

Staff Summary Report



Council Meeting Date: 12/06/07

Agenda Item Number: 38

SUBJECT: Request approval of a professional engineering services contract with Wilson Engineers, for the Sub-Regional Operating Group (SROG) Capacity Management Facilities.

DOCUMENT NAME: 20071206PWCH12 SUB-REGIONAL OPERATING GROUP (SROG) (0107-05) PROJECT NO. 3200592

SUPPORTING DOCS: Yes

COMMENTS: Professional engineering services contract in an amount not to exceed \$80,000 with Wilson Engineers, subject to execution of the final written contract.

PREPARED BY: MARK WEBER, PRINCIPAL CIVIL ENGINEER (x8526)

REVIEWED BY: ANDY GOH, DEPUTY PW MANAGER/CITY ENGINEER (x8896)
DON HAWKES WATER UTILITES MANAGER (x2660)

LEGAL REVIEW AS TO FORM: JENAE NAUMANN, ASSISTANT CITY ATTORNEY (x8402)

FISCAL NOTE: Sufficient funds are available in Capital Improvement Fund No. 3200592.

RECOMMENDATION: Approve contract and authorize the Mayor to sign all necessary documents for the contract together with any required addenda.

ADDITIONAL INFO: The scope of work for this contract is to provide modeling and engineering services specific to the City of Tempe's sewer collection system as part of the larger SROG Regional Capacity Management Facilities Project. The fee was negotiated by staff and is considered reasonable for the scope of services.

This approval is conditioned upon execution of final written contract documents and approved submittals of any required ensure to insure affidavit, insurance certificates or other documents.

Approved by Glenn Kephart, Public Works Manager



CITY OF TEMPE, ARIZONA
PUBLIC WORKS DEPARTMENT
DIVISION OF ENGINEERING

CONTRACT FOR PROFESSIONAL SERVICES

THIS CONTRACT is made and entered into on the 6th day of December, 2007, by and between the City of Tempe, hereinafter called CITY, and WILSON ENGINEERS, hereinafter called the CONSULTANT.

The CITY engages the CONSULTANT to perform professional services for a project known and described as SUB-REGIONAL OPERATING GROUP (SROG) CAPACITY MANAGEMENT FACILITIES, Project No. 3200592, hereinafter called the "Project".

SECTION I - SERVICES OF THE CONSULTANT

The CONSULTANT shall perform the following professional services to CITY standards and in accordance with the degree of care and skill that a registered professional in Arizona would exercise under similar conditions:

- A. The CONSULTANT shall provide modeling and engineering services specific to the CITY'S sewer collection system, as described in Exhibit "A" attached.
- B. The CONSULTANT has assigned Steve Todd as the Project Manager for this Contract. Prior written approval is required in the event the CONSULTANT needs to change the Project Manager. The CONSULTANT shall submit the qualifications of the proposed substituted personnel to the City for approval.
- C. The CONSULTANT shall prepare and submit a detailed opinion of probable cost of the project.
- D. The CONSULTANT shall follow and comply with the Public Improvement Project Guide as directed by the CITY.
- E. The CONSULTANT shall prepare plans and technical specifications per the requirements of the applicable chapters of the City's Engineering Design Criteria Manual, latest revision, and the Maricopa Association of Governments (MAG) Standard Specification and Details as amended by the CITY. All plans shall be prepared on CAD as required by the CITY. Final plans shall be submitted on 3 ml double matte black line mylar and shall be 24" x 36" in size.
- F. The CONSULTANT shall submit all final construction documents in both hard copy and electronic format. Plans shall be MicroStation or AutoCAD compatible and all other documents shall be Microsoft Office compatible. The software version used shall be compatible to current City standards. Other support documents, for example, structural calculations, drainage reports and geotechnical reports, shall be submitted in hard copy only.

SECTION II - PERIOD OF SERVICE

The CONSULTANT shall complete all services within 360 calendar days of the "Notice to Proceed" date. In the event delays are experienced beyond the control of the CONSULTANT, the schedule may be revised as mutually agreed upon by the CITY and the CONSULTANT.

SECTION III - CONSULTANT'S COMPENSATION

- A. Payment for this CONTRACT shall be based on hourly rates established in the attached Exhibit "A". Total compensation for the services performed shall not exceed \$80,000.00, unless otherwise authorized by the CITY. This fee includes an allowance of \$520.00 for reimbursable expenses, which in no event will ever be more than actual cost.
- B. The CITY shall pay the CONSULTANT in installments based upon monthly progress reports and detailed invoices submitted by the CONSULTANT subject to the following limitations:
 - 1. If the scope of work of this CONTRACT includes the preparation of studies, design concepts, or other investigations, progress payments shall not exceed 90 % of the total CONTRACT amount prior to submittal of the final report deliverables.
 - 2. Payment for reimbursable expenses shall be made during all phases based on actual expenses.
- C. The CITY at its discretion may, by written notification, waive the above limitations.
- D. The CITY shall make payments to the CONSULTANT within thirty (30) days after receipt of the progress report and detailed invoice.

SECTION IV - THE CITY'S RESPONSIBILITIES

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

- B. The CITY shall review submittals by the CONSULTANT and provide prompt response to questions and rendering of decisions pertaining thereto, to minimize delay in the progress of the CONSULTANT'S work. The CITY will keep the CONSULTANT advised concerning the progress of the CITY'S review of the work. The CONSULTANT agrees that the CITY'S inspection, review, acceptance or approval of CONSULTANT'S work shall not relieve CONSULTANT'S responsibility for errors or omissions of the CONSULTANT or it's sub-consultant(s).
- C. Unless included in the CONSULTANT'S Services as identified in Section I, the CITY shall furnish the CONSULTANT gratis, the following information or services for this Project:
1. One copy of its maps, records, laboratory tests, survey ties, and benchmarks, or other data pertinent to the services. However, the CONSULTANT shall be responsible for searching the records and requesting specific drawings or information and independently verifying said information.
 2. Available CITY data relative to policies, regulations, standards, criteria, studies, etc., relevant to the Project.
 3. When required, title searches, legal descriptions, detailed ALTA Surveys, and environmental assessments to the end that the CITY may proceed with the right of way acquisition.

SECTION V - TERMINATION

The CITY, at its sole discretion, may terminate this CONTRACT for convenience or abandon any portion of the Project for which services have not been performed by the CONSULTANT, upon fourteen (14) days written notice delivered to CONSULTANT personally or by certified mail at 9633 S. 48th Street, Suite 290, Phoenix, AZ 85044. This CONTRACT may be terminated pursuant to ARS Sec. 38-511.

Immediately after receiving such notice, the CONSULTANT shall discontinue advancing the services under this CONTRACT and proceed to close said operations under this CONTRACT. The CONSULTANT shall appraise the services it has completed and submit an appraisal to the CITY for evaluation. The CITY shall have the right to inspect the CONSULTANT's work to appraise the services completed.

CONSULTANT shall deliver to the CITY all drawings, special provisions, field survey notes, reports, estimates and any and all other documents or work product generated by the CONSULTANT under the CONTRACT, entirely or partially completed, together with all unused materials supplied by the CITY.

In the event of such termination or abandonment, the CONSULTANT shall be paid for services performed prior to receipt of said notice of termination including reimbursable expenses then incurred.

If the remuneration scheduled hereunder is based upon a fixed fee or definitely ascertainable sum, the portion of such sum payable shall be proportionate to the percentage of services completed by the CONSULTANT based upon the scope of work set forth in Exhibit A, and shall be agreed upon mutually by the CONSULTANT and the CITY. However, in no event shall the fee exceed that set forth in Section III of the attached CONTRACT.

The CITY shall make final payment within sixty (60) days after the CONSULTANT has delivered the last of the partially completed items and the final fee has been agreed upon.

In the event this CONTRACT is terminated, the CITY shall have the option of completing the work, or entering into a CONTRACT with another party for the completion of the work according to the provisions and agreements herein.

SECTION VI - SUPPLEMENTAL CONTRACT PROVISIONS

The supplemental contract provisions to this CONTRACT are attached hereto and incorporated herein by reference as if fully set forth.

Sub-Regional Operating Group (SROG) Capacity Management Facilities
Project No. 3200592

IN WITNESS WHEREOF, the parties hereto have executed this CONTRACT this _____ day of _____, 2007.

CITY OF TEMPE, ARIZONA

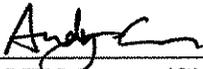
By _____
Mayor

By _____
Public Works Manager

ATTEST:

City Clerk

Recommended By:



Deputy PW Manager/City Engineer

APPROVED AS TO FORM:

City Attorney

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

CONSULTANT
Wilson Engineers

Name

Title

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

Certified to be a true and exact copy.

Karen M. Fillmore
Records Specialist

CITY OF TEMPE
TEMPE, ARIZONA
DEPARTMENT OF PUBLIC WORKS

AFFIDAVIT OF GENERAL CONTRACTOR / PRIME CONSULTANT
REGARDING
HEALTH INSURANCE

_____,
Arizona

Date _____

**Sub-Regional Operating Group (SROG) Capacity Management Facilities
Project No. 3200592**

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

Name of Insurance Company: _____

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

Policy No.: _____

Policy Effective Date (MM/DD/YY): _____

Policy Expiration Date (MM/DD/YY): _____

Signed and dated at _____, this _____ day of _____, 2007.

General Contractor/Prime Consultant

By: _____

STATE OF ARIZONA)
) ss
COUNTY OF MARICOPA)

SUBSCRIBED AND SWORN to before me this _____ day of _____, 2007.

Notary Public

My commission expires:

City of Tempe

Guidelines for Implementation of Health Insurance

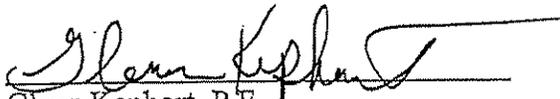
These Guidelines are provided for purposes of implementing Resolution No. 2000.73, which requires all employees of prime consultants, general contractors and major subconsultants and subcontractors to have health insurance and to offer health insurance to their eligible dependants, as determined at the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

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

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

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

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


Glenn Kephart, P.E.
Public Works Manager

CITY OF TEMPE, ARIZONA
PUBLIC WORKS DEPARTMENT
DIVISION OF ENGINEERING

SUPPLEMENTAL CONTRACT PROVISIONS

SECTION I - INSURANCE

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

A. General Clauses

1. **Additional Insured.** The insurance coverage, except Workers' Compensation and Professional Liability, required by this CONTRACT, shall name the CITY, its agents, representatives, directors, officials, and employees, as additional insured, and shall specify that insurance afforded the CONSULTANT shall be primary insurance, and that any self insured retention and/or insurance coverage carried by the CITY or its employees shall be excess coverage, and not contributory coverage to that provided by the CONSULTANT.
2. **Coverage Term.** All insurance required herein shall be maintained in full force and effect until Services required to be performed under the terms of this CONTRACT are satisfactorily completed and formally accepted; failure to do so may constitute a material breach of this CONTRACT, at the sole discretion of the CITY.
3. **Primary Coverage.** The CONSULTANT's insurance shall be primary insurance as respects the CITY and any insurance or self insurance maintained by the CITY shall be in excess of the CONSULTANT'S insurance and shall not contribute to it.
4. **Claim Reporting.** CONSULTANT shall not fail to comply with the claim reporting provisions of the policies or cause any breach of a policy warranty that would affect coverage afforded under the policy to protect the CITY.
5. **Waiver.** The policies for Workers' Compensation and General Liability shall contain a waiver of transfer rights of recovery (subrogation) against the CITY, its agents, representatives, directors, officers, and employees for any claims arising out of the work of the CONSULTANT.

6. **Deductible/Retention.** The policies may provide coverage, which contains deductibles or self-insured retentions. Such deductible or self-insured retentions shall not be applicable with respect to the coverage provided to the CITY under such policies. The CONSULTANT shall be solely responsible for deductible or self-insured retentions and the CITY may require the CONSULTANT to secure the payment of such deductible or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit.
7. **Policies and Endorsements.** The CITY reserves the right to request and to receive, within 10 working days, information on any or all of the above policies or endorsements.
8. **Certificates of Insurance.** Prior to commencing services under this CONTRACT, CONSULTANT shall furnish the CITY with Certificates of Insurance, or formal endorsements as required by the CONTRACT, issued by CONSULTANT'S insurer(s), as evidence that policies providing the required coverages, conditions, and limits required by this CONTRACT are in full force and effect. Such certificates shall identify this CONTRACT by referencing the project number and/or project name and shall provide for not less than thirty (30) days advance written notice by Certified Mail of cancellation or termination of insurance.
9. **Sub-Consultants/Contractors.** CONSULTANT shall include all sub-consultants and sub-contractors as insured under its policies or shall furnish separate certificates and endorsements for each sub-consultant and sub-contractor.

B. Workers' Compensation

The CONSULTANT shall carry Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of CONSULTANT employees engaged in the performance of the Services; and Employer's Liability insurance of not less than \$100,000 for each accident, \$100,000 disease for each employee, and \$500,000 disease policy limit.

In case Services are sub-contracted, the CONSULTANT shall require the sub-consultant to provide Workers' Compensation and Employer's Liability to at least the same extent as provided by the CONSULTANT.

C. Automobile Liability

The CONSULTANT shall carry Commercial/Business Automobile Liability insurance with a combined single limit for bodily injury and property damages of not less than \$1,000,000 each occurrence regarding any owned, hired, and non-owned vehicles assigned to or used in performance of the CONSULTANT Services. Coverage will be at least as broad as coverage Code 1 "any auto" (Insurance Service Office policy form CA 0001 1/87 or any replacements thereof). Such coverage shall include coverage for loading and unloading hazards.

D. Commercial General Liability

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

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

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

E. Professional Liability

The CONSULTANT retained by the CITY to provide the engineering services required by the CONTRACT will maintain Professional Liability insurance covering errors and omissions arising out of the Services performed by the CONSULTANT or any person employed by him, with an unimpaired limit of not less than \$1,000,000 each claim and \$1,000,000 all claims, or 10% of the construction budget, whichever is larger. In the event the insurance policy is written on a "claims made" basis, coverage shall extend for two years past completion and acceptance of Services as evidenced by annual Certificates of Insurance.

F. Property Coverage – Valuable Papers

The CONSULTANT shall carry Property coverage on all-risk, replacement cost, agreed amount form with Valuable Papers insurance sufficient to assure the restoration of any documents, memoranda, reports, or other similar data relating to the services of the CONSULTANT used in the completion of this CONTRACT.

HEALTH INSURANCE REQUIREMENTS

All Consultants who enter into a Public Works contract in excess of \$30,000.00 with the City of Tempe, after January 1, 2001, must certify that they have, and all of their major sub-consultants will have, health insurance for all employees. Health insurance must be offered to eligible dependents of all such employees. An affidavit must be signed in the form included herein (Page AFF-1). Major sub-consultants are defined as entities doing work in excess of \$30,000.00 as determined at the start of each project. All required health insurance must be maintained during the entire time of the contract with the City.

Health insurance is required for all consultant and major sub-consultant employees who work more than one hundred and twenty (120) days in any calendar year. A "work day" consists of any time within a twenty-four hour period, regardless of number of hours, that the individual is paid. At this time, health insurance is not required for temporary employees or students working part-time who are enrolled in a recognized educational institution.

The health insurance requirements shall apply to all employees directly involved with this City project including support and administrative personnel.

All complaints concerning violations of the health insurance requirements shall be filed, in writing, with the Public Works Department, within thirty (30) days from discovery of the violation. An administrative hearing will be held before the Public Works Manager, and a written decision of findings will be provided to the parties to the hearing within ten (10) days thereafter. Appeal from the decision of the Public Works Manager may be made within ten (10) days of the date of the decision by filing a notice of appeal in writing with the Public Works Department. If an appeal is timely filed, an administrative hearing will be held before an administrative hearing officer appointed by the City Manager. The decision of the administrative hearing officer shall be final.

In the event of a finding of violation of the insurance provisions, the company in violation of the provision shall be barred from bidding on, or entering into, any Public Works contract with the City for a period of three (3) years from the execution of the contract.

All Consultants subject to the health insurance requirements shall post, in English and Spanish, notice of the health insurance requirements at their office and at the job site. Signs for posting will be provided by the City at the Pre-construction Conference for Contractors and sent with the executed contract for Consultants.

SECTION II - OWNERSHIP OF DOCUMENTS

All work products (electronically or manually generated) including but not limited to plans, specifications, cost estimates, tracings, studies, design analyses, original mylar drawings, computer aided drafting and design (CADD) file diskettes which reflect all final drawings, and other related products which are prepared in the performance of this CONTRACT are the property of the CITY and are to be delivered to the CITY before the final payment is made to the CONSULTANT.

The CITY shall retain ownership of these original drawings, however, if approved in writing by the CITY, the CONSULTANT may retain the original drawings and supply the CITY with reproducible mylar copies. CONSULTANT shall endorse by his/her professional seal all plans and special provisions furnished by him/her.

In the event these documents are used for another project without further consultations with the CONSULTANT, the CITY agrees to indemnify and hold the CONSULTANT harmless from any claim arising from the reuse of the documents. The CITY shall remove the CONSULTANT'S seal and title block from such documents.

The CONSULTANT shall retain full copyrights of all documents produced by the CONSULTANT on behalf of City in connection with the Services of this CONTRACT, with exception of CITY rights to use drawings for reproduction and promotional purposes.

SECTION III - CONFLICT OF INTEREST

The CONSULTANT agrees to promptly disclose any financial or economic interest in the Project property, or any property affected by the Project, existing prior to the execution of this CONTRACT. Further, the CONSULTANT agrees to promptly disclose any financial or economic interest with the Project property, or any property affected by the Project, if the CONSULTANT gains such interest during the course of this CONTRACT.

If the CONSULTANT gains any financial or economic interest in the Project during the course of this CONTRACT, this may be grounds for terminating this CONTRACT at the sole discretion of the CITY.

The CONSULTANT shall not engage the services on this CONTRACT of any present or former CITY employee who was involved as a decision maker in the selection or approval processes, or who negotiated or approved billings or contract modifications for this CONTRACT.

The CONSULTANT agrees that it shall not perform services on this Project for the contractor, sub-contractor, or any supplier.

The CONSULTANT shall not negotiate, contract, or make any agreement with the contractor, sub-contractor, or any supplier with regard to any of the work under this Project, or any services, equipment or facilities to be used on this Project.

SECTION IV - COVENANT AGAINST CONTINGENT FEES

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

SECTION V - INDEMNIFICATION

To the fullest extent permitted by law, the CONSULTANT shall defend, indemnify and hold harmless the CITY, its agents, officers, officials, and employees from and against all claims, damages, losses, and expenses (including but not limited to attorney's fees, court costs, and the costs of appellate proceedings), relating to, arising out of, or alleged to have resulted from the negligent acts, errors, mistakes or omissions in the work, services, or professional services of the CONSULTANT, its agents, employees, or any other person (not the CITY) for whose negligent acts, errors, mistakes or omissions in the work, services, or professional services the CONSULTANT may be legally liable in the performance of this contract. CONSULTANT'S duty to defend, hold harmless and indemnify the CITY, its agents, officers, officials, and employees shall arise in connection with any claim for damage, loss, or expenses that is attributable to bodily injury, sickness, disease, death, or injury to, impairment, or destruction of any person or property, including loss of use resulting therefrom, caused by any negligent acts, errors, mistakes, omissions, work, services, or professional services in the performance of this contract by CONSULTANT or any employee of the CONSULTANT, or any other person (not the CITY) for whose negligent acts, errors, mistakes, omissions, work, or services the CONSULTANT may be legally liable. The amount and type of insurance coverage requirement set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

SECTION VI - DISPUTE RESOLUTION

In the event of a dispute concerning questions of fact that arise during the course of the CONTRACT, the parties will meet in good faith to attempt to resolve such questions.

SECTION VII - ADDITIONAL SERVICES

Additional services which are outside the scope of basic services contained in this CONTRACT shall not be performed by the CONSULTANT without prior written authorization from the CITY. Additional services, when authorized by an executed contract or an Amendment to this CONTRACT shall be compensated for by a fee mutually agreed upon between the CITY and the CONSULTANT.

SECTION VIII - SUCCESSORS AND ASSIGNS

This CONTRACT shall not be assignable except at the written consent of the parties hereto and it shall extend to and be binding upon the heirs, executors, administrators, successors, and assigns of the parties hereto.

SECTION IX- SPECIAL PROVISIONS

The CONSULTANT shall comply with all applicable Federal, State, and local laws and ordinances at the time the plans are sealed, and will not discriminate against any person on the basis of race, color, or national origin in the performance of this CONTRACT, and shall comply with the terms and intent of Title VII of the Civil Rights Act of 1964, P.L. 88-354.

The CONSULTANT further agrees to insert the foregoing provisions in all sub-contracts hereunder, except sub-contracts for standard commercial supplies or raw materials. Any violation of such provisions shall constitute a material breach of this CONTRACT.

This CONTRACT shall be in full force and effect only when it has been approved by the City Council of the City of Tempe, Arizona, and when executed by the duly authorized CITY officials and the duly authorized agent of the CONSULTANT.

RECEIVED

OCT 25 2007

City of Tempe
Engineering Division

October 25, 2007

Mark A. Weber, P.E.
Principal Civil Engineer
City of Tempe
Public Works/ Engineering
31 East 5th Street
Tempe, AZ 85281Re: SROG Regional Capacity Management Facilities Project (RCMF)
Engineering Representative Proposal

Mark,

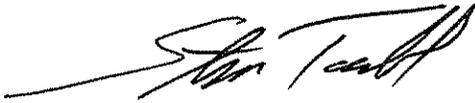
We are sending this Proposal for Wilson Engineers to provide Engineering Services to the City of Tempe as the City's "Engineering Representative" for the SROG RCMF Project. The SROG RCMF Project is being managed by Greely and Hansen with the team of Carollo Engineers and Black & Veatch responsible for developing viable alternatives, recommended solutions, and developing CIP schedules for SROG Capacity Management Facilities for Mesa, NE Phoenix, Scottsdale, and Tempe. The Scope of Work for this project is attached as Appendix A to this Proposal. Wilson Engineers, as a subconsultant to Carollo Engineers, has been serving as the City of Tempe "Engineering Representative" providing modeling and engineering services specific to the City of Tempe's sewer collection system in support of the Series, 200, 300, and 400 Task items. Carollo's Contract had a \$50,000 allowance for Wilson to provide these Engineering Representative Services for Tempe. That Allowance has been expended. Carollo has indicated that Phoenix/SROG is not able to authorize additional funds under Carollo's contract for Wilson to continue as the Engineering Representative for Tempe. Therefore, we are sending this proposal to contract directly with the City of Tempe to continue to provide engineering and modeling services specific to the City of Tempe sewer collection in support of the SROG RCMF.

The specific services that Wilson will provide under this proposal include serving as Tempe's Engineering Representative to provide engineering and modeling support to complete the SROG RCMF Project. The Scope items left to complete are a portion of the 400 series and the 500, 600, 700, and 800 Series Tasks. This work will essentially consist of developing infrastructure improvement alternatives that will reduce the currently planned future dry weather and wet weather flows from Tempe's sewer collection system into the SROG Salt River Outfall (SRO) sewer line. It is anticipated

that alternatives will be developed that can solely be implemented by the City of Tempe and alternatives that would be a joint project between east valley SROG Cities. Appendix B to this proposal presents the current SROG plan for completing these Tasks.

We would propose to provide these services to the City of Tempe on an hourly Time and Materials basis for a not to exceed fee of \$80,000.00. Please contact me if there are any questions. Thanks.

WILSON ENGINEERS



Steve Todd, P.E.
Operations Manager

CITY OF TEMPE
SROG ENGINEERING REPRESENTATIVE
FEE PROPOSAL
10/25/2007

Task	Task Description	Principal E-7 \$ 195.00	Project Manager E-6 \$ 165.00	Project Engineer E-4 \$ 120.00	Senior Technician T-4 \$ 75.00	Admin. A-4 \$ 70.00	Total Hours	Total Fee
Series 400 - Local Wastewater Program Development								
400.1	Project Meetings	16	24				40	\$ 7,080
400.2	Sewer System Modeling and Analysis		8	24	32		64	\$ 6,600
400.3	Report Preparation	2	8	32		8	50	\$ 6,110
	Subtotal	18	40	56	32	8	154	\$ 19,790
Series 500 - Alternative Evaluation and Analysis								
500.1	Project Meetings	16	24				40	\$ 7,080
500.2	Sewer System Modeling and Analysis		12	40	40		92	\$ 9,780
500.3	Report Preparation	2	16	24		8	50	\$ 6,470
	Subtotal	18	52	64	40	8	182	\$ 23,330
Series 600 - Cost Estimating, Phasing, and Apportioning								
600.1	Project Meetings	8	8				16	\$ 2,880
600.2	Cost Estimating		8	16			24	\$ 3,240
	Subtotal	8	16	16	0	0	40	\$ 6,120
Series 700 - Economic and Technologic Analysis								
700.1	Project Meetings	8	8				16	\$ 2,880
700.2	Evaluate Feasibility and Alternatives	4	24	80			108	\$ 14,340
700.3	Report Preparation	2	8	16			26	\$ 3,630
	Subtotal	14	40	96	0	0	150	\$ 20,850
Series 800 - Regional SROG Program Development								
800.1	Project Meetings	16	16				32	\$ 5,760
800.2	Report Preparation	2	8	16			26	\$ 3,630
	Subtotal	18	24	16	0	0	58	\$ 9,390
	Subtotal - Labor	76	172	248	72	16	584	\$ 79,480

II. EXPENSE SUMMARY

No.	Expense Description	Unit	Total Units	Cost / Unit	Total
1.0	Misc. Printing (Reports, Deliveries etc)	Lump Sum	1	\$ 520	\$ 520
SUBTOTAL - EXPENSE SUMMARY					\$ 520

III. TOTAL FEE

Item	Description	Amount
I.	LABOR SUMMARY	\$ 79,480
II.	EXPENSE SUMMARY	\$ 520
III.	TOTAL FEE PROPOSAL	\$ 80,000

MMW

APPENDIX A

SROG RCMF
SCOPE OF WORK

Subregional Operating Group



Regional Capacity Management Facilities Project
Project No. WS90160016
Contract No. 118452

Exhibit A

Scope of Engineering Services

August 2006



MIAW

Exhibit A – Scope of Engineering Services

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Exhibit A – Scope of Engineering Services

Regional Capacity Management Facilities Introduction

The “Regional Capacity Management Facilities” project was developed from the results of the “Flow Metering and Analysis for Selected SROG Interceptor Sewers” project. Brief descriptions of the objectives and results of both project phases are presented below.

Flow Metering and Analysis for Selected SROG Interceptor Sewers – Phase I

The first phase of this study focused primarily on the development and completion of a rainfall study and a hydrologic model analysis of the SROG System. Typical RDII (Rainfall Derived Infiltration/Inflow) quantities were estimated using the R-value method and an analysis of two characteristic rainfall events (July 12 to 15, 2002 and February 14 to 15, 2003). The R-value is defined as the ratio between the volume of RDII measured by a specific monitor and the total volume of rainfall that falls on the drainage area served by that monitor. The resulting R-values for the SROG system were between 0.2% and 0.8% for all of the SROG tributary basins. Higher values corresponded with the older built-up, downtown City of Phoenix area. The average RDII volume that was conveyed to the regional 91st Avenue WWTP was approximately 0.4% of the total rainfall on the SROG drainage basins.

In general, the project team found that one-inch of rainfall resulted in the conveyance of approximately 40 million gallons of RDII to the 91st Avenue WWTP. The rate of RDII conveyance is influenced by the storm nucleus location, local WRP operation, and interceptor conveyance capacities. For the SROG collection system, the impact of RDII can be significant. The average influent flow at the 91st Avenue WWTP was 150 mgd in August 2005. However, the hourly peak flow during that month was 315 mgd as measured during the August 2, 2005 rainfall event.

Flow Metering and Analysis for Selected SROG Interceptor Sewers – Phase II

The objectives of this phase were to identify SROG interceptor system capacity issues and develop multiple alternative solutions. Field investigations were performed to establish the best location for the installation of permanent meter installations. A dynamic hydraulic model analysis was also performed on the SROG interceptor system to assess the impact of specific rainfall events on the SROG system. These analyses resulted in the development of both short and long term capacity issue solutions. Potential solutions that allowed the use of the existing system assets included parallel pipelines, tunnels, new treatment facilities, equalization basins, and expanded local and/or regional treatment facilities. Rough cost estimates were developed as part of a technical and economic evaluation of these alternatives. The preliminary evaluation indicated that future capacity needs could be met through the use of equalization basins.

The equalization basin approach was developed based on the results of a calibrated hydraulic model. This model predicted that at peak flow, the existing SROG interceptor system capacity was being exceeded. At daily low flow, less than 20 percent of the interceptor capacity was being utilized. As a result, the backbone interceptor system has been called “inefficient”.

Considering that the interceptors are operating well below capacity for the majority of the day, the project team formulated an approach that allows the SROG Cities to take maximum advantage of existing

Exhibit A – Scope of Engineering Services

infrastructure and current system investment. This proposed approach includes capacity management facilities consisting of influent pump stations, primary clarifiers, equalization basins, effluent pump stations, and force mains. Data collected automatically from inline flow meters and rainfall gauges could be used to control operation of the proposed facilities.

Although the initial vision was focused on solving the current SROG system capacity issues, one of the most important challenges that evolved during the Phase II study was the need to Master Plan a regional solution that would be adaptable to future changing conditions along a longer timeline and could be interfaced with local wastewater programs. At this point, it is important to mention that Phase II of the study was developed based on the 300,000 drainage basin acres that are tributary to the backbone interceptors. The area represents only 50% of the total tributary area that could affect the system (600,000 acres).

As a result of the Phase II study, it was recommended that SROG develop local wastewater and RDII management programs to comply with proposed CMOM regulations. The expanded regional study should include the total, local and regional, SROG service area (600,000 acres). Each local program, developed on a per-city basis, should be compatible with and complimentary to the regional solution. This systematic and coordinated solution approach will allow each City to estimate the capital costs for both their local and regional programs. Once the local programs are defined, pre-conceptual sizing and siting of the facilities can begin. The conceptual regional solution can be tested using a predictive model according to defined events and capacities.

Program Objective

The objective of the Regional Capacity Management Facilities Study is to address the following:

- Develop common criteria that will be used for the development of: technical models, financial models, alternatives to satisfy the local and regional system capacity requirements, evaluation of alternatives and the characteristics of the proposed regional solution.
- Apply the SROG system rainfall model to the SROG wastewater service areas based on the adopted evaluation criteria.
- Develop an action plan to address potential regulatory issues.
- Develop mechanisms to handle conflicts and to evaluate the project progress in its different stages.
- Establish the specific regulatory requirements for implementation of the proposed regional solution and the specific project timeline.
- Obtain “buy-in” from all the project participants at each project stage, especially from the regulatory community.
- Update or upgrade the SROG local wastewater programs according to the adopted evaluation criteria requirements.

Exhibit A – Scope of Engineering Services

- Develop a series of alternatives based on the local wastewater program needs, SROG City interfaces and the SROG system requirements.
- Develop financial and technical decision and evaluation matrices for the proposed alternatives based on the adopted evaluation criteria.
- Recommend an alternative that satisfies the requirements of the adopted evaluation criteria for the defined study period.

Program Approach

The Program Approach to achieve the objective of the Regional Capacity Management Facilities Study is to combine the professional services of the SROG consultants with the services of individual SROG City Engineering Representatives. The SROG consultants consist of the following three teams:

- Program Management - Greeley and Hansen
- Team A - Greeley and Hansen / Damon S. Williams Associates
- Team B - Carollo Engineers P.C. / Black & Veatch

The Program Management consultant is responsible to promote the integrated delivery of two independent projects by two independent consultant teams under the Construction Manager at Risk (CMAR) delivery method; facilitate division of design and construction; and align the project with the vision of the previously completed SROG Interceptor Capacity Study and the ongoing Regional Capacity Management Facilities Study.

The Team A consultant is responsible to develop viable alternatives, recommend solutions and develop Capital Improvement Program schedules for the Capacity Management Facilities for the City of Glendale, NW City of Phoenix and Central City of Phoenix. This team is also responsible for the coordination and receipt of input and deliverables from the City of Glendale Engineering Representative, NW City of Phoenix Engineering Representative and the Central City of Phoenix Engineering Representative.

The Team B consultant is responsible to develop viable alternatives, recommend solutions and develop Capital Improvement Program schedules for the Capacity Management Facilities for the City of Mesa, NE City of Phoenix, City of Scottsdale and City of Tempe. This team is also responsible for the coordination and receipt of input and deliverables from the City of Mesa Engineering Representative, NE City of Phoenix Engineering Representative, City of Scottsdale Engineering Representative and the City of Tempe Engineering Representative.

The Program Manager, Team A and Team B have entered into contracts with the City of Phoenix on behalf of SROG that include subconsultant allowances for the individual SROG Cities Engineering Representatives. Team A will contract with the City of Glendale Engineering Representative, the NW City of Phoenix Engineering Representative and the Central City of Phoenix Engineering Representative. Team B will contract with the City of Mesa Engineering Representative, NE City of Phoenix Engineering Representative, City of Scottsdale Engineering Representative and the City of Tempe Engineering Representative.

Exhibit A – Scope of Engineering Services

Outline of Engineering Representatives Services

The scope of professional services for the Engineering Representatives on a per series basis is outlined as follows:

- Series 0100 - Project Management
- Series 0200 - Local Rainfall Model Development
- Series 0300 - Regional Criteria Development
- Series 0400 - Local Wastewater Program Development
- Series 0500 - Alternative Evaluation and Analysis

Exhibit A – Scope of Engineering Services

Series 0100 – Project Management Services

- Task 0110 – Project Management and Coordination
- Task 0120 - Monitor Progress and Prepare Status Reports

SROG Cities Engineering Representatives will perform Project Management services for the Regional Capacity Management Facilities as described in the following tasks:

Task 0110 – Project Management and Coordination

This task of professional services consists of overall Project Management and coordination, which consists of the administrative tasks necessary to maintain the overall project budget and schedule through the preparation of and assembly of the monthly deliverables. This Series is sub-organized as follows:

- Subtask 0111 – Project Performance Plan
- Subtask 0112 – Monthly Management Meetings
- Subtask 0113 – Project Administration/Coordination

Subtask 0111 – Project Performance Plan

This Subtask develops a detailed project plan and schedule that will define and identify each of the tasks required to complete the professional services described in this scope of services. The project plan consists of the following:

- A descriptive explanation of how each of the tasks will be accomplished
- A project organization chart
- A table containing project contact information
- A project schedule outlining the anticipated timeline for performing the services and highlighting the planned completion date of certain project milestones and deliverables

Subtask 0112 – Monthly Management Meetings

This Subtask consists of monthly management meetings with the Team A or Team B Project Manager. The meetings are scheduled every month during the project and last one (1) hour each. The level of effort for this task will be based on one-hour meetings, plus the necessary time for development of meeting material and documentation. The updated project schedule from Task 0140 will be submitted and discussed at this monthly management meeting. The meeting agenda will generally consist of the following:

- Summary of the services completed during the last month
- Review of action item list
- Presentation of the costs of services completed during the last month
- Review updated project schedule



Exhibit A – Scope of Engineering Services

Subtask 0113 – Project Administration/Coordination

This Subtask consists of the administrative tasks necessary to maintain the overall project budget and schedule through the preparation of and assembly of the monthly deliverables. This task also consists of the services to coordinate the design team's inter-company and interdisciplinary efforts including preparing the project team agreements.

Task 0120 - Monitor Progress and Prepare Status Reports

The Engineer will report the progress of activities through the use of a computer-based Project Management and scheduling system, which includes all major activities. The Engineer will update the schedule under Task 0140. Review of the schedule and deliverables with the City will take place at the monthly management meeting under Subtask 0112. Progress and schedule tracking will consist of:

- Monthly tracking and reporting on progress

Assumptions:

It is estimated that XXX hours will be needed to manage and coordinate the study.

It is assumed the study effort will have 12 update/progress meetings at one hour each plus time to prepare meeting materials and meeting results. The effort is for meetings held with Team A or Team B project manager or other meetings where the City requests your presence. Task 0120 is not intended for the SROG Cities Engineering Representative's private internal staff meetings.

Team A or Team B Input:

Team A or Team B will have representation at progress/review meetings and workshops and provide input and feedback.

Team A or Team B will review and provide comments on status reports and progress schedules.

Team A or Team B will provide necessary direction to other SROG/City Consultants to assure coordination.

Deliverables:

- Task 0111 - Project Performance Plan (5 copies)
- Task 0112 – Monthly Management Meetings - Action Item List (5 copies)
- Task 0120 – Monitor Progress and Prepare Status Reports (5 copies)



Exhibit A – Scope of Engineering Services

Series 0200 - Local Rainfall Model Development

The following series generally describes the effort of the SROG Cities Engineering Representatives for the above-referenced project. The SROG Cities Engineering Representatives are delineated as follows:

- City of Glendale Engineering Representative
- City of Mesa Engineering Representative
- City of Phoenix Engineering Representative
- City of Scottsdale Engineering Representative
- City of Tempe Engineering Representative

Team A will develop a hydrologic rainfall model on a basin level that will be used by the engineering representative of a particular city to input into the local system of that SROG City.

The local rainfall model on a basin level will allow the engineering representative of each City to quantify RDII values and calibrate the City's wastewater computer model from one of two historical rainfall events (July 15, 2003 or August 3, 2005). The model will also estimate RDII flow values at basin locations as identified by the SROG Cities Representative in the system based on synthetic rainfall events representing a 10 Year – 24 Hour storm. The following tasks describe the activities to be completed:

Task 0210 – Glendale Rainfall Model

City of Glendale Engineering Representative will provide Team A with technical support and complete the following activities:

- Develop a map showing basin level delineation from the existing Wastewater Master Plans
- Collect available Local Collection System Flow Measurements for a Defined Period
- Determine Existing and Projected Service Areas on a basin basis for Project Timeline
- Develop "Rainfall Calibration and 10 Year – 24 Hour Rainfall Event" Technical Memorandum
- Diurnals on an hourly basis will be developed for each pipeline that is connected to the SRO, SAI or the 99th Avenue Interceptor for the calibration storm and for the 10 Year – 24 Hour Rainfall event.

To aid in the accomplishment of the tasks described above, the City of Glendale Engineering Representative will participate during:

- The 4-hour "SROG System Rainfall Model Overview" workshop with the Team A, to describe the recommended procedures for the development of a local hydrologic model. Topics for this workshop will consist of: transferring hydrologic model documents and data, discussing particular aspects of the hydrologic model calibration, discuss input for the 10 Year – 24 Hour storm, and the integration of the SROG System Rainfall model to the City of Glendale Engineering Representative.
- An individual 2-hour "Rainfall Model Development" meeting with Team A, to answer questions related to the calibration task and to provide additional information, if required.

Exhibit A – Scope of Engineering Services

- An individual meeting “Rainfall Model Wrap-Up” meeting with the Team A, after the completion of the technical memorandum, to discuss the City’s modeling results, conclusions, and next steps.

The City of Glendale Engineering Representative will review and comment on the draft meeting minutes developed by Team A for each of the three meetings.

Similar activities will be developed for the other SROG Cities with Team A or Team B leading the following tasks.

Task 0220 – Mesa Rainfall Model

The activities associated with this task for the City of Mesa Engineering Representative are similar to Task 0210 - Glendale Rainfall Model, but applied to the City of Mesa Engineering Representative with the exception that Team B will be responsible for the coordination of the City of Mesa Engineering Representative.

Task 0230 – Phoenix Rainfall Model

The activities associated with this task for the City of Phoenix Engineering Representative are similar to Task 0210- Glendale Rainfall Model with the exception that Team A will be responsible for the coordination of the NW, Central and South Areas with the City of Phoenix Engineering Representative and Team B will be responsible for the NE Area with the City of Phoenix Engineering Representative.

Task 0240 – Scottsdale Rainfall Model

The activities associated with this task for the City of Scottsdale Engineering Representative are similar to Task 0210 - Glendale Rainfall Model, but applied to the City of Scottsdale Engineering Representative with the exception that Team B will be responsible for the coordination of the City of Scottsdale Engineering Representative.

Task 0250 – Tempe Rainfall Model

The activities associated with this task for the City of Tempe Engineering Representative are similar to Task 0210 - Glendale Rainfall Model, but applied to the City of Tempe Engineering Representative with the exception that Team B will be responsible for the coordination of the City of Tempe Engineering Representative.

Meetings and deliverables associated with this Series are as follows:

- Meetings:
 - One 4-hour “SROG System Rainfall Model Overview” workshop, with all SROG Cities Engineering Representatives and Team B, where Team A will introduce the existing SROG System Rainfall Model, discuss its integration with the local systems and present a preliminary schedule for the local rainfall model development.

Exhibit A – Scope of Engineering Services

- “Rainfall Model Development” meetings, one with each of the SROG Cities including Team B, where Team A will discuss individual questions about local rainfall models, including applicability and limitations. The anticipated duration of these meetings is 2-hours each.
 - “Rainfall Model Wrap-Up” meeting with each of the SROG cities including Team B, after the completion of the individual technical memoranda, where Team A will discuss results and conclusions. The anticipated duration of these meetings is 2-hours each.
- Deliverables:
- The SROG Cities Engineering Representative will take the lead in developing the draft and final deliverables. Team A or Team B will review these draft deliverables and provide written comments for consideration to the SROG Cities Engineering Representatives for incorporation into the final deliverables. The deliverables associated with this series consist of the following:
- Map showing sub-basin level delineation from the existing Wastewater Master Plans (5 Copies each Draft and Final)
 - Local Collection System Flow Measurements for a Defined Period (5 Copies each Draft and Final)
 - Existing and Projected Service Areas for Project Timeline (5 Copies each Draft and Final)
 - “Rainfall Calibration and 10 Year – 24 Hour Rainfall Event”
 - ❖ City of Glendale – Appendix A1 (5 Copies each Draft and Final)
 - ❖ City of Mesa – Appendix A2 (5 Copies each Draft and Final)
 - ❖ City of Phoenix – Appendix A3 (5 Copies each Draft and Final)
 - ❖ City of Scottsdale – Appendix A4 (5 Copies each Draft and Final)
 - ❖ City of Tempe – Appendix A5 (5 Copies each Draft and Final)
 - Meeting minutes comments (three meetings)

Exhibit A – Scope of Engineering Services

Series 0300 – Regional Criteria Development

The following series generally describes the effort of the SROG Cities Engineering Representatives for the above-referenced project. The SROG Cities Engineering Representatives are delineated as follows:

- City of Glendale Engineering Representative
- City of Mesa Engineering Representative
- City of Phoenix Engineering Representative
- City of Scottsdale Engineering Representative
- City of Tempe Engineering Representative

This task consists of the establishment of common regional design and evaluation criteria that will be used for the development of solution alternatives, their technical and economical evaluation and the determination of the characteristics of the recommended alternative.

Task 0310 – Develop Regional Design Criteria

SROG Cities Engineering Representatives will summarize the existing design criteria for their respective wastewater collection and treatment systems and deliver a letter report (Appendix B-1) summarizing their findings to their respective Team A or B. The data collection will consist of the criteria for sizing, materials equipment and regulations. These criteria will be categorized by City and used to establish/confirm the regional design criteria during the “Regional Design Criteria Workshop.” SROG Cities Engineering Representatives will attend the “Regional Design Criteria Workshop.”

Task 0320 – Develop Project Timeline

SROG Cities Engineering Representatives will summarize the project timeline information for their respective wastewater collection and treatment systems and deliver a letter report (Appendix B-2) summarizing their findings to their respective Team A or B. This information will consist of developing the parameters and project timeline ranges. Timeline ranges include horizon year, currently set at 2060, and desired dated to implement CMOM.

Meetings and deliverables associated with this series are as follows:

- Meetings:
 - Teams A and B will conduct a 3-hour “Regional Design Criteria Workshop”, including all SROG Cities Engineering Representatives, to discuss the design criteria to be applied on this project.
- Deliverables:

The SROG Cities Engineering Representatives will take the lead in developing the listed draft and final letter reports. Teams A and B will review the draft letter reports and provide written comments for consideration to the SROG Cities Engineering Representatives for incorporation into the final letter report. The letter reports associated with this series consist of the following:

Exhibit A – Scope of Engineering Services

- “Design Criteria Letter Report” – Appendix B-1
 - ❖ City of Glendale – Appendix B1-1 (5 Copies each Draft and Final)
 - ❖ City of Mesa – Appendix B1-2 (5 Copies each Draft and Final)
 - ❖ City of Phoenix – Appendix B1-3 (5 Copies each Draft and Final)
 - ❖ City of Scottsdale – Appendix B1-4 (5 Copies each Draft and Final)
 - ❖ City of Tempe – Appendix B1-5 (5 Copies each Draft and Final)

- “Project Timeline Letter Report” – Appendix B-2
 - ❖ City of Glendale – Appendix B2-1 (5 Copies each Draft and Final)
 - ❖ City of Mesa – Appendix B2-2 (5 Copies each Draft and Final)
 - ❖ City of Phoenix – Appendix B2-3 (5 Copies each Draft and Final)
 - ❖ City of Scottsdale – Appendix B2-4 (5 Copies each Draft and Final)
 - ❖ City of Tempe – Appendix B2-5 (5 Copies each Draft and Final)

- Meeting minute comments (1 meeting)

Exhibit A – Scope of Engineering Services

Series 0400 - Local Wastewater Program Development

The following series generally describes the effort of the SROG Cities Engineering Representatives for the above-referenced project. The SROG Cities Engineering Representatives are delineated as follows:

- City of Glendale Engineering Representative
- City of Mesa Engineering Representative
- City of Phoenix Engineering Representative
- City of Scottsdale Engineering Representative
- City of Tempe Engineering Representative

The local programs by SROG Cities will be developed as part of the following tasks:

Task 0410 – Glendale Program

The City of Glendale Engineering Representative will develop the City's local program in coordination with Team A based on the procedure and outline described in Task 0410. As a result of this task, the City of Glendale Engineering Representative in conjunction with Team A will develop the "City of Glendale Local Program" Appendix C1.

The City of Glendale local wastewater program will be updated based on the results and findings of Series 0200 and 0300. The City of Glendale local wastewater program should be developed for the following two periods.

- **Period I (From 2005 to 2015).** For this period, the expansion, operation and maintenance of the City of Glendale wastewater facilities are well established.
- **Period II (From 2016 to 2060).** For this period, the operation, maintenance, and expansion of local wastewater facilities are less defined for the City of Glendale.

The development of the City of Glendale local program, for the periods described above, will consist of the following:

- **Wastewater Flow Projections Periods I and II**
 - Develop wastewater flow projections to the 91st Avenue WWTP and to local WRPs for dry weather condition and deliver these projections in electronic excel spreadsheets to Team A.
 - Graphically depict the locations at which the City of Glendale wastewater conveyance system currently discharges to the SROG system and deliver electronic PowerPoint slides to Team A.
 - Describe and graphically depict the locations of facilities (or proposed facilities) to monitor residual flow to the SROG system from City of Glendale reclamation facilities and deliver electronic PowerPoint slides to Team A.
 - Describe and graphically depict the locations of facilities (or proposed facilities) to monitor wastewater flow rates in the primary collection system for the City of Glendale and deliver electronic PowerPoint slides to Team A.

Exhibit A – Scope of Engineering Services

- Summarize the findings and conclusions in a draft chapter report consisting of the following:
 - ❖ Dry Weather Projections
 - Period I
 - Period II

- Wastewater Flow per Basin for the City of Glendale including RDII Periods I and II
 - Develop wastewater flow projections on a basin basis to the 91st Avenue WWTP and to local WRPs for 10 Year – 24 Hour wet weather conditions and deliver these projections in electronic excel spreadsheets to Team A.
 - ❖ Diurnals on an hourly basis will be developed for each pipeline that is connected to the SRO, SAI or the 99th Avenue Interceptor for the 10 Year – 24 Hour Rainfall event.
 - Summarize the findings and conclusions in a draft chapter report consisting of the following:
 - ❖ Wet Weather Projections
 - Period I
 - Period II

- Existing and Planned Capacity Management Facilities
 - Identify the dry weather and wet weather capacities of existing and planned conveyance and treatment facilities for the City of Glendale including their planned redundancy, stand-by power and safety reserve. Summarize the findings and conclusions in a draft chapter report consisting of the following:
 - ❖ Peak Hour Projections to the 91st Avenue WWTP
 - Diurnals on an hourly basis will be developed for each pipeline that is connected to the SRO, SAI or the 99th Avenue Interceptor for the 10 Year – 24 Hour Rainfall event.
 - ❖ Peak Hour Projections to the City of Glendale WRPs
 - ❖ Existing Capacity Management Facility Capacities
 - Average
 - Dry Weather Peak
 - Wet Weather Peak
 - ❖ Planned Capacity Management Facility Capacities
 - Average
 - Dry Weather Peak
 - Wet Weather Peak
 - ❖ Identification of Capacity Management Facility Limitations

- “City of Glendale Local Program” – Appendix C1
 - Summarize the findings and conclusions in a draft and final sealed technical memorandum consisting of the following chapters:
 - ❖ Executive Summary
 - ❖ Introduction
 - ❖ Dry Weather Projections
 - Period I
 - Period II



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Exhibit A – Scope of Engineering Services

- ❖ Wet Weather Projections
 - Period I
 - Period II
- ❖ Peak Hour Projections to the 91st Avenue WWTP
- ❖ Peak Hour Projections to the City of Glendale WRPs
- ❖ Existing Capacity Management Facility Capacities
 - Average
 - Dry Weather Peak
 - Wet Weather Peak
- ❖ Planned Capacity Management Facility Capacities
 - Average
 - Dry Weather Peak
 - Wet Weather Peak
- ❖ Identification of Capacity Management Facility Limitations
- ❖ Conclusions
- ❖ Recommendations
- ❖ References

To aid in the accomplishment of the tasks described above, the City of Glendale Engineering Representative will participate during:

- A 4-hour “Local Wastewater Program Definition” workshop with Team A, Team B and the other SROG Cities Engineering Representatives. The purpose of this workshop is to discuss primary guidelines for developing the local programs. Team A will be lead in the development of this workshop.
- Meetings with the City of Glendale Engineering Representative are anticipated to be the following four 3-hour meetings:
 - Wastewater Flow Projections Periods I and II
 - Wastewater Flow per Basin for the City of Glendale including RDII Periods I and II
 - Existing and Planned Capacity Management Facilities
 - Draft “City of Glendale Local Program” Presentation

The City of Glendale Engineering Representative will review and comment on the draft meeting minutes developed by Team A for the “Local Wastewater Program Definition” workshop, the “Wastewater Flow Projections Periods I and II” meeting, the “Wastewater Flow per SubBasin for the City of Glendale including RDII Periods I and II” meeting, the “Existing and Planned Capacity Management Facilities” meeting, the “City of Glendale Local Program” Presentation” meeting and the SROG Status Meeting.

The City of Glendale Engineering Representative will take the lead in developing the draft and final “City of Glendale Local Program” Appendix C1 for Tasks 0410. Team A will review these draft appendix and

Exhibit A – Scope of Engineering Services

and outline described in Series 0410 for Northwest, South and Central Phoenix. As a result of this task, Team A in conjunction with the City of Phoenix Engineering Representative will develop the “City of Phoenix Northwest, Central and South Local Program” – Appendix C3.

For the Northeast Area of the City of Phoenix, the City of Phoenix Engineering Representative will develop the City’s local program in coordination with Team B based on the procedure and outline described in Series 0400 for Northeast Phoenix. As a result of this task, Team B in conjunction with the City of Phoenix Engineering Representative will develop the “City of Phoenix Northeast Local Program” – Appendix C4.

Task 0440 – Scottsdale Program

The City of Scottsdale Engineering Representative will develop the City’s local program in coordination with Team B based on the procedure and outline described in Series 0400. As a result of this task, Team B in conjunction with the City of Scottsdale Engineering Representative will develop the “City of Scottsdale Local Program” – Appendix C5.

Task 0450 – Tempe Program

The City of Tempe Engineering Representative will develop the City’s local program in coordination with Team B based on the procedure and outline described in Series 0400. As a result of this task, Team B in conjunction with the City of Tempe Engineering Representative will develop the “City of Tempe Local Program” – Appendix C6.

Exhibit A – Scope of Engineering Services

Series 0500 – Alternative Evaluation and Analysis

The following series generally describes the effort of the SROG Cities Engineering Representatives for the above-referenced project. The SROG Cities Engineering Representatives are delineated as follows:

- City of Glendale Engineering Representative
- City of Mesa Engineering Representative
- City of Phoenix Engineering Representative
- City of Scottsdale Engineering Representative
- City of Tempe Engineering Representative

The “Flow Metering and Analysis for Selected SROG Interceptor Sewers – Phase II” project recognized the synergy that exists between local (conveyance and treatment systems) and the SROG facilities and the possibility that this synergy will increase and consolidate in the future. By exploring the alternatives for cooperative operation, the SROG Cities can possibly minimize or lessen the need for additional capital improvement.

The SROG Cities Representatives will be running their City’s calibrated wastewater model for Periods I and II to support the alternatives that are being developed by Team A or Team B in the following tasks:

Task 0510 – Area 1–NE Phoenix, Scottsdale, Tempe and Mesa Interface

The following SROG Cities Representatives will support Team B in Team B’s efforts to develop three alternatives for the interface between the cities of NE Phoenix, Scottsdale, Tempe and Mesa based on the results of Series 0200, 0300 and 0400:

- City of Mesa Engineering Representative
- City of Phoenix Engineering Representative
- City of Scottsdale Engineering Representative
- City of Tempe Engineering Representative

As a result of this task, Team B will develop the “NE Phoenix, Scottsdale, Tempe and Mesa Alternatives” – Appendix D1.

Task 0520 – Area 2 – NW Phoenix and Glendale Interface

The following SROG Cities Representatives will support Team A in Team A’s efforts to develop three alternatives for the NW Phoenix and Glendale interface, based on the results of Series 0200, 0300 and 0400:

- City of Glendale Engineering Representative
- City of Phoenix Engineering Representative

As a result of this task, Team A will develop the “NW Phoenix and Glendale Alternatives” – Appendix D2.

Exhibit A – Scope of Engineering Services

Task 0530 – Area 3 – South and Central Phoenix and SROG System Interface

The following SROG Cities Representatives will support Team A in Team A's efforts to develop three alternatives for South and Central Phoenix and the SROG system interface, based on the results of Series 0200, 0300 and 0400:

- City of Phoenix Engineering Representative

As a result of this task, Team A will develop the “South and Central Phoenix Alternatives” – Appendix D3.

Meetings and deliverables associated with this task are as follows:

- Meetings:

- Team B will conduct the following 3-hour coordination meetings with the City of Phoenix with their City of Phoenix Engineering Representative and the Cities of Scottsdale, Mesa and Tempe and their engineering representatives to discuss possible solution alternatives:
 - ❖ “Alternative Options” meeting
 - ❖ “Top 3 Alternative Selection” meeting
 - ❖ “Preliminary Alternative Results” meeting
- Team A will conduct the following 3-hour coordination meetings with the City of Phoenix with their City of Phoenix Engineering Representative and the City of Glendale with their engineering representative to discuss possible solution alternatives:
 - ❖ “Alternative Options and Top 3 Selection” meeting
 - ❖ “Alternative Results”
- Team A will conduct the following 3-hour coordination meetings with the City of Phoenix for their Central and South Areas with their City of Phoenix Engineering Representative to discuss possible solution alternatives:
 - ❖ “Alternative Options and Top 3 Selection” meeting
 - ❖ “Alternative Results”

- Deliverables:

Team A will take the lead in developing the draft and final Appendix D2 and D3 for Tasks 0520 and 0530. The Tasks 0520 and 0530 SROG Cities Engineering Representatives and Team B will review these draft appendixes and provide written comments for consideration to Team A and for incorporation into the final appendixes. Team B will take the lead in developing the draft and final Appendix D1 for Task 0510. The Task 0510 SROG Cities Engineering Representatives and Team A will review this draft appendix and provide written comments for consideration to Team B for incorporation into the final appendix. The deliverables associated with this series consist of the following:

- Review and provide comments to meeting minutes
 - ❖ City of Glendale Engineering Representative (two sets)
 - ❖ City of Mesa Engineering Representative (four sets)
 - ❖ City of Phoenix Engineering Representative (eight sets)
 - ❖ City of Scottsdale Engineering Representative (four sets)
 - ❖ City of Tempe Engineering Representative (four sets)

Exhibit A – Scope of Engineering Services

- Review and provide comments to the following draft appendixes:
 - ❖ City of Glendale Engineering Representative
 - “NW Phoenix and Glendale Alternatives” – Appendix D2
 - ❖ City of Mesa Engineering Representative
 - “NE Phoenix, Scottsdale, Tempe and Mesa Alternatives” – Appendix D1
 - ❖ City of Phoenix Engineering Representative
 - “NW Phoenix and Glendale Alternatives” – Appendix D2
 - “South and Central Phoenix Alternatives” – Appendix D3
 - “NE Phoenix, Scottsdale, Tempe and Mesa Alternatives” – Appendix D1
 - ❖ City of Scottsdale Engineering Representative
 - “NE Phoenix, Scottsdale, Tempe and Mesa Alternatives” – Appendix D1
 - ❖ City of Tempe Engineering Representative
 - “NE Phoenix, Scottsdale, Tempe and Mesa Alternatives” – Appendix D1

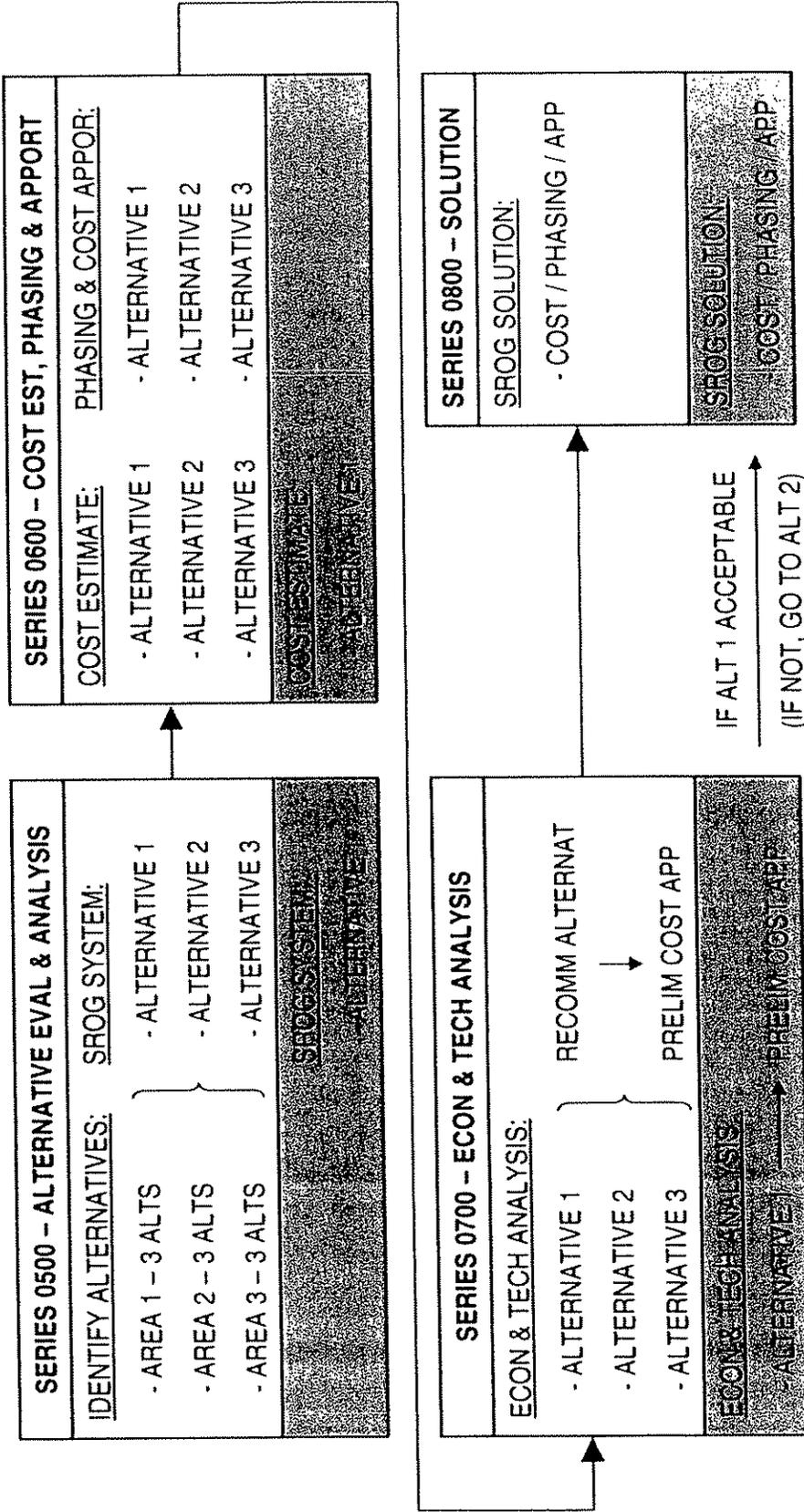


APPENDIX B

9-19-2007 MODIFIED
APPROACH FOR COMPLETING
THE SROG RCMF PROJECT

Next Steps – Proposed Approach

Next Steps



ORIGINAL PROPOSED