General Liability insurance policies 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.
6. CONSULTANT's General Liability 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.
7. The General Liability insurance policies 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 CONSULTANT's acts, errors, mistakes, omissions, work or service.
8. 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 CONSULTANT. 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 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.
9. 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 or for non-payment of premiums, ten (10) days prior written notice.

10. Information concerning reduction of coverage on account of revised limits or claims paid under the General Aggregate, or both, shall be furnished by the CONSULTANT with reasonable promptness in accordance with the CONSULTANT's information and belief.
11. 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 CONSULTANT until such time as the CONSULTANT shall furnish such additional security covering such claims as may be determined by the CITY.

C.1 PROOF OF INSURANCE - CERTIFICATES OF INSURANCE

1. Prior to commencing work or services under this Agreement, CONSULTANT shall furnish to CITY Certificates of Insurance, issued by 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.
2. 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.
3. All Certificates of Insurance shall identify the policies in effect on behalf of 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.
4. 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 CONSULTANT of any deficiencies in such policies and endorsements, and such receipt shall not relieve CONSULTANT from, or be deemed a waiver of CITY's right to insist on, strict fulfillment of CONSULTANT's obligations under this Agreement.

C.2 REQUIRED COVERAGE

1. Such insurance shall protect CONSULTANT from claims set forth below which may arise out of or result from the operations of CONSULTANT under this Contract and for which CONSULTANT may be legally liable, whether such operations be by the 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.
2. Claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed;
3. Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
4. Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;

5. Claims for damages insured by usual personal injury liability coverage;
6. Claims for damages, other than to Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
7. 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 "8 & 9" for hired and non-owned auto policy form CA00011293 or equivalent thereof.
8. Claims for bodily injury or property damage arising out of completed operations;
9. Claims involving contractual liability insurance applicable to the Contractor's obligations under the Indemnification Agreement;
10. Claims for injury or damages in connection with one's professional services;
11. 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.

C.2.1 Commercial General Liability - Minimum Coverage Limits

The Commercial General Liability insurance required herein shall be written for not less than \$500,000 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 \$500,000 per occurrence (or 10% per occurrence) and an aggregate of \$1,000,000 (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 CONSULTANT's operations and products, and completed operations.

C.2.2 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 \$500,000 or 10% of the contract cost and with a \$1,000,000 aggregate.

C.2.3 Automobile Liability

CONSULTANT shall maintain Commercial/Business Automobile Liability insurance with a combined single limit for bodily injury and property damage of not less than \$500,000 each occurrence with respect to any owned, hired, and non-owned vehicles assigned to or used in performance of the CONSULTANT's work. Coverage shall be at least as broad as coverage code 8 & 9(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.

C.2.4 Worker's Compensation and Employer's Liability

CONSULTANT shall maintain Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction over CONSULTANT's employees engaged in the performance of the work or services; and, Employer's Liability insurance of not less than \$500,000 for each accident, \$500,000 disease coverage for each employee, and \$500,000 disease policy limit.

In case any work is subcontracted, CONSULTANT will require the Subcontractor to provide Workers' Compensation and Employer's Liability to at least the same extent as required of CONSULTANT.

C.2.5 Professional Liability N/A

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 CONSULTANT, with a claims made policy limit of not less than \$1,000,000.