

REGULAR MEETING
SAND SPRINGS/SAPULPA JOINT BOARD MEETING
Inter-local Cooperation Agreement
Tuesday, April 19, 2016
5:00 o'clock P.M.
Sapulpa City Hall
Conference Room – First Floor
424 East Dewey Avenue, Sapulpa, Oklahoma

AGENDA

1. Call to Order
2. Roll Call
3. Minutes
 - A. Consider approval of minutes for the January 19, 2016, Regular Joint Board Meeting.
4. BUSINESS
 - A. Discuss and consider recommendation to respective municipal trust authorities an agreement for engineering services with Tetra Tech for operations and maintenance of the jointly owned Skiatook Raw Water Conveyance System during Fiscal Year 2016-2017 in the total amount of \$305,870.00.
 - B. Discuss and consider recommendation authorizing staff to order an upgrade of the Skiatook Pump Station 20-year old purpose built SCADAview computer. The upgrade will include a Dell Optiplex 7040 Computer, Monitor, Speaker Bar, required Software, and include computer configuration within the current SCADAview system, setup, onsite installation and startup by the current Station Operational System designer for a total cost of \$10,018.00.
 - C. Discuss and consider recommendation authorizing staff to order the supply and installation of a new 350 Amp, 480 Volt Square D Molded Case Breaker in the 480 Volt Switch Gear System of SRWCS Pump No. 201 for a total cost of \$4,826.00.
 - D. Discuss and consider recommendation authorizing staff to order the supply and installation of an Oil Sample Port on the SRWCS Pump Station Step-Down Transformer (4160 to 480 Volts) for the System Operator to obtain oil samples assisting with assessment of the ongoing transformer winding condition for a total cost of \$1,408.00.

5. STAFF REPORTS

- A. Skiatook Raw Water Conveyance System Status Report of April 5, 2016, by Tetra Tech. (discussion only, no action required).
- B. Discuss noted SRWCS condition assessments from the March 2016 Tri-Annual System Maintenance Outage, and the April 2016 SRWCS Right-of-Way Easements Helicopter Fly-Over. (discussion only, no action required).

6. Adjournment:

(The next meeting is July 19, 2016, at 5:00 O'clock P.M. in Sapulpa).

Date Posted: April 4, 2016

Time Posted: 9:00 am.

By: Shirley Burzio, City Clerk

This agenda was posted at _____ p.m. on April, 2016 on the digital display board located in the lobby of the Sand Springs Municipal Building, 100 East Broadway, Sand Springs, Oklahoma 74063, by Janice Almy, City Clerk, City of Sand Springs, Oklahoma.

Janice Almy, City Clerk, City of Sand Springs, Oklahoma

MINUTES
SAND SPRINGS/SAPULPA JOINT BOARD
Interlocal Cooperation Agreement
Tuesday, January 19, 2016 at 5:00 P.M.
Regular Meeting
Sand Springs Public Works Building
109 North Garfield Ave.
Sand Springs, Oklahoma 74063

MEMBERS PRESENT: Mike Burdge, City of Sand Springs
John Fothergill, City of Sand Springs
Robert Petitt, City of Sapulpa

OTHERS PRESENT: Elizabeth Gray, City of Sand Springs
Frank Weigle, City of Sand Springs
Rick Sauer, Tetra Tech

The Sand Springs/Sapulpa Joint Board met in regular session on Tuesday, January 19, 2016 at 5:00 p.m. in the Sand Springs Public Works Building pursuant to the agenda filed with the City Clerk's office and posted at 4:00 p.m. on January 15, 2016 on the digital display board located in the first floor lobby of the Sand Springs Municipal Building, 100 East Broadway, Sand Springs, Oklahoma 74063.

1. **Call to Order**

Chairman Burdge called the meeting to order at the noted time of 5:04 p.m.

2. **Roll Call**

Mr. Burdge called for an individual roll call with members replying in the following manner:

Mr. Fothergill, here; Mr. Petitt, here, Mr. Burdge, here.

3. **Minutes**

Approval was requested for the minutes of the October 20, 2015 Regular Joint Board meeting.

A motion was made by Mr. Fothergill and seconded by Mr. Petitt to approve the minutes of the October 20, 2015 Sand Springs/Sapulpa Regular Joint Board meeting.

Mr. Burdge called for the vote recorded as follows:

Mr. Fothergill, aye; Mr. Petitt, aye; Mr. Burdge, aye.

4. **Business**

- A. Discussion and consideration of recommendation authorizing staff for ordering an upgrade of the Pump Station 20-year old purpose built SCADAview computer for system operation and operator input.

A motion was made by Mr. Fothergill and seconded by Mr. Pettit to table this item at the recommendation of staff pending a further update and recommendation of necessary equipment, configuration and cost due to additional information received after the item was placed on this particular agenda.

Mr. Burdge called for the vote recorded as follows:

Mr. Fothergill, aye; Mr. Pettit, aye; Mr. Burdge, aye

5. **Staff Reports (No Action Required)**

- A. Discussed preparation status for the 2016 SRWCS Tri-Annual Maintenance Period.
- B. Discussed status of the SRWCS Pipeline Fittings Assessment and Maintenance Report.
- C. Discussed status of the Acquisition of Property for the SRWCS.
- D. Discussed the SRWCS Status Report for December 2015 of January 12, 2016.

6. **Adjournment - 5:34 P.M.**

There being no further business, a motion was made for adjournment by Mr. Burdge and seconded by Mr. Pettit.

Mr. Burdge called for the vote recorded as follows:

Mr. Fothergill, aye; Mr. Pettit, aye; Mr. Burdge, aye.

Memorandum



Tetra Tech

To: Sapulpa Municipal Authority
 Sand Springs Municipal Authority

From: Neill Pulliam, P.E., Project Manager

Subject: SRWCS: Operations & Maintenance Agreement (FY 2016-2017)

Date: April 12, 2016

The Joint Board of the Skiatook Raw Water Conveyance System (SRWCS) is respectfully requested during the upcoming meeting to consider and approve the attached Agreement for Engineering Services with Tetra Tech, Inc. for Operations and Maintenance of the jointly owned SRWCS during FY 2016-2017.

The scope of work and corresponding labor / cost budget is composed of three separate sections: (1) "Operations & Maintenance (O&M)" section, (2) "Repair & Rehabilitation/Upgrade (R&R)" section, and (3) "Tri-annual Shutdown" section. The "O&M" portion of the budget is based upon anticipated labor-hours and costs to operate the raw water system and perform routine maintenance activities on the system's assets (pumps, strainers, valves, tanks, mechanical equipment, and telemetry) and facilities. The "R&R" portion of the budget is based upon an estimate of labor-hours and costs that could be associated with unforeseen equipment repairs and replacements which may be necessary during the upcoming year. The "Tri-annual Shutdown" section summarizes labor-hours and costs associated with the system shutdown and detailed internal inspections/cleaning/maintenance of critical facilities which can only be performed off-line, and facility evaluation; this effort is performed once every three years since inception of the system; last occurring in March 2016 and next scheduled for March 2019.

The summary table of estimated man-hours, labor costs, and engineer expenses shown below is consistent with recent staff review and budget finalization meetings.

Scope of Services	Man-hours	Labor Costs	Engineer Expenses	Estimated Total
Operations & Maintenance	2043	\$195,437	\$67,244	\$262,681
Repair / Rehab / Upgrade {1}	431	\$31,750	\$11,439	\$43,189
Tri-annual Shut-down	0	\$0	\$0	\$0
Sub-totals	2474	\$227,187	\$78,683	\$305,870

{1}[Includes estimated labor and direct expenses for repair / replacement of unanticipated equipment malfunctions.]

AGREEMENT
FOR
ENGINEERING SERVICES
SKIATOOK RAW WATER CONVEYANCE SYSTEM
OPERATIONS AND MAINTENANCE FY 2016 - 2017

THIS AGREEMENT, including Attachments between Sapulpa Municipal Authority and the Sand Springs Municipal Authority Joint Board (Owner) and Tetra Tech, Inc. (Engineer);

WITNESSETH:

WHEREAS, Owner has contracted for the maintenance and operation of the Skiatook Lake Raw Water Conveyance System (SRWCS) since September 15, 1992; and Owner intends to continue to maintain and operate the SRWCS (the Project); and,

WHEREAS, Owner requires certain engineering services (the Services) in connection with the Project; and,

WHEREAS, Engineer is prepared to provide the Services;

NOW THEREFORE, in consideration of the promises contained in this Agreement, Owner and Engineer agree as follows:

ARTICLE 1 - EFFECTIVE DATE

The effective date of this Agreement shall be the ____ day of _____ 2016.

ARTICLE 2 - GOVERNING LAW

This Agreement shall be governed by the laws of the state of Oklahoma, local ordinances, and resolutions and the interlocal cooperation agreement for the Skiatook Lake Raw Water Conveyance System originally executed December 1, 1986, hereafter referred to as the Interlocal Agreement.

ARTICLE 3 - SERVICES TO BE PERFORMED BY ENGINEER

Engineer shall perform the Services described in Attachment A, Scope of Services.

ARTICLE 4 - COMPENSATION

Owner shall pay Engineer in accordance with Attachment B, Compensation.

ARTICLE 5 - OWNER'S RESPONSIBILITIES

Owner shall be responsible for all matters described in Attachment C, Owner's Responsibilities and Special Conditions.

ARTICLE 6 - STANDARD OF CARE

Engineer shall perform the Services undertaken in a manner consistent with the prevailing accepted standard for similar services with respect to projects of comparable function and complexity, and with the applicable laws and regulations published and in effect at the time of performance of the Services. The System shall be operated and maintained in a good and workmanlike manner and in strict accordance with this Agreement. All work shall be performed by or under the supervision of

Oklahoma Dept. Of Environmental Quality (ODEQ) certified operators properly qualified to perform such Services, which qualification shall be subject to review by the Owners. Engineer shall perform the Services which fail to satisfy this standard of care in a manner satisfactory to the Owner, at no additional cost. Other than the obligation of the Engineer to perform in accordance with the foregoing standard, no warranty, either express or implied, shall apply to the Services to be performed by the Engineer pursuant to this Agreement or the suitability of Engineer's work product.

ARTICLE 7 - LIABILITY AND INDEMNIFICATION

7.1 General. Having considered the potential liabilities that may exist during the performance of the Services, the benefits of the Project, and the Engineer's fee for the Services; and in consideration of the promises contained in this Agreement, Owner and Engineer agree to allocate and limit such liabilities in accordance with this Article.

7.2 Indemnification. Engineer and Owner each agrees to defend, indemnify, and hold harmless each other, its agents and employees, from and against legal liability for all claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are caused solely by its negligent acts, errors, or omissions. In the event claims, losses, damages, or expenses are caused by the joint or concurrent negligence of Engineer and Owner, they shall be borne by each party in proportion to its own negligence.

7.3 Consequential Damages. Engineer shall not be liable to Owner for any special, indirect, or consequential damages resulting in any way from the performance of the Services such as, but not limited to, loss of use, loss of revenue, or loss of anticipated profits.

7.4 Survival. Upon completion of all Services, obligations, and duties provided for in this Agreement, or if this Agreement is terminated for any reason, the terms and conditions of this Article shall survive.

7.5 Limitations of Liability. To the fullest extent permitted by law, Engineer's total liability to the Owner for all claims, losses, damages, and expenses resulting in any way from the performance of the Services shall not exceed the limits of the Engineer's insurance coverage.

ARTICLE 8 - INSURANCE

During the performance of the Services under this Agreement, Engineer shall maintain the following insurance:

- (1) General Liability Insurance, with a combined single limit of \$1,000,000 for each occurrence and \$1,000,000 in the aggregate.
 - (2) Automobile Liability Insurance, with a combined single limit of \$1,000,000 for each accident.
 - (3) Workers' Compensation Insurance and Employer's liability Insurance in accordance with statutory requirements.
 - (4) Professional Liability Insurance, with a limit of \$1,000,000 annual aggregate.
- Engineer shall, upon written request, furnish Owner certificates of insurance which shall include a provision that such insurance shall not be canceled without at least thirty days' written notice to Owner. All Project contractors shall be required to include Owner and Engineer as additional

insureds on their General Liability insurance policies, and shall be required to indemnify Owner and Engineer to the same extent.

The Owners shall be responsible for providing all property loss insurance for the System.

Engineer and Owners each shall require its insurance carriers to waive all rights of subrogation against the other and its directors, officers, partners, commissioners, officials, agents and employees, for damages covered by property insurance during and after the performance of services. A similar provision shall be incorporated into all contractual arrangements entered into by Owners and shall protect Owners and Engineer to the same extent.

ARTICLE 9 - LIMITATIONS OF RESPONSIBILITY

Engineer shall not be responsible for: (1) maintenance means, methods, techniques, sequences, procedures, or safety precautions and programs being provided by others in connection with the System; (2) the failure of any contractor, subcontractor, vendor, or other Project participant, not under contract to Engineer, to fulfill contractual responsibilities to the Owner or to comply with federal, state, or local laws, regulations, and codes; or (3) procuring permits, certificates, and licenses required for any work unless such responsibilities are specifically assigned to Engineer in Attachment A, Scope of Services.

ARTICLE 10 - LIMITATIONS OF RESPONSIBILITIES FOR ACTS OF OTHERS

Provided that the Engineer has acted in good faith, Engineer shall not be liable to Owner for breach of contract or for negligent error or omission in failing to detect, prevent, or report the failure of any contractor, subcontractor, vendor, or other project participant to fulfill contractual or other responsibilities to the Owner, failure to finish or construct the Project in accordance with the plans and specifications, or failure to comply with federal, state, or local laws, ordinances, regulations, rules, codes, orders, criteria, or standards.

ARTICLE 11 - OPINIONS OF COST AND SCHEDULE

Since Engineer has no control over the cost of labor, materials, or equipment furnished by others, or over the resources provided by others to meet Project schedules, Engineer's opinion of probable costs and of Project schedules shall be made on the basis of experience and qualifications as a professional engineer. Engineer does not guarantee that proposals, bids, or actual System operation costs will not vary from Engineer's estimates or that actual schedules will not vary from Engineer's projected schedules. Engineer shall complete the services within the time frame outlined on Attachment E, Schedule, subject to conditions which are beyond the control of the Engineer. Engineer does not guarantee that actual system operation costs will not vary from Engineer's estimates or that actual schedules will not vary from Engineer's projected schedule.

ARTICLE 12 - REUSE OF DOCUMENTS

All documents, including, but not limited to, drawings, specifications, and computer software prepared by Engineer pursuant to this Agreement are instruments of service in respect to the Project. They are not intended or represented to be suitable for reuse by Owner or others on extensions of the Project or on any other project. Any reuse without prior written verification or adaptation by Engineer for the specific purpose intended will be at Owner's sole risk and without liability or legal exposure to Engineer. Owner shall defend, indemnify, and hold harmless Engineer against all claims, losses, damages, injuries, and expenses, including attorneys' fees, arising out of or resulting from such reuse. Any verification or adaptation of documents will entitle Engineer to additional compensation at rates to be agreed upon by Owner and Engineer.

ARTICLE 13 - OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

Except as otherwise provided herein, engineering documents, drawings, and specifications prepared by Engineer as part of the Services shall become the property of Owner provided, however, that Engineer shall have the unrestricted right to their use. Engineer shall retain its rights in its standard drawing details, specifications, databases, computer software, and other proprietary property. Rights to intellectual property developed, utilized, or modified in the performance of the Services shall remain the property of Engineer.

ARTICLE 14 - TERMINATION

This Agreement may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement. The nonperforming party shall have fifteen calendar days from the date of the termination notice to cure or to submit a plan for cure acceptable to the other party.

Owner may terminate or suspend performance of this Agreement for Owner's convenience upon written notice to Engineer. Engineer shall terminate or suspend performance of the Services on a schedule acceptable to Owner. If termination or suspension is for Owner's convenience, Owner shall pay Engineer for all the Services performed and termination or suspension expenses. Upon restart, an equitable adjustment shall be made to Engineer's compensation for the direct and indirect costs associated with remobilization.

ARTICLE 15 - DELAY IN PERFORMANCE

Neither Owner nor Engineer shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the nonperforming party. For purposes of this Agreement, such circumstances include, but are not limited to, abnormal weather conditions; floods, earthquakes, fire; epidemics; war, riots, and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage; judicial restraint; and inability to procure permits, licenses, or authorizations from any local, state, or federal agency for any of the supplies, materials, accesses, or services required to be provided by either Owner or Engineer under this Agreement.

Should such circumstances occur, the nonperforming party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement.

ARTICLE 16 - COMMUNICATIONS

Any communication required by this Agreement shall be made in writing to the address specified below:

Engineer:	Tetra Tech, Inc. 7645 E. 63 rd Street, Suite 301 Tulsa, Oklahoma 74133 Attention: D. Neill Pulliam Jr, P.E.,
Owner:	Sand Springs/Sapulpa Joint Board c/o Sand Springs Municipal Authority PO Box 338 Sand Springs, OK 74063 Attention: Mr. Derek Campbell, P.E.

and

Sand Springs/Sapulpa Joint Board
c/o Sapulpa Municipal Authority
P.O. Box 1130
Sapulpa, OK 74067
Attention: Mayor Reg Green

Nothing contained in this Article shall be construed to restrict the transmission of routine communications between representatives of Engineer and Owner.

ARTICLE 17 - WAIVER

A waiver by either Owner or Engineer of any breach of this Agreement shall be in writing. Such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

ARTICLE 18 - SEVERABILITY

The invalidity, illegality, or unenforceability of any provision of this Agreement or the occurrence of any event rendering any portion or provision of this Agreement void shall in no way affect the validity or enforceability of any other portion or provision of this Agreement. Any void provision shall be deemed severed from this Agreement, and the balance of this Agreement shall be construed and enforced as if this Agreement did not contain the particular portion or provision held to be void. The parties further agree to amend this Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this Article shall not prevent this entire Agreement from being void should a provision which is of the essence of this Agreement be determined void.

ARTICLE 19 - INTEGRATION

This Agreement represents the entire and integrated Agreement between Owner and Engineer. It supersedes all prior and contemporaneous communications, representations, and agreements, whether oral or written, relating to the subject matter of this Agreement.

ARTICLE 20 - SUCCESSORS AND ASSIGNS

To the extent permitted by Article 21, Owner and Engineer each binds itself and its successors and assigns to the other party to this Agreement.

ARTICLE 21 - ASSIGNMENT

Neither Owner nor Engineer shall assign its duties under this Agreement without the prior written consent of the other party. Unless otherwise stated in the written consent to an assignment, no assignment will release or discharge the assignor from any obligation under this Agreement. Nothing contained in this Article shall prevent Engineer from employing independent consultants, associates, and subcontractors to assist in the performance of the Services.

ARTICLE 22 - THIRD PARTY RIGHTS

Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than Owner and Engineer.

ARTICLE 23 – PERIODIC REVIEW AND PERIOD OF SERVICE

Reviews of the major facilities of the System, as identified in Attachment A, - Scope of Services, may be made at least two (2) times yearly during the months of February and August by one or more designated representatives of the Owners in the company of Engineer and at the discretion of the

Owners. Reviews are to assess Engineer's performance and confirm acceptable operational condition of the System.

Only written comments from these reviews or other appropriate forums, authorized by the Owners, will be responded to by Engineer.

ARTICLE 24 – MAINTENANCE EQUIPMENT AND SUPPLIES

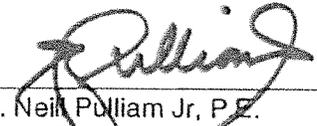
Maintenance equipment and supplies acquired by Engineer by direct purchase under this Agreement shall remain the property of the System, and shall be maintained by Engineer as a part of the System.

IN WITNESS WHEREOF, Owner and Engineer have executed this Agreement.

Owner: Sapulpa Municipal Authority

Engineer: Tetra Tech, Inc.

By _____

By  _____

Title _____

D. Neil Pulliam Jr, P.E.
Title Chief Engineer

Date _____

Date 4-12-16

APPROVED

Municipal Authority Attorney

ATTEST

Secretary

Owner: Sand Springs Municipal Authority

Title _____

Date _____

APPROVED

Municipal Authority Attorney

ATTEST

Secretary

**ATTACHMENT A
TO
AGREEMENT FOR ENGINEERING SERVICES
BETWEEN
SAPULPA MUNICIPAL AUTHORITY AND
SAND SPRINGS MUNICIPAL AUTHORITY, OWNERS
AND
TETRA TECH, INC., ENGINEER
FOR
SKIATOOK RAW WATER CONVEYANCE SYSTEM
OPERATIONS AND MAINTENANCE FY 2016-2017**

SCOPE OF WORK

The following scope of services shall be made a part of the Agreement dated the ____ day of ____ 2016.

I. PROJECT UNDERSTANDING

The Sapulpa Municipal Authority and the Sand Springs Municipal Authority currently utilize raw water from Skiatook Lake for treatment and subsequent distribution to customers. This raw water is conveyed to each individual entity's treatment facilities by the jointly owned Skiatook Raw Water Conveyance System (SRWCS). This system and its facilities require both routine and emergency operational and maintenance services. The Engineer shall provide full-time operational services for the pump station, repeater station, one-way surge tank, 2MG storage tanks (2), meter vault, and the 36" transmission line with all appurtenances. No individually owned facilities are included within the scope of this Agreement. The included facilities may be referred to as the "System," SRWCS," or the "Joint Facilities."

II. SCOPE OF SERVICES

1. Engineer shall perform site visits to each and all major facilities on the system no less than five times per month.
2. Engineer shall enter information necessary to establish and maintain the maintenance management system. Engineer shall utilize the management system for maintenance scheduling and documentation.
3. Engineer shall provide routine maintenance on the system equipment as identified in the operation and maintenance manuals and as further defined by the maintenance management system. Engineer shall provide consumable supplies needed for normal, routine maintenance within the budgeted values identified in Attachment "B". When authorized by this agreement in accordance with budgeted values identified in Attachment "B", Engineer shall be prepared to: solicit for quotes, acquire, and install special/critical equipment and materials needing timely replacement or rehabilitation due to unforeseen conditions and/or circumstances.

4. Engineer shall perform periodic water balance examinations of the system to investigate the potential for excessive losses warranting further investigations beyond the scope of the current budgetary limitations.
5. Engineer shall complete an aerial inspection of the 36" transmission line a minimum of one time per year. Advance authorization from Owners is required prior to all such inspections. Further, the Owners may assign one representative to accompany Engineer on the inspections.
6. Engineer shall inspect, exercise, and report on the condition of transmission line appurtenances (isolation and air-relief valves and blow-off assemblies, etc.) as appropriate or in conjunction with the tri-annual system shutdown.
7. Engineer shall provide monthly raw water flow meter readings at each site of the system. These meter readings shall be regularly scheduled. The Owner shall be given the opportunity to witness all meter readings. Engineer shall enter the results of these meter readings and utility billing into the cost allocation spreadsheet provided by the Owners and report the resulting cost allocation monthly to the Owners.
8. Engineer shall prepare a monthly report on the system status, usage, and operator activities to the Owners.
9. Engineer shall provide a listing of initial and monthly updates of equipment, supplies, and manpower assistance to be provided by the owners for operations and maintenance on the system. When necessary, Engineer shall prepare and distribute to Owner's representatives an Activity Report to initiate assistance from Owners as outlined in Attachment C.
- ~~10. Grounds keeping services removed from Engineer scope of work and omitted.~~
11. Engineer shall notify and inform owner of anticipated technical services required for Owner's coordination of the yearly specialized services as outlined in Attachment C, Owner Responsibilities and Special Conditions/Exclusions.
12. Engineer shall perform routine maintenance and cleaning of cooling, heating, and ventilation equipment two times per year to generally coincide with the onset of the heating and cooling seasons.
13. Engineer shall perform monthly rotations of high-service pumps if not in operation and if system conditions/configuration permit pump rotations.
14. Engineer shall provide the basic tools necessary for performance of the requirements of this Agreement.
15. Engineer shall respond to emergency call-outs received. Engineer shall assess the severity of all call-outs and respond as Engineer deems appropriate in accordance with the policies approved by the Owners.

16. Engineer shall provide one primary operator along with a minimum of two stand-by operators familiar with the system. Operators shall be equipped with cellular telephones to ensure communication and safety.
17. Primary Operator shall be certified as required by the Oklahoma State Department of Health. Costs for such certification beyond an "O.S.D.H. Class D" shall be included in the annual budget and be eligible for reimbursement.
18. In the event of a system emergency, Engineer shall be responsible for the coordination of all necessary efforts and resources in accordance with the policies established by the Owners.
19. Engineer shall perform, no more than one time per month, the required NPDES sampling and delivery of samples to the designated Owners' laboratory.

ATTACHMENT B
TO
AGREEMENT FOR ENGINEERING SERVICES
BETWEEN
SAPULPA MUNICIPAL AUTHORITY AND
SAND SPRINGS MUNICIPAL AUTHORITY, OWNERS
AND
TETRA TECH, INC., ENGINEER
FOR
SKIATOOK RAW WATER CONVEYANCE SYSTEM
OPERATIONS AND MAINTENANCE FY 2016 - 2017

COMPENSATION

The following compensation provisions shall be made a part of the Agreement dated the _____ day of _____ 2016.

I. **PAYMENTS FOR SERVICES AND EXPENSES OF THE ENGINEER:**

- A. **Basic Engineering Services.** For basic engineering services performed under Article 3, the Owner will pay the Engineer at the hourly rates, plus burdened expenses, set forth in Engineer's Rate Schedule (Attachment D). The rates shown include all costs, including overhead and profit. Total maximum billing shall not exceed \$ 305,870.00 without further authorization.
- B. **Additional Engineering Services.** For additional engineering services, initiated by written authorization from Owner representative and performed under Article 3, the Owner will pay the Engineer at the "Additional Services" Hourly rates, set forth in Engineer's Rate Schedule (Attachment D), plus subcontract work, if any, and direct expenses at burdened cost plus 10%. Billing rates will not exceed those set forth in Engineer's Rate Schedule (Attachment D).

II. **TIMES OF PAYMENT:** Invoices are due and payable within 30 days of date of invoice. Invoices past due are subject to interest at the rate of 1½% per month.

- A. **Basic Engineering Services.** For the basic engineering services performed under Article 3, monthly payments shall be made in proportion to services performed. Owners shall pay the invoices as follows:

Sand Springs	60%
Sapulpa	40%

- B. **Additional Engineering Services.** For additional engineering services, monthly payments by the Owner shall be based on detailed invoices from Engineer for work completed. Owners shall pay the invoices as follows:

Sand Springs	60%
Sapulpa	40%

This sheet intentionally blank

EXHIBIT B-2

(For Information of Potential Estimated Costs)

R.01 - System and Equipment rebuild/ replacement		Budget	
		Identified	
: PMP IQ1000 MOTOR PROTECT ION RELAY & RTD MODULE		\$	-
EMERGENCY CRANE RENTAL SERV		\$	-
ONE WAY TANK ALTITUDE VALVE REPAIR KIT		\$	677
COMPRESSOR CONTROL - EVAL & RELAY		\$	-
Strainer #1 worm gear reducer		\$	-
Strainer #1 backwash valve		\$	-
ROW Maintenance [materials]		\$	-
ROW Maintenance [Equipment Rental - skid loader]		\$	2,043
Pull pump and rebuild [P301 in 08]		\$	-
HVAC emergency repairs		\$	1,500
12" gate valve and hardware		\$	2,500
Replace 2 suspended heaters: Strainer Bldg / Station 15KW 480V		\$	4,630
Emergency Telemetry Repairs		\$	-
meter repairs		\$	-
meter calibration		\$	-
Butterfly Valve	REPLACE	\$	-
		\$	11,350

EXHIBIT B-3

(For Information of Potential Estimated Costs)

R.02 - EQUIPMENT FOR STATION AND RIGHT-OF-WAY		
	Station	ROW
Purchase		
Strainer Parts #1 & #2	\$ 851	\$ -
EROSION DEVICES	\$ -	\$ 340
Hand Tools	\$ 681	\$ -
Gauges	\$ -	\$ -
Cup Changes	\$ 2,043	\$ -
Replace 6 Hydraulic Hoses [Air/Oil Op]	\$ -	\$ -
Gland Replacement	\$ 1,566	\$ -
4" ARV Valves(1) rebuild kit	\$ -	\$ -
6" ARV (1) rebuild kit	\$ -	\$ -
Pad Locks	\$ -	\$ 204
Marker and Post [Replace 50 signs]	\$ -	\$ -
Misc. Equip	\$ 1,702	\$ 272
EXHAUST INTAKE SCRN	\$ -	\$ -
Pump Oil	\$ 5,000	\$ -
GASKETS	\$ 545	\$ -
Compressor Maint. Parts - Filter / filter kits	\$ 3,159	\$ -
Brushhog / Mowing R/W		\$ 6,000
Rental		
Generator (rental)	\$ -	\$ -
pressure washer (rent)	\$ -	\$ -
Water pump (rent)	\$ -	\$ -
ATV (rental)	\$ -	\$ -
TOTAL	\$ 15,547	\$ 6,817
	\$	22,364

EXHIBIT B-4

(For Information of Potential Estimated Costs)

BUDGET			
R.04 - Subcontracts / Vendors			
	Station	ROW	Facilities
ANNUAL			
Annual flight	\$ -	\$ 2,043	\$ -
Yard Maintenance <i>[Beginning FY 09-10 Owner responsibility]</i>	\$ -	\$ -	\$ 0
HVAC (annual service)	\$ 742	\$ -	\$ -
MICRO-COMM ANNUAL SERV 'SYS CHECKOUT' SYSTEM TELE. DEBUG	\$ -	\$ -	\$ 2,043
MICRO-COMM ANNUAL EQUIP INSURANCE (excludes labor)	\$ -	\$ -	\$ 2,451
Meter Calibration (sta.) field calibration in-house	\$ -	\$ -	\$ -
Cathodic services on (2) tanks	\$ -	\$ -	\$ 2,152
Meter Calibration (MV)	\$ -	\$ 1,123	\$ -
MOTOR INSULATION / VIBRATION	\$ 4,637	\$ -	\$ -
Herbicide Treatment PSO	\$ -	\$ -	\$ -
Tank base seal	\$ -	\$ -	\$ -
Cathodic services - Vault Piping	\$ -	\$ 2,860	\$ -
ANNUAL CLEANING TANK #2 (OWNER PO) - \$8300 (March 2016)	\$ -	\$ -	\$ -
PAGE PLUS (Emergency Pager for Operator / All Operator on-call)	\$ -	\$ -	\$ 644
TRI -ANNUAL			
Clean Arrestor & One-Way Tank DUE 3/13/2016 /2019 /2022	\$ -	\$ -	\$ -
Clean #1 Tank - 2 MG (OWNER PO) - \$8270 DUE 3/13/2016 /2019 /2022	\$ -	\$ -	\$ -
Touch up Paint - One-Way Tank DUE 3/13/2016 /2019 /2022	\$ -	\$ -	\$ -
Touch up Paint - Surge Arrestor DUE 3/13/2016 /2019 /2022	\$ -	\$ -	\$ -
Porto - John Rental DUE 3/13/2016 /2019 /2022	\$ -	\$ -	\$ -
Replace Surge Arrestor Anodes (16) (if needed) DUE 3/13/2016 /2019 /2022	\$ -	\$ -	\$ -
Pipeline Inspection - excavation / backfill DUE 3/13/2016 /2019 /2022	\$ -	\$ -	\$ -
Switch gear IR Survey - elect maintenance / rpt DUE 3/13/2016 /2019 /2022	\$ -	\$ -	\$ -
	\$ 5,379.11	\$ 6,025.97	\$ 7,289.58
ESTIMATED TOTAL	\$5,379	\$6,026	\$7,290
	Station	ROW	Facilities
			\$18,695

EXHIBIT B-5

(For Information of Potential Estimated Costs)

BUDGET			
R.09 - MISC SUPPLIES			
1 Air system filters -	\$	953	
2 HVAC filters -	\$	102	
3 Oil booms -	\$	136	
4 Oil pads -	\$	272	
5 Wipe All wipers -	\$	272	
6 Shop rags	\$	68	
7 Compressor Air & Oil filters -	\$	204	
8 Grease -	\$	102	
9 Water filters -	\$	102	
10 Trash bags -	\$	68	
11 Cleaners -	\$	204	
12 Clnng Supplies -	\$	102	
13 Spray lube -	\$	34	
14 Teflon Tape -	\$	51	
15 Oil Absorb material -	\$	-	
16 Floor sealer, polish -	\$	-	
17 Light bulbs -	\$	300	
18 Fuses -	\$	-	
19 UPS Batteries -	\$	405	
20 Vac supplies -	\$	-	
21 Paint -	\$	505	
22 Ext. Block Sealer [tri-annual application] Due 7/2017	\$	-	
23 Caulk -	\$	68	
24 Paint supplies -	\$	136	
24 Printer -	\$	54	
26 Yard Maint. Supplies	\$	203	
28 Seed and fertilizer	\$	-	
29 Concrete for patching 2mg and station	\$	-	
30 Overhead crane oil change kit every other year 2011	\$	82	
31 2A wax tape (case) and primer(20	\$	-	
32 Zander arrestor add-air filter	\$	177	
33	\$	-	
34	\$	-	
35	\$	-	
TOTAL		\$3,649	
		\$3,649	
		Station	
R.09 - MISC SUPPLIES - SUBTOTAL		\$3,649	

**ATTACHMENT C
TO
AGREEMENT FOR ENGINEERING SERVICES
BETWEEN
SAPULPA MUNICIPAL AUTHORITY AND
SAND SPRINGS MUNICIPAL AUTHORITY, OWNERS
AND
TETRA TECH, INC., ENGINEER
FOR
SKIATOOK RAW WATER CONVEYANCE SYSTEM
OPERATIONS AND MAINTENANCE FY 2016 - 2017**

OWNER'S RESPONSIBILITIES AND SPECIAL CONDITIONS

The following list of special Owner responsibilities and contract conditions shall be made a part of the Agreement dated the ____ day of _____ 2016.

I. OWNER RESPONSIBILITIES

1. Owner shall furnish and make all provisions for the Engineer to enter upon public or private property as required for the Engineer to perform the Services under this Agreement.
2. Owner shall be responsible for all permit fees.
3. Owner shall designate in writing a person to act as its representative in respect to the work to be performed under this Agreement, and such person shall have complete authority to transmit instructions, receive information, interpret, and define Owner's policies and decisions with respect to materials, equipment, elements, and systems pertinent to the services covered by this Agreement.
4. Owner shall provide suitable office location for the operator at an appropriate location in reasonable proximity to the SRWCS.
5. Upon request and advance notification, Owner shall provide labor and equipment assistance to Operator for normal, special, and unanticipated maintenance or repair of system facilities as recommended, and approved necessary and economically possible. Tri-annual shutdown operations and maintenance efforts are considered to be special activities; and warranting additional manpower, familiar with the system, and providing efficient assistance to the Operator.
6. Owner shall provide technical and professional engineering evaluation of encroachment / crossing permit applications, and oversight of improvement / repair projects to system facilities outside the scope of normal and anticipated Operations and Maintenance efforts; including but not limited to engineering analysis and design, contract document preparation, solicitation of bids, construction administration, and inspection / documentation of contractor activities.
7. Owner shall perform or sub-contract groundskeeping activities at the pump station, repeater station, one-way surge tank, and 2 MG tanks.

II. SPECIAL CONDITIONS - EXCLUSIONS

The following items are considered exclusions from Engineer's required scope of services.

1. Direct costs and/or subconsultant fees associated with yearly technical calibration and/or testing of specialized equipment exceeding the items and estimated costs shown in Exhibit B-2 and B-4 to this Agreement, including, but not limited to, telemetry equipment, flow meters, cathodic protection, pump motor resistance, and other such specialized testing.
2. Technical service to cooling, heating, and ventilation equipment exceeding estimated costs shown in Exhibit B-2 and B-4: assistance shall be provided by the Owners.
3. Purchasing operation and maintenance: assistance shall be provided by the Owners.
4. Monitoring of the system status via the telemetry system shall be provided by the Owners.
5. Coordination of an additional maintenance management system shall be provided by the Owners.
6. Laboratory work necessary to comply with the pump station future discharge permit shall be provided by the Owners.
7. Maintenance (labor) assistance for extraordinary and emergency items shall be provided by the Owners as practical and economically possible.
8. Enforcement of SRWCS right-of-way provisions and permitting requirements associated with encroachments shall be provided by the Owners; Owner's Engineering staff shall provide technical review of encroachment / crossing permit applications.
9. Equipment supply for extraordinary and emergency items shall be provided by the Owners.
10. Purchases of replacement equipment necessary to maintain function and operations as identified in this Agreement shall be provided by the Owners in a timely and efficient manner.
11. Receipt of all mail and file maintenance for the system shall be provided by the Owners.
12. Direct costs and/or subconsultant fees associated with maintenance to system pumps 1-1, 2-1, 3-1, and 4-1 requiring the removal of motors and/or pumps from the pump cans shall be provided by the Owners.
13. Engineering coordination, and inspection of warranty work required during any periods of repair, rehabilitation, and/or improvements projects may be contracted separately.

ATTACHMENT D
TO
AGREEMENT FOR ENGINEERING SERVICES
BETWEEN
SAPULPA MUNICIPAL AUTHORITY AND
SAND SPRINGS MUNICIPAL AUTHORITY, OWNERS
AND
TETRA TECH, INC., ENGINEER
FOR
SKIATOOK RAW WATER CONVEYANCE SYSTEM
OPERATIONS AND MAINTENANCE FY 2016 - 2017

RATE SCHEDULE

The following hourly rates shall apply as described in Attachment B and shall be made a part of the Agreement dated the _____ day of _____ 2016. (List effective July 1, 2016)

I. PROFESSIONAL FEES BASED ON TIME

The hourly rates set forth below include all salaries, benefits, overhead and other indirect costs including federal, state and local taxes, plus profit.

Professional Services

Principal in Charge	\$225.00
Principal Engineer	\$193.92
Senior Project Manager	\$192.00
Project Manager	\$185.00
Senior Engineer 2	\$175.00
Senior Engineer 1	\$145.00
Project Engineer 2	\$132.00
Project Engineer 1	\$125.00
Engineer 3	\$105.00
Engineer 2	\$98.00
Engineer 1	\$85.00
Architectural Program Manager	\$180.00
Senior Architect 2	\$160.00
Senior Architect 1	\$140.00
Architect 2	\$95.00
Architect 1	\$80.00
Architectural Designer 3	\$100.00
Architectural Designer 2	\$75.00
Architectural Designer 1	\$70.00
Senior Technician 2	\$115.00
Senior Technician 1	\$105.00
Technician 3	\$95.00
Technician 2	\$85.00

Technician 1	\$50.00
Senior CAD Designer 2	\$120.00
Senior CAD Designer 1	\$116.15
CAD Designer	\$90.00
CAD Technician 3	\$84.00
CAD Technician 2	\$72.00
CAD Technician 1	\$60.00
Eng Designer 3	\$119.18
Eng Designer 2	\$100.00
Eng Designer 1	\$85.00
Construction Manager 1	\$135.00
Construction Manager 2	\$150.00
Sr. Constr Project Rep 2	\$90.00
Sr. Constr Project Rep 1	\$90.40
Construction Project Rep 2	\$78.00
Construction Project Rep 1	\$55.91
Sr. Construction Administrator	\$112.00
Construction Administrator	\$92.92
Plant Operator 2	\$90.40
Plant Operator 2 – OVERTIME	\$90.40
Plant Operator 1	\$65.00
Sr. Project Administrator	\$97.00
Project Administrator	\$88.88
Project Assistant 2	\$65.00
Project Assistant 1	\$45.00
Sr. Consultant 2	\$125.00
Sr. Consultant 1	115.00
Consultant 2	\$85.00
Consultant 1	\$75.00
H&S Manager	\$115.00
Systems Analyst/Programmer 2	\$75.00
Systems Analyst/Programmer 1	\$65.00
Sr. Project Analyst	\$185.00
Project Analyst 2	\$114.00
Project Analyst 1	\$65.00

II. DIRECT COSTS

- A. Travel. Travel from the office on Project-related business will be billed at the hourly rates specified in Section I above. Charges for transportation, taxis, meals, lodging, gratuities, etc., will be billed at burdened cost plus 10% markup. Automobile travel (mileage) shall be billed at current approved government rates plus 10% markup.
- B. Technology Usage. Technology use fee charges on Project-related business will be billed at a rate not to exceed \$3.87 per hour.

- C. Outside Reproduction/Other Outside Services. Direct costs such as large-volume printing, shipping, or other outside services will be billed at burdened cost plus 10% markup.
- D. Other. All other direct costs not covered herein shall be invoiced to the client at burdened cost plus 10% for handling. All such charges shall be mutually agreed upon prior to submission to the client.

IV. ADJUSTMENT CLAUSE

The rates and costs described in this Agreement may be revised annually.

**ATTACHMENT E
TO
AGREEMENT FOR ENGINEERING SERVICES
BETWEEN
SAPULPA MUNICIPAL AUTHORITY AND
SAND SPRINGS MUNICIPAL AUTHORITY, OWNERS
AND
TETRA TECH, INC., ENGINEER
FOR
SKIATOOK RAW WATER CONVEYANCE SYSTEM
OPERATIONS AND MAINTENANCE FY 2016 - 2017**

SCHEDULE

The following schedule shall be made a part of the Agreement dated the _____ day of _____ 2016.

The scope of services outlined in this Agreement shall continue from July 1, 2016, to June 30, 2017.

Frank Weigle

From: Garrison, Greg [Greg.Garrison@tetrattech.com]
Sent: Tuesday, April 12, 2016 12:03 PM
To: Frank Weigle; Robert Petitt (rpetitt@cityofsapulpa.net)
Cc: Sauer, Rick; Pulliam, Neill; Peterson, Evelyn
Subject: FW: SRWCS JNT BRD ITEM - ****UPDATE FROM PREVIOUS *****FW: Scadaview Computer Replacement
Attachments: Skiatook Raw Water Conveyance, OK-V32016-Scadaview 32 Computer replacement single computer.pdf; cor-ibr600-data-sheet-111815.pdf

Frank/Bobby,

To summarize, the functionality of the upgraded system will be the same as the current system. It will provide a new computer, new SCADAview software and a new 4G cellular data connection to the SRWCS station.

I discussed the 4G connection with ATT small business solutions and the monthly data costs are the same as quoted in January (3GB-\$30 / 5GB-\$50). The ATT representative stated that the procedure would be:

- Purchase the router/modem from a vendor (such as CDW / Amazon / Newegg etc.).
- Contact ATT to add the data plan to your existing service and give them the IMEI number of the new router/modem
- ATT would then send a sim card to plug into the new router/modem (ATT rep stated usually takes one day)
- Call ATT to activate the card to establish service

Next,

- Create the logmein.com account and test the remote connection to the current computer
- Notify Micro-comm that the new data connection to the station is setup
- Micro-comm will proceed with the new computer migration

I am recommending that you use a different 4G router/modem than I proposed in January as it will provide a more robust connection for the station.

- It is specifically designed for mission critical business applications and has external antennas.
- I have attached a datasheet for the proposed modem/router
- This router is an additional \$450 more than the original recommendation.

The separate modem and router as depicted in the proposal from Micro-comm are integrated into one unit (Cradlepoint IBR600).

Micro-Comm upgrade package as described in attached quote	\$9,368.00	
4G modem (Cradlepoint IBR600)	\$650.00	

Subscription to a data plan		
Typical cost (as of 4/12/2016) through ATT	3 GB	5 GB
	\$30 / month	\$50 / month
logmein.com yearly subscription at the pro level	\$149.00	

Greg Garrison | Engineering Technician
 Direct: 918.249.3913 | Main: 918.249.3909 | Fax: 918.249.3930
greg.garrison@tetrattech.com

Tetra Tech | Water, Environment & Infrastructure Group
 7645 E. 63rd Street, Suite 301 | Tulsa, OK 74133 | www.tetrattech.com

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From: Pulliam, Neill
Sent: Saturday, January 16, 2016 1:21 PM
To: Frank Weigle (feweigle@sandspringsok.org) <feweigle@sandspringsok.org>; Bobby Petitt (E-mail) (rpetitt@cityofsapulpa.net) <rpetitt@cityofsapulpa.net>
Cc: Garrison, Greg <Greg.Garrison@tetrattech.com>; Sauer, Rick <Rick.Sauer@tetrattech.com>; Peterson, Evelyn <Evelyn.Peterson@tetrattech.com>
Subject: SRWCS JNT BRD ITEM - ****UPDATE FROM PREVIOUS *****FW: Scadaview Computer Replacement

Frank / Bobby:

ITEM 4.A of the 1/19/16 Joint Board Agenda relates to the computer upgrade at the Pump Station - please see the email below and the attached information regarding important updates to the system requirements and associated costs that need to be understood prior to the Tuesday Joint Board meeting.

As I understand the current technology:

- Windows 32-bit Operating System is obsolete
- New computers are based on 64-bit Operating system
 - Existing software SCADAview32 is not compatible with 64-bit OS
 - Thus, recommendations include upgrade of software to "CSX" for compatibility with the 64-bit OS
- Existing communications via PCAnywhere is obsolete with the 64-bit OS
 - Thus, 4G Cellular Data service with modem would be warranted with the upgraded computer

Our information reflects that \$9,000 was originally budgeted for the computer upgrade.

3.3	INTERFACE COMPUTER / SCADA UPGRADE- COMPATIBLE WITH 3.3.1 (FUTURE)	X	\$	5,400	X	\$
3.3.1	COMPUTER + SCADA UPGRADE- FOR REMOTE WEB BASED OPERATIONS					

Micro-Comm, Inc.
15895 South Pflumm Rd.
Olathe, KS 66062

Phone: 913-390-4500
Fax: 913-390-4550

4/12/2016

COMPUTER PRICE QUOTE

Rick Sauer
Skiatook Raw Water Conveyance
Tetra-Tech, 7645 E 63rd, Suite 301
Tulsa, OK 74133
Rick.Sauer@tetrattech.com

Rick,
Please find below the requested line item quote for a purpose built SCADAview computer replacement. This quote also includes the price for the computer and required software. The configuration and setup for this equipment is included in this quote. The installation of the equipment will be completed by the customer unless otherwise stated. The following page outlines the remote access requirements. Prior to installing this computer please contact Joshua L. Johnson to schedule.

Dell Optiplex 7040 W/ Monitor and speaker bar	
Windows 10 Pro 64 bit, Core i7, 8 GB Ram, 1 TB HD, Dual Ethernet, One Serial port	\$1,400.00
Computer Setup + Configuration + Remote Service (inhouse)	\$2,000.00
Labor Discount if computer is purchased from Micro-Comm Inc.	-\$500.00
SCADAview CSX Upgrade from Scadaview 32 (existing Customer)	\$4,500.00
USB External hard drive (1 TB)	\$168.00
Shipping & Handling	\$100.00
Onsite Travel, installation, and Startup	\$1,700.00
Total	\$9,368.00

If you should have any questions or concerns please give me a call at your convenience.

Sincerely,

Joshua L Johnson
Systems Engineer

Accepted By: _____ Date ____ / ____ / ____ P.O.# _____

This quote is valid for 60 days from 4/12/2016

Micro-Comm Remote Access Requirements

Below are the requirements for Micro-Comm Remote Access (see Figure 1 for more details). These requirements cover TeamViewer and ScadaWeb. In order for Micro-Comm to provide you with the best level of service all requirements must be met. In the event that your Internet service provider cannot configure these services, please contact your local Network technician.

Micro-Comm Remote Access Requirements:

Business Class Broadband Internet Service

SCADAweb Access: In addition to the Remote access requirements you will need the following.

Static Global (Internet Accessible) IP address

Forward HTTPS Port 443 TCP & UDP to Scada Computer

DHCP Range 192.168.1.75-192.168.1.99

Subnet Mask 255.255.255.0

Internet Local Area Network Adapter Requirements: (SCADAweb)

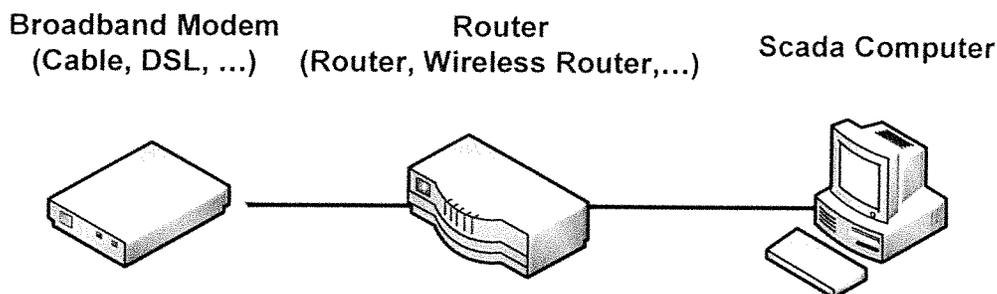
Static Local IP address for Scada Computer (i.e. 192.168.1.40)

Subnet Mask 255.255.255.0

PCC Local Area Network Adapter Requirements:

Static Local IP address for Scada Computer (i.e. 192.168.10.40)

Subnet Mask 255.255.255.0

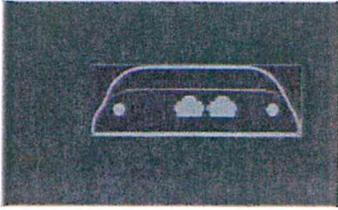


Note: Broadband Modem will most likely need to be set up in Point-to-Point (Bridged, MAC address forwarding, ...) mode so the Router can use the Global (Internet) IP address for Port Forwarding.

Figure 1: Network Diagram Example

If you should have any questions or concerns please give us a call at your convenience.

Micro-Comm Inc.
15895 South Pflumm Rd.
Olathe, KS 66062
Phone: 913-390-4500
FAX: 913-390-4550



Cradlepoint COR IBR600 Series

Integrated Broadband Routers

The Cradlepoint COR IBR600 Series is built for your M2M network. The COR IBR600 Series is an affordable, highly featured compact router with an embedded modem designed for critical business and enterprise applications that require 24/7 connectivity.

With its compact size, sleek metal case, mounting bracket, and external mobile broad-band and WiFi* (IBR600 only) antennas, the Cradlepoint COR IBR600 Series is ideal for use in high-availability portable or fixed applications like ATMs, kiosks, surveillance, vehicles, etc.

Cradlepoint COR provides instant network connectivity with a built-in modem – just add a mobile broadband plan or insert an activated SIM (2FF) and go. It also supports traditional wired data networks like DSL, cable, or T1 for maximum network flexibility. Business-continuity features like failover/failback come standard in Cradlepoint COR. When configured for failover, COR detects

network failures and seam-lessly switches over to a secondary WAN – keeping your network online.

The Cradlepoint COR IBR600 Series provides VPN end-point functionality, VLAN support, IPv6 support, multiple remote management methods including SMS, modem data usage management and alerts, GPIO support, USB-to-serial console passthrough support for out-of-band management of connected devices, and the ability to be part of a PCI-DSS compliant solution. It allows for secure access to company networks for enterprise applications and provides a secure way to transmit sensitive data to and from a remote site.



THE HEART OF YOUR M2M NETWORK

- + For use in 24/7 business-critical installations such as ATMs, kiosks, surveillance, vehicles, etc.
- + WiFi* (IBR600) and no-WiFi (IBR650) options available Wireless 2x2 MIMO "N" WiFi (802.11 b/g/n)*
- + Increase your network availability with WiPipe™-powered automatic failover and failback
- + Several models available with 4G and/or 3G support for US and international carriers
- + Certified for shock and vibration in accordance with MIL STD 810G and SAE J1455 – be confident in the device's ability to survive challenging environments, including vehicles
- + IPsec VPN termination (tunnel, NAT-T, and transport) with GRE support and site-to-site dynamic VPN with NHRP
- + Create a custom-branded hotspot with our captive portal
- + Supports both wireless and wired Internet connections (two Ethernet ports for either LAN/LAN or WAN/LAN)
- + feature (include ToS, advertisements, etc.)*
- + Standalone active GPS support on -PWD models (1x1 "N" WiFi support)*

GO TO CRADLEPOINT.COM/IBR600 TO LEARN MORE.

FEATURES

INTERNET ACCESS AND DEVICE CONNECTIVITY

- + Includes integrated 3G/4G modem (see attached for options and specifications)
- + 2 Ethernet LAN/WAN ports for Ethernet-enabled devices or landline Internet
- + Wireless 2x2 MIMO "N" WiFi (802.11 b/g/n)*
- + Supports up to 64 WiFi connections at a time*
- + Two SSIDs (with individual security, bandwidth limits, and QoS settings; separate critical traffic or create a public WiFi hotspot)*

SECURITY

- + IPsec VPN (up to 5 concurrent sessions) and GRE Tunneling option, also supports passthrough VPN connections (IPsec, L2TP, PPTP)
- + Layer 2 Tunneling Protocol (L2TP)**
- + WEP, WPA, WPA2, WPA2 Enterprise with AES encryption for secure WiFi*
- + 802.1Q VLAN support to isolate, segment and secure network traffic
- + SPI (stateful packet inspection) firewall and NAT (network address translation) to prevent unwanted access to connected computers
- + Zone-based firewall
- + Variety of security features (URL filtering, IP & traffic filtering, DMZ, port forwarding) for safer Internet access
- + Advanced security mode and reporting to facilitate PCI-DSS compliance

FLEXIBILITY

- + First-time and advanced setup wizards for easy, swift, and secure setup
- + Remote management with Cradlepoint Enterprise Cloud Manager
- + Multi-Carrier Software-Defined Radio with LPE models
- + SNMP v1/2c/3, CLI over SSH, and SMS
- + IP passthrough support provides 3G/4G-to-Ethernet adapter
- + Create a WiFi hotspot with a captive portal (terms of service, ads, etc)*
- + Network failover support & load balancing
- + GPIO for additional hardware control, serial console available (USB-to-serial)
- + LAN/WAN affinity to assign specific LAN traffic to a WAN
- + Enterprise routing protocols:** BGP, OSPF, RIP
- + VRRP for enterprise router redundancy**
- + GPS NMEA GGA, VGT, and/or RMC sentence support
- + IPv6 support
- + Advanced APN management
- + Network Mobility (NEMO) support for session continuity in mobile networks**
- + Roaming control and ability to force 3G or 4G bands

PROTECT YOUR INVESTMENT: 24/7 SUPPORT

Keep deployments running with less time and effort. The CradleCare Support Agreement gives IT professionals access to a dedicated Cradlepoint Support Engineer, who provides consultation on network design, works with multiple parties – including wireless operators – to triage and address issues, and to serve as one point of contact with guaranteed response times.

4C



Shermco Industries

Tulsa Service Center
4510 South 86th East Ave., Tulsa, OK 74145
p. (918) 234-2300 f. (918) 234-2306

This Proposal has been prepared specifically for:

Rick Sauer
of
Tetra Tech Inc.
for
Tetra Tech Supply 350A Breaker

Approved by:
Michael Forbes

Shermco Quote Number:
SIQ-02481-16

March 28, 2016





March 28, 2016

Rick Sauer
Tetra Tech Inc.
7645 East 63rd Street #301
Tulsa, OK 74133-1274

Re: Tetra Tech Supply 350A Breaker
Shermco Quote # SIQ-02481-16

Mr. Sauer,
Shermco Industries is pleased to provide the following equipment quotation for your review. Please review the below detailed specifications to ensure that products quoted meet your specifications and needs as were provided.

Please note that Shermco can provide Qualified Technicians available 24 hours-a-day, 365 days-a-year to assist with removal of old equipment, installation of newly purchased equipment, start-up service, custom engineered solutions, complete system maintenance and repair. If interested in any of these services please contact Shermco to request an additional proposal.

TOTAL PRICE \$4,826.00

Applicable taxes not included, terms net 30 days. All sales subject to Shermco Industries terms and conditions form SI-100995. All freight will be prepaid and added to the invoice.

EQUIPMENT TO BE SUPPLIED AND INSTALLED

- 1. Qty: 1 ea. Square D Molded Case Breaker, Cat# LAL36350

Supply and install of a new breaker from manufacturer's distribution and distributor's warranty shall only apply.

DELIVERY OF EQUIPMENT

The delivery will be approximately 2 Days after receipt of an order. Shipping terms are FOB Point of Origin, Freight Prepaid and Added.

GENERAL CONDITIONS

Work performed by Shermco Industries will be in accordance with the following:

1. Accuracy and complete equipment drawings, diagrams and control schematics supplied to Shermco for the purpose of this quotation is the responsibility of the customer to supply. Shermco will require this information prior to the beginning of the project, or during the pricing and submittal phase of the project.
2. Buyer will bear all costs and risks of loss of or damage to the goods from FOB point and the Buyer shall be responsible for the filing of all claims with the carrier.
3. Shipping dates are estimates only which are not guaranteed and are based upon prompt receipt from customer of all necessary shipping and other information. Shermco will use its best efforts to maintain shipping schedules, however, delays in shipment are possible and any failure to deliver goods within the time specified shall not constitute a default.
4. No product or part shall be returned to Shermco without written authorization and shipping instructions first having been obtained from Shermco.
5. This quotation is effective for 30 days from quotation date, unless otherwise authorized by Shermco Industries.
6. Warranty claims will follow Shermco's Conditions of Sale, repair or Remanufacturing guidelines noted on form SI 100995.
7. The accompanying BOM is Shermco's interpretation of what the client wants to purchase. If during the bid/quote evaluation, if there are any questions about this proposal, please do not hesitate to call your sales representative. Seller highly recommends a face-to-face review of the proposal with the engineer(s) to verify completeness and to confirm that we have not included anything extra. If material needs to be added or deleted, seller will gladly revise the quote.
8. All orders placed with Shermco Industries will be pending on Credit Approval or Credit Card before proceeding with an order.
9. This quotation is limited to the listed equipment herein.

Thank you for this opportunity to be of service. Should you have any questions please do not hesitate to give me a call.

Respectfully Submitted
Shermco Industries, Inc.

Michael Forbes

Account Manager
Engineering Services Division
mforbes@shermco.com
(918) 510-5319

Copy: Robin Sparks – ESD Customer Service Specialist



4D



Tulsa Service Center
4510 South 86th East Ave., Tulsa, OK 74145
p. (918) 234-2300 f. (918) 234-2306

This Proposal has been prepared specifically for:

Rick Sauer
of
Tetra Tech Inc
for
Tetra Tech Oil Port

Approved by:
Michael Forbes

Shermco Quote Number:
SIQ-02647-16

March 28, 2016



March 28, 2016

Rick Sauer
 Tetra Tech Inc
 7645 East 63rd Street #301
 Tulsa, OK 74133-1274

Re: Tetra Tech Oil Port
 Shermco Quote # SIQ-02647-16

Mr. Sauer,
 Shermco Industries is pleased to provide the following quotation:
 Pricing,

Oil Sample Port (Supply & Install) \$ 1,408.00 ←
Oil Sample (Customer Pulling Oil Sample) \$ 307.00

Applicable taxes not included, terms net 30 days. All sales subject to Shermco Industries terms and conditions form SI-100995. All freight will be prepaid and added to the invoice.

EQUIPMENT

- 1. Qty: 1 ea. Transformer Oil Filled

WORKSCOPE

Shermco will supply oil sample port, and provide technicians to install the oils sample port on the above listed equipment. Customer will pull oil sample from the above listed equipment. Sample will be sent to Shermco Labs, oil analysis will include the following tests:

Transformer Standard Tests:

- Dissolved Gas Analysis ASTM D-3612
- Moisture Content ASTM D-1533b
- Interfacial Tension ASTM D-971
- Acid Number ASTM D-974
- Color / Visual Exam ASTMD-1500 & 1524
- Dielectric Breakdown ASTM D-1816
- Power Factor-25C ASTM D-924
- Power Factor-100C ASTM D-924 *
- Particle Count Laser Scan / ISO Code *

* For transformers less than 69kV this test will only be performed if deemed necessary

SCHEDULE

Shermco will provide the services listed above based on the following schedule:

Monday thru Friday

2 Technicians Working 5 Hours On Site for 1 Day

Note: This proposal is based on an estimated Straight Time mobilization(s) to the work site. Additional or changes to the mobilization(s) are subject to additional billing.

The start date is to be determined work will be confirmed and schedule upon the receipt of a purchase order. Please give at least two weeks' notice for scheduling purposes.

Monday thru Friday 7:00AM until 4:00 PM will be billed at a Straight Time Rate.

Monday thru Friday before 7:00AM or after 4:00PM will be billed at an Over Time Rate.

Saturday and after eight consecutive ST hours worked will be billed at an Over Time Rate.

Sunday and after twelve consecutive hours worked will be billed at a Premium Time Rate.

REPORT

Upon completion of the insulating oil analysis you will receive one (1) electronic copy of the report, normally prepared within five (5) working days. The report will include conditions and test data, with a summary of recommendations for future maintenance, replacement of components or replacement of apparatus.

GENERAL CONDITIONS

Work performed by Shermco Industries will be in accordance with the following:

1. The customer's electrician or engineer, familiar with the distribution system, is to be available during the testing and commissioning period.
2. The "line side" or entire service entrance of the electrical equipment must be de-energized and available for testing before any system performance testing can be performed.
3. The customer shall provide an electrically qualified worker to disconnect and re-energize all electrical equipment. Any utility service-disconnect or reconnect is to be scheduled by the customer so that the electrical equipment is available without delay.
4. The customer shall provide an auxiliary source of 120 volts, 60 hertz, single-phase power for lights, vacuum cleaners, small power tools and test equipment unless other agreements are made.
5. The customer is responsible for providing Shermco with all facility one-line drawings/ diagrams, control schematics, and equipment drawings.
6. Switching of electrical equipment is the responsibility of the customer.
7. Site specific training is not included in the price.
8. Delays due to circumstances beyond the control of the Shermco service personnel will be subject to additional billing at established rates. This includes stand-time for switching, power-up operations & equipment clearances and permitting.
9. The Shermco services will include all tools, test apparatus, associated equipment, expenses and transportation cost to and from customer's premises, unless otherwise noted.



10. This quotation is effective for 30 days from quotation date, unless otherwise authorized by Shermco Industries. If materials have been quoted and to be provided, additional costs may apply due to the rapid changing price of raw materials.
11. Cancellations, which may include weather related issues, will be assessed with a mobilization and/or project management/completion charge based on expenses incurred.
12. All permits required will be the responsibility of the customer.

Thank you for this opportunity to be of service. Should you have any questions please do not hesitate to give me a call.

Respectfully Submitted
Shermco Industries, Inc.

Michael Forbes

Account Manager
Engineering Services Division
mforbes@shermco.com
(918) 510-5319

Copy: Robin Sparks – ESD Customer Service Specialist





OIL SAMPLE REPORT

CUSTOMER DATA

Customer: <u>Tetra Tech Inc.</u>	Shop Order#: <u>6-6732-05</u>	Equip ID <u>300kva XFMR</u>
<u>7645 E. 63rd Street</u>	Customer PO#: <u>21113</u>	Location <u>Skiatook</u>
<u>Suite 301</u>	Serial# <u>901006-A1</u>	Imp. (% Z) <u>3.1</u>
<u>Tulsa</u>	Received Date: <u>3/25/2016</u>	Gallons <u>155</u>
<u>OK 74133</u>	Reported Date: <u>3/26/2016</u>	Primary Voltage kV <u>4.16</u>
Contact: RICK SAUER	Phase <u>3 Phase</u>	KVA: <u>300</u>
Phone: <u>(918) 249-3909</u> EXT	Tank <u>Transformer</u>	Mfg. <u>SQ D</u>
Cell: <u>(918) 645-6639</u>	Breathing <u>Sealed</u>	Fluid <u>Mineral Oil</u>
FAX:	E-Mail: <u>rick.sauer@tetrattech.c</u>	Voltage Class <u><69kV</u>

SAMPLE DATA

Date Sampled:	3/22/2016
Oil Temp (C):	30
Hydrogen (H2):	8
Methane (CH4):	21
Ethane (C2H6):	9
Ethylene (C2H4):	14
Acetylene (C2H2):	0
Carbon Monoxide (CO):	603
Carbon Dioxide (CO2):	16629
Nitrogen (N2):	90477
Oxygen (O2):	352
Tot Dissolved Gas:	108106
Tot Dissolved Combustible Gas:	665
Equivalent TCG %:	0.49
Moisture PPM:	5.8
Interfacial Tension (dynes/cm):	41.7
Acid Number (mg KH/g):	.01
Color Number (Relative):	1.0
Visual Exam (Relative):	Yellow
Sediment Exam (Relative):	ND
Dielectric Breakdown (kV):	
Dielectric Breakdown 1 mm (kV mm-C):	42.4
Dielectric Breakdown 2 mm (kV mm-C):	
Power Factor @ 25C (%):	.017
Power Factor @ 100C (%):	
Specific Gravity (Relative):	.869
Passivator (ppm):	
Oxidation Inhibitor (wt. %):	



Customer: Tetra Tech Inc.

Shop Order#: 6-6732-05

Equip ID 300kva XFMR

Customer PO#: 21113

Serial# 901006-A1

Location Skiatook

Results

N2 Diagnosis - Pad gas
CO2 Diagnosis - Insulation degradation, Overheating
Total Combustible Gas - Re-sample with-in 3 months, deserving of continued attention.
Relative Saturation - 2.85%

Recommendations

Sample data shows CO above normal limit of <350 ppm. CO2 above upper limit of >10,000 ppm. Insulation degradation and overheating. Unit is in condition 3, due to single gas level of CO. CO2 is in condition 4. Check load and confirm proper oil level on unit. Recommend a resample in 3 months to monitor CO/CO2 gas generation after proper oil level and flow through all radiators has been confirmed.



TETRA TECH

Mr. Derek Campbell, City of Sand Springs

FROM: Rick Sauer

RE: SKIATOOK RAW WATER CONVEYANCE SYSTEM
MARCH 2016 STATUS REPORT

DATE: April 5, 2016

GENERAL:

This report will cover the status of the Skiatook Raw Water Conveyance System from March 1, 2016, through March 31, 2016. The average water usage rate for Sand Springs during the month of March was 2.43 MGD (includes golf course, if any). The average water usage rate for Sapulpa during the month of March was 2.75 MGD. The total average water usage rate for the system during March was 5.18 MGD. (See the attached sheets for more detail.) The meter reading data reflects water usage from the beginning of the project through March 2016. The latest graph shows the water usage from February 2005 through March 2016. The electrical allocation print-out for the billing month of March is included within the attachments.

PERIOD IN REVIEW:

Tetra Tech personnel continued to monitor and conduct routine maintenance on the entire system. There were no after-hours emergency call-outs for the period March 1, 2016, to March 31, 2016.

In addition to many routine maintenance tasks, Tetra Tech personnel performed the following items during this period:

1. Addressed two locate tickets associated with the SRWCS system, assisted the Owners' personnel with marking the system alignment when warranted, and reported potential conflicts to the Owners' representatives as necessary.
2. Completed scheduled tri-annual maintenance shut-down March 11 thru March 23.
3. Station infrared scan indicated faulty #2 pump motor 350 amp breaker. Plans are to replace unit as soon as possible. Cost will be ~ \$4,823.00.
4. Infrared scan also indicated bad connection at #2 pump motor which was corrected during switchgear maintenance on March 22.

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5. Shermco technicians pulled oil sample from station 300kva transformer on March 22. Results indicate insulation degradation, overheating, CO/CO2 gas generation above normal limits. Shermco recommends installation of external oil sample port and quarterly monitoring. Also recommended infrared scan of transformer to determine flow and effect of oil thru the cooling fins and fluid level. Municipalities and Tetra Tech to inform Joint Board members and then work toward solutions.
6. All 12" blow-off valves were exercised with the exception of #29 which is inoperable and we are unable to access due to property owner issues. (See item #17.)
7. Municipal personnel exercised all 36" butterfly valves with no issues.
8. All station valves were exercised by Tetra Tech personnel during shut-down event.
9. Cleaned both 2mg reservoirs during shut-down event. #1 reservoir had ~3" to 5" of silt within and #2 had 5" to 6" average. Internal coating inspections performed by operator and Sapulpa personnel on March 18. Operator completed minor floor coating repairs as needed within both units.
10. Engaged Kimery painting technician to inspect surge arrestor internal coating on March 16 after cleaning on the 14th. Results indicate no issues at this time.
11. Corpro personnel entered surge arrestor on March 16 to inspect the 16 sacrificial anodes within. The existing anodes appear to contain 85% remaining. Operator purchased 16 new anodes and placed in storage in the event replacement is warranted in 2019.
12. Operator performed static test March 11 thru the 13th. Utilized full #1 reservoir with 1" loss over the 49 hour period. Isolated waterline at meter vault and station. Calculations indicate ~ 1.75 gpm loss.
13. Kimery personnel removed old material and replaced #2 reservoir base seal March 16 thru the 18th.
14. Tetra Tech engineers entered waterline and completed internal liner inspection at Station 2+22 on March 17th. Awaiting report as of this writing.
15. Operator replaced the pneumatic system water trap on March 22 as the existing original unit contained irreparable internal corrosion issues.
16. Operator replaced leaking #1 strainer 2" backwash ball valve on the 29th.

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17. Tetra Tech office received notice from right-of-way property owner Craig Sutton on September 20, 2010. He owns property from Station 328+99 to 384+53. He has revoked all trespass rights across his property to access structures which include Air Relief Valve #s 26, 27, 30, and 32; 36" Butterfly Valve #28; and 12" Blow-off Valve #29. Operator met with Mr. Sutton on September 27, 2010, in an attempt to resolve issue; however Mr. Sutton requests monetary compensation to grant access to right-of-way structures. Operator replied that he has no authority to approve monetary compensation on behalf of the municipalities. An 'on-site' meeting including Mr. Sutton, Mr. Weigle, GMA Construction, and Mr. Sauer was conducted on March 1, 2012. The municipalities and Mr. Sutton are currently working on an agreement to allow operator and contractors to access right-of-way for maintenance purposes.

EMERGENCY REPAIRS W.P. 10:

T-G Excavating continues to be on "standby" for any emergency line repairs.

SS GOLF COURSE WATERLINE:

The golf course meter reflected a usage of -0- gallons for the month of March 2016. The usage readings, if any, are included in Sand Springs' average water usage rate as reported in paragraph one of this report.

MAINTENANCE ISSUES:

Operations considers corrosion to be one of the most serious issues that could possibly affect the future reliability of the SRWCS system. Priority corrosion concerns involve the system surge arrester, the uncoated A.R.V.s, flanged outlets along the system, and the vault piping that doesn't meet standards to be considered cathodically protected. Operations will continue to gather trending data from the vault piping test stations in an effort to monitor for and report corrosion concerns associated with these areas of the system. Following the 2015 cathodic survey of vault piping by Corrpro, Tetra Tech forwarded the Corrpro report with recommendations attached, to the Owners' representatives for their consideration.

Operations continues to recommend that the Owners annually address unwanted growth along the SRWCS easement by utilizing a tractor and brush hog until a different means of removal becomes available.

MISCELLANEOUS:

The Skiatook Lake normal elevation is 714.00 feet at the top of the conservation pool. As of 12:00 p.m. midnight, March 31, 2016, the lake elevation was recorded at 714.62 feet.

LAKE LEVEL IS .62' ABOVE NORMAL

Tt FEE STATUS

PERCENT EXPENDED FROM BUDGET

<u>INVOICE</u> <u>MONTH</u>	<u>CONTRACT</u> <u>TIME</u>	<u>OPER. &</u> <u>MAINT.</u>	<u>DIRECT</u> <u>EXPENSE</u>	<u>REPAIR</u> <u>& REHAB</u>
March 2016	73%	69%	58%	12%

Attachments
RS/emp//tk

cc:
Frank Weigle, City of Sand Springs, w/att.
Robert Pettit, City of Sapulpa, w/att.
Josh Muskopf, Tetra Tech w/att.

Sand Springs

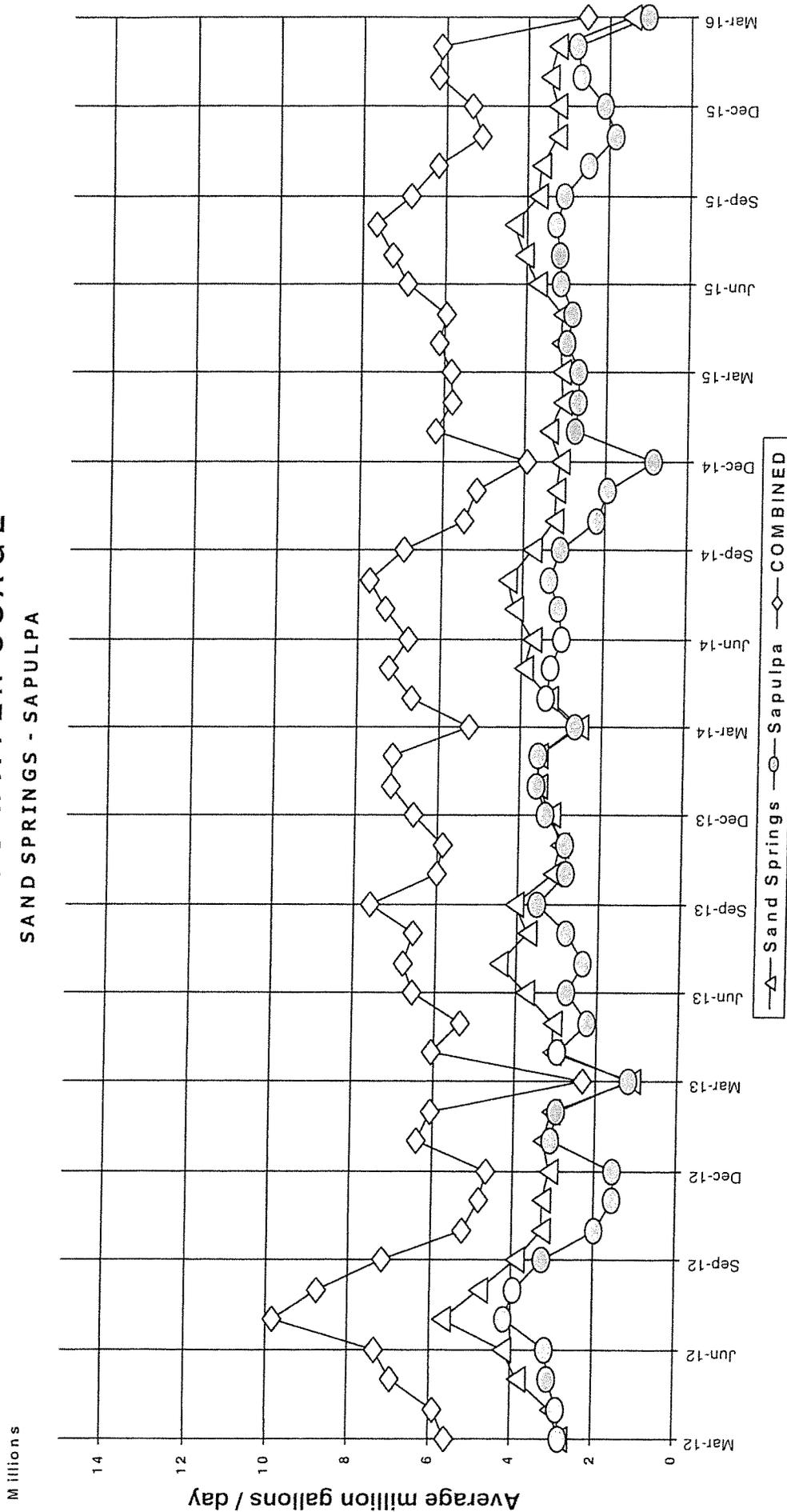
Sapulpa

Month	Sand Springs				Sapulpa				TOTAL MONTHLY METERED USAGE	TOTAL MONTHLY ADJUSTED USAGE
	METER READING	METERED USAGE	ADJUSTMENT	METER READING	METERED USAGE	ADJUSTMENT	CUMULATIVE METER TOTAL	TOTAL MONTHLY METERED USAGE		
2015 Dec	7,076,531,645	101,640,245	0	5,731,226,200	64,905,920	0	12,807,757,845	166,546,165	166,546,165	
Sand Springs golf course reading is 212,126,000 for a recorded use of -0- gallons.										
2016 Jan	7,184,765,250	108,233,605	0	5,814,522,250	83,296,050	0	12,999,287,500	191,529,655	191,529,655	
Sand Springs golf course reading is 212,126,000 for a recorded use of -0- gallons.										
Feb	7,280,466,070	95,700,820	0	5,895,943,060	81,420,810	0	13,176,409,130	177,121,630	177,121,630	
Sand Springs golf course reading is 212,126,000 for a recorded use of -0- gallons.										
Mar	7,326,565,120	46,099,050	0	5,929,023,670	33,080,610	0	13,255,588,790	79,179,660	79,179,660	
Sand Springs golf course reading is 212,126,000 for a recorded use of -0- gallons.										

SRWCS WATER USAGE

SAND SPRINGS - SAPULPA

4/8/2016



Millions

Average million gallons / day

Sand Springs
 Sapulpa
 COMBINED