Sent Via Email: mlkb4mike@yahoo.com

Civil, Water, Wastewater, Drainage, Transportation and
Electrical/Controls Engineering ● Construction Management ● Surveying
California ● Arizona

October 23, 2021

Inscription Canyon Water Company Attn: Mike Hubbard, VP of Operations 302 W. Willis Street, Suite 203 Prescott, AZ 86301

**Subject: ICWC Design Review and Operations Enhancement** 

Civiltec Revised Proposal No. PP21032.00

Dear Mr. Hubbard:

Civiltec Engineering, Inc. (Civiltec) appreciates the opportunity to submit this revised proposal to Inscription Canyon Water Company (Client) to provide professional surveying and engineering services for the above referenced project. We understand this project is for the review of the existing water system design and operational components in Prescott, Arizona.

From the initial request for proposals and our subsequent scoping meeting on October 8, 2021, the Inscription Canyon Water Company (ICWC) system consists of a set of wells and water distribution systems to the Inscription Canyon/Whispering Canyon developments and a second set of wells and water distribution systems to the Talking Rock/TRR Golf Course development. The two systems are independent with no cross ties.

The project will be developed in three phases as follows:

**Phase 1** – Inscription Canyon/Whispering Canyon & Talking Rock water system data collection, system mapping, evaluation and general recommendations.

**Phase 2** – Talking Rock Ranch water system modeling, system detailed evaluation and report preparation including recommendations for system and operational enhancements.

**Phase 3** – Inscription Canyon/Whispering Canyon water system modeling, system detailed evaluation and report preparation including recommendations for system and operational enhancements.

## **SCOPE OF SERVICES**

Based on our understanding and professional experience, we have identified the following scope of services.



# Phase 1 - Inscription Canyon/Whispering Canyon & Talking Rock Systems Data

This Phase 1 design review will be for IC/WC and TRR water systems and will include the overall system facilities and operations (excluding well hydrogeology). The following Tasks are anticipated:

#### Task 1 – IC/WC & TRR Data Acquisition

Civiltec will compile existing documents and system information via the System Operators, Civiltec past projects for ICWC, site visits for verification of installed facilities and controls, review of existing O&M Manuals, review of existing electrical power supply and control systems, review of available as-built construction plans for initial system mapping and review of historical water usage (demands) for the system as provided by ICWC.

## Task 2 – IC/WC & TRR System Mapping

Based on the results of Task 1, Civiltec will prepare water system maps including the primary facilities (pump stations, wells, storage tanks), waterline approximate locations and sizes, valves, air release valves, PRV's, fire hydrants, approximate locations of water meters, and other system components. Final map formatting, scale and presentation to be agreed upon by ICWC and Civiltec prior to map production.

The maps will be provided to ICWC and the system operators for review and input. Upon completion of the Client review, Civiltec will incorporate all the redlined and anecdotal data into the preparation of the final system maps. These maps will serve as the foundation for the subsequent system analysis and will be updated based on the results of the system reviews and recommendations. A single line schematic drawing will be developed for the system.

#### Task 3 – IC/WC Existing System Review

Civiltec will perform an initial review and report on the overall system design/operational integrity, facility capacities, system integration, process diagrams, pumping and distribution facilities and components, control systems, O&M Manuals, pump data, specialty components, electrical and PLC controls systems. We will compile all data included in the initial review of the existing infrastructure and recommended facility and operational improvements. A report on general conditions, observations and recommendations will be provided as the basis for the subsequent detailed reports to be included in Phases 2 and 3.

# Phase 2 – Talking Rock Ranch System Modeling & Reports

This Phase 2 design review will be for Talking Rock water system and will include the overall system facilities and operations (excluding well hydrogeology). The following Tasks are anticipated:

#### Task 1 –TRR System Modeling

Civiltec will prepare a backbone model of the water system including existing line sizes, system pressures, pumping facility data and pump curves, flow rates and water velocities, impacts on water storage facilities, well supply based on well pump production and available fire hydrant flows and pressures. The modeling will identify where pressure zones exist in the system and/or where they should be established. Additionally, the modeling will identify where deficiencies exist that need to be addressed.

## Task 2 –TRR System Report and Recommendations

Based on the results of the Phase 1 work and Phase 2, Task 1, Civiltec will prepare a detailed report of the existing water system operations and integration, identification of critical components, capacities of the infrastructure, identification of potential areas requiring improvements, compilation of the existing O&M

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Manuals, pump data and specialty components for each facility, identification of operating pressures and set points for each facility, supplemental wiring diagrams, a single line diagram of the system, system maps, available electrical facilities, SCADA/Controls systems PLC logic identified, and other system improvements included as found during the analysis and site visits.

#### Task 3 – TRR Operational Enhancements

The report will include recommendations for urgent or immediate improvements required due to potential code violations or system deficiencies affecting overall operations, high risk operational enhancements, a preventative maintenance program, monitoring and/or alarm notification system improvements for risk reduction, a critical/back up spare parts list for each facility, compilation of an O&M Manual for each facility, improvements to reduce downtime from component failures, emergency power recommendations (generators, solar, etc.) and other potential enhancements that result from the system analysis.

Long term recommendations will also be provided for improving the system. These could include additional wells, additional storage tanks, pump stations and establishment of new or modified pressure zones and the associated improvements.

# Phase 3 - Inscription Canyon/Whispering Canyon System Modeling & Reports

## Task 1 - IC/WC System Modeling

Civiltec will prepare a backbone model of the water system including existing line sizes, system pressures, pumping facility data and pump curves, flow rates and water velocities, impacts on water storage facilities, well supply based on well pump production and available fire hydrant flows and pressures. The modeling will identify where pressure zones exist in the system and/or where they should be established. Additionally, the modeling will identify where deficiencies exist that need to be addressed.

#### Task 2 – IC/WC System Report and Recommendations

Based on the results of the Phase 1 work and Phase 3, Task 1, Civiltec will prepare a detailed report of the existing water system operations and integration, identification of critical components, capacities of the infrastructure, identification of potential areas requiring improvements, compilation of the existing O&M Manuals, pump data and specialty components for each facility, identification of operating pressures and set points for each facility, supplemental wiring diagrams, a single line diagram of the system, system maps, available electrical facilities, SCADA/Controls systems PLC logic identified, and other system improvements included as found during the analysis and site visits.

#### Task 3 – IC/WC Operational Enhancements

The report will include recommendations for urgent or immediate improvements required due to potential code violations or system deficiencies affecting overall operations, high risk operational enhancements, a preventative maintenance program, monitoring and/or alarm notification system improvements for risk reduction, a critical/back up spare parts list for each facility, compilation of an O&M Manual for each facility, improvements to reduce downtime from component failures, emergency power recommendations (generators, solar, etc.) and other potential enhancements that result from the system analysis.

Long term recommendations will also be provided for improving the system. These could include additional wells, additional storage tanks, pump stations and establishment of new or modified pressure zones and the associated improvements.

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# **ADDITIONAL SERVICES**

Civiltec will provide separate scope of work and fee budgets for the following tasks if requested by ICWC:

Water Balance – Civiltec will perform a high-level assessment of water availability from wells, reclaimed water usage, evaporation from golf course ponds, runoff (wet and dry years) and average water consumption by household and fire fighting requirements for general system planning for IC/WC and TRR after completion of the Phase 1 and 2 tasks.

**Standard Specifications** – Civiltec will prepare a set of standard design and construction specifications based on MAG, City of Prescott, Town of Prescott Valley, Town of Chino Valley, Quad City Standard Details or other source documents for use by ICWC for project design, reviews and construction submittals.

#### **DELIVERABLES**

**Phase 1** deliverables will include a compilation of system data and information obtained during the data collection process, preparation of overall system map(s) of the existing conditions, and a preliminary report of our findings on the IC/WC and TRR existing systems including current conditions, observations and recommendations as identified in Phase 1 above.

**Phases 2 and 3** deliverables will include reports of our findings on the TRR and IC/WC existing system, recommended improvements and enhancements, water modeling results, final system maps, O&M manuals, etc., as identified in Phase 2 and 3 above.

#### **ASSUMPTIONS**

- 1. ICWC to provide Civiltec with historical and current water usage data (demands) for TRR and IC/WC for modeling purposes.
- 2. This proposal does not include utility potholing, geotechnical evaluations, environmental clearances, SWPPP, ADEQ, FEMA/404 permitting, structural engineering, landscape architectural, building architectural or other sub-consulting services. Those services can be added to the project if requested by Client.
- 3. ICWC will provide Civiltec with full access to their facilities for the evaluation for both the Talking Rock and IC/WC systems. ICWC will provide copies of water production, pumping and usage records for the past 3 years for both systems.
- 4. Boundary, topographic and/or aerial mapping surveying services are not anticipated. All mapping will be based on Yavapai County GIS data or other available mapping services as determined by Client/Civiltec. If site topographic surveying is required, Civiltec can provide that as an additional service if requested by Client. Any fees associated with the purchase of aerial mapping/GIS data or imagery for the project will be the responsibility of Client.

## **SCHEDULE**

Civiltec is available to commence this project immediately. The Phase 1 tasks are anticipated to be completed in approximately 6 months from the acceptance of this proposal with the overall schedule being dependent on ICWC project budgeting and subsequent direction from the governing Board.



# **FEE DISTRIBUTION SCHEDULE**

Civiltec's services will be provided on an hourly rate, not to exceed fee basis. The approximate fee is provided below based on our understanding of the services requested by the Client. A detailed breakdown of our fee estimate is attached.

Phase 1	\$63,792.00
Phase 2	\$42,514.00
Phase 3	\$42,514.00
Total Phases 1, 2 and 3	\$148,820.00

Any work not authorized within 3 months of the date of this proposal will be subject to renegotiations based on current rates.

# **Reimbursables / Additional Services**

All fees associated with purchase of aerial mapping/GIS data or imagery review and agency/private permit application filings or fees shall be the responsibility of the Client. Additional services may be authorized by the Client through a change order or contract addendum. Civiltec will bill monthly for all work performed and expenses incurred on behalf of the project.

We are looking forward to working with you and will begin immediately upon receipt of the signed Proposal Acceptance Sheet.

Sincerely,

CIVILTEC ENGINEERING, INC.

Richard E. Aldridge, PE, MBA

Principal Engineer / Branch Manager

Attachment(s): Civiltec PP21032.00 Revised Time and Fee Estimate, 10-12-2021



# **PROPOSAL ACCEPTANCE SHEET**

Project Name:	•	on Canyon Water Company Proposal No. PP21032.00	,					
Project Location:	Prescott	, Arizona						
Date:	October	October 23, 2021						
Client Information	n:							
Name:	Inscripti	on Canyon Water Company	,					
Address:								
Contact: Phone #: Email:	(928) 44	5-5606						
SPECIAL INSTRUCT	ΓIONS:	Per attached Proposal						
SCOPE OF SERVICE	ES:	Per attached Proposal						
CONTRACT AMOU	JNT:	Per attached Proposal						
	nditions o	of the Proposal and this pag	e, including the TERN	AS AND CONDITIONS o	n the			
Accepted this		day of		2021.				
Accepted by Autho	Civiltec Proposal No. PP21032.00  ect Location: Prescott, Arizona  e: October 23, 2021  nt Information: ne: Inscription Canyon Water Company  ress: 302 W. Willis Street, Suite 203							
Mike Hubb	ard   Vice	e President of Operations		Date				



# **TERMS AND CONDITIONS**

- 1. SERVICES TO BE PROVIDED. Civiltec Engineering, Inc. (hereinafter Civiltec) is an independent consultant and agrees to provide Client, for its sole benefit and exclusive use, consulting services set forth in our proposal. Civiltec reserves the right to terminate services at any time. Payment for services rendered prior to the time of termination of services shall be due pursuant to the payment terms as described.
- 2. PAYMENT TERMS. Client agrees to pay our invoice upon receipt. If payment is not received within 30 days from the invoice date, Client agrees to pay a service charge on the past due amount at the prevailing legal rate (1 ½ percent monthly), including reasonable attorney's fees if collected by an attorney, and Civiltec reserves the right to suspend all work until payment is received. No deduction shall be made from our invoice on amount of liquidated damages or other sums withheld from payments to Contractor or others. These payment terms may be amended in the Proposal.

Either party may terminate this Agreement without cause upon 30 days written notice. In the event Client requests termination prior to completion of the proposed services, Client agrees to pay Civiltec for all costs incurred plus charges associated with the termination of the work including assembling project files, data and copies for transfer to the Client not to exceed \$1,000.

In the event all or any portion of the services or work product prepared or partially prepared by Civiltec be suspended or abandoned, Client shall pay Civiltec for all fees, charges, and services provided for the project, not to exceed any contract limit specified herein for each Phase for the work performed up to the date of suspension or abandonment. Client acknowledges if the project services are suspended and restarted, there will be additional charges due to suspension of the services, which shall be paid for by Client as extra services. The charges for the extra services will be provided to the Client in the form of a contract addendum to be authorized by the Client prior to resumption of services or work.

- 3. STANDARD OF CARE. Civiltec will perform its services using that degree of care and skill ordinarily exercised under similar conditions by reputable members of our profession practicing in the same or similar locality. NO OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE OR INTENDED BY OUR PROPOSAL OR BY OUR ORAL OR WRITTEN REPORTS.
- 4. INSURANCE. Civiltec maintains insurance coverage as follows:
  - a) Worker's Compensation Statutory; Employers' Liability \$1,000,000 each accident/disease/policy limit;
  - b) Professional Liability \$5,000,000 per claim, \$5,000,000 aggregate;
  - c) Commercial General Liability \$1,000,000 per occurrence, \$2,000,000 aggregate;
  - d) Umbrella Liability \$5,000,000 per occurrence, \$5,000,000 aggregate;
  - e) Automobile Liability Insurance \$1,000,000 each accident.
- 5. PROFESSIONAL LIABILITY. Client agrees that Civiltec's liability to Client or any third party due to any negligent professional acts, errors or omissions or negligent breach of contract will be limited to an aggregate of \$50,000 or our total fee, whichever is greater. If Client prefers to have higher limits of professional liability, we agree to increase the limit up to a maximum of \$5,000,000 upon Client's written request at the time of accepting our proposal, provided Client agrees to pay an additional consideration of ten percent of our total fee, or \$1,000, whichever is greater. The additional charge for the higher liability limit is because of the greater risk assumed by us and is not a charge for additional professional liability insurance.
- 6. SITE OPERATIONS AND SOIL CONDITIONS. Client will arrange for right-of-entry to the property for the purpose of performing studies, tests and evaluations pursuant to the agreed services. Client represents that it possesses necessary permits and licenses required for its activities at the site.

Civiltec makes no representations concerning soil conditions and is not responsible for any liability that may arise out of the making or failure to make soil surveys, or sub-surface soil tests, or general soil testing.

If a Contractor (not a subcontractor of Civiltec) is involved in the project, Client agrees, in accordance with generally accepted construction practices, that the Contractor will be solely and completely responsible for the working conditions on the job site, including the safety of all persons and property during performance of the work, and compliance with OSHA regulations. These requirements will apply continuously and will not be limited to normal working hours. It is agreed that Civiltec will not be responsible for job or site safety on the project, other than for our employees and subcontractors. If a Contractor is involved in the project, the Client agrees to contract directly through the Contractor, not through Civiltec.

Client acknowledges that Civiltec is not responsible for the performance of work by third parties including, but not limited to, the construction Contractor and its subcontractors. Client further agrees to defend, indemnify and hold Civiltec harmless from any and all liability, real or alleged, in connection therewith, excepting liability arising from the negligence of Civiltec.

- 7. UNFORSEEN CONDITIONS OR OCCURRENCES. It is possible that unforeseen conditions or occurrences may be encountered, which could substantially alter the necessary services or the risks involved in completing our services. If this occurs, we will promptly notify and consult with Client, but will act based on our sole judgment where risk to our personnel is involved. Possible actions could include:
  - a) Complete the original Scope of Services in accordance with the procedures originally intended in our Proposal, if practical in our judgment;
  - b) Agree with Client to modify the Scope of services and the estimate of charges to include study of the unforeseen conditions or occurrences, with such revision agreed to in writing;
  - c) Terminate the services effective on the date specified by us in writing.
- 8. CLIENT DISCLOSURE. Client agrees to advise Civiltec upon execution of this Agreement of any hazardous substance or any condition known by Client, existing in, on, or near the site that present a potential danger to human health, the environment, or equipment. By virtue of entering into this Agreement or providing services hereunder, we do not assume control of or responsibility for the site or the person in charge of the site, or undertake

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responsibility for reporting to any federal, state or local public agencies any conditions at the site that may present a potential danger to public health, safety or the environment.

- 9. INDEMNITY. To the fullest extent permitted by law, the Client shall indemnify and hold harmless Civiltec, Civiltec's officers, employees, directors, shareholders, subconsultants, and subcontractors from and against all claims, damages, losses, expenses, and other costs, including costs of defense and attorney's fees resulting from the active, passive, or comparative neglect of the Client. In connection with toxic or hazardous substances or constituents and to the maximum extent permitted by law, Client agrees to defend, hold harmless and indemnify Civiltec from and against any and all claims and liabilities unless caused by our negligence or willful misconduct, resulting from:
  - a) Client's violation of any federal, state or local statute, regulation or ordinance relating to the management or disposal of toxic or hazardous substances or constituents;
  - b) Client's undertaking of or arrangement for the handling, removal, treatment, storage, transportation or disposal of toxic or hazardous substances or constituents found or identified at the site;
  - c) Toxic or hazardous substances or constituents introduced at the site by Client or third persons before or after the completion of services herein; and
  - d) Allegations that Civiltec is a handler, generator, operator, treated, storer, transporter, or disposer under the Resource Conservation and Recovery Act of 1976 as amended or any other similar federal, state or local regulation or law due to the services provided under this Agreement.

Civiltec shall indemnify and hold Client harmless from all claims, damages, losses, expenses and other costs including defense costs and attorney fees resulting from the active, passive or comparative neglect of Civiltec.

- 10. DOCUMENTS. Civiltec will furnish to Client the agreed upon number of reports and supporting documents. These instruments of services are furnished for Client's exclusive internal use and reliance in connection with the project or services provided for in this Agreement, not for advertising or other type of distribution or general publication, and are subject to the following:
  - a) For any other purposes, all documents generated by Civiltec under this Agreement shall remain the sole property of Civiltec. Upon request and payment of the costs involved, Client is entitled to copies of all papers, documents and drawings provided Client's account is paid current. Client agrees to obtain our written permission for any exception for use not described here. Any unauthorized use or distribution shall be at Client's and recipients' sole risk and without liability of Civiltec. Disclosure to the property owners and members of Client on Client's web site and board meetings are not considered distribution or general publication and is not subject to written permission from Civiltec;
  - b) Client shall furnish documents or information reasonably within Client's control and deemed necessary by us for proper performance of our services. Civiltec may rely upon Client-provided documents in performing the services required under this Agreement; however, Civiltec assumes no responsibility or liability for their accuracy. Client-provided documents will remain the property of Client.
- 11. CLAIMS. The parties agree to attempt to resolve any dispute without resort to litigation. However, in the event a claim is made that results in litigation, and the claimant does not prevail at trial, then the claimant shall pay all costs incurred in defending the claim, including all reasonable attorney's fees of both parties. The claim will be considered proven if the judgment obtained and retained through any applicable appeal is at least ten percent greater than the sum offered to resolve the matter prior to the commencement of trial.
- 12. OPINIONS OF COST. If requested, Civiltec will use its best efforts and experience on similar projects to provide realistic opinions or estimates of costs for installation of materials, remediation or construction as appropriate based on reasonably available data, our designs or our recommendations. However, such opinions are intended primarily to provide information on the order of magnitude or scale of such costs and are not intended for use in firm budgeting or negotiation unless specifically agreed otherwise in advance, in writing with Civiltec. Client understands actual costs of such work depend heavily on regional economics, local construction practices, material availability, site conditions, weather conditions, Contractor skills, and many other factors beyond our control.
- 13. CONFIDENTIALITY. Civiltec will maintain as confidential any documents or information provided by Client indicated to be confidential and will not release, distribute, or publish to any third party without prior permission from Client, except as compelled by order of a court or regulatory body of competent jurisdiction and then only after notice to Client.
- 14. SEVERABILITY. In the event that any provision of this Agreement is found to be unenforceable, the other provisions shall remain in full force and effect.
- 15. SURVIVAL. All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating responsibility or liability between Client and Civiltec shall survive the completion of the services and their termination of this Agreement.
- 16. INTEGRATION. This Agreement, the attached Proposal and documents and those incorporated herein constitute the entire Agreement between the parties and cannot be changed except by a written instrument signed by both parties.
- 17. GOVERNING LAW. This Agreement shall be governed in all respects by the laws of the State of Arizona.
- 18. FEES. Client shall pay the costs of outside checking and inspection fees, zoning and annexation application fees, assessment fees, soils engineering fees, soil testing fees, aerial topography fees, and all other fees, permits, bond premiums, title company charges, blueprint and reproductions, and all other charges not specifically covered by the terms of this Agreement. \*\*\*\*END OF DOCUMENT\*\*\*\*

## **ICWC Design Review and Operations Enhancement** Prescott Arizona Time and Fee Estimate PP21032.00

Date: October 12, 2021



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	НО	URS BY	HOURS		HOURS BY	HOURS BY	HOURS BY	HOURS BY	HOURS BY	
	┨.	PIC	PrEE		PM	SrE	PE	D	Admin	TOTAL
Scope of Work	\$	195.00	\$ 19	0.00	\$ 181.00	\$ 170.00	\$ 149.00	\$ 127.00	\$ 68.00	COST
Phase 1 - ICR/WCR & TRR SYSTEMS										\$ 63,792.00
Task 1 - IC/WC DATA ACQUISITION			24		24		8	24	1	\$ 13,212.00
Task 2 - IC/WC SYSTEM MAPPING			4		4		8	60		\$ 10,296.00
Task 3 - IC/WC EXISTING SYSTEM REVIEW			27		18					\$ 8,388.00
Task 4 - TRR DATA ACQUISITION			24		24		8	24	1	\$ 13,212.00
Task 5 - TRR SYSTEM MAPPING			4		4		8	60		\$ 10,296.00
Task 6 -TRR EXISTING SYSTEM REVIEW			27		18					\$ 8,388.00
Phase 2 - TALKING ROCK RANCH SYSTEM										\$ 42,514.00
Task 1 -TRR SYSTEM MODELING		4			4		80			\$ 13,424.00
Task 2 -TRR REPORT AND RECOMMENDATIONS		1	32		80			8	1	\$ 21,839.00
Task 3 -TRR OPERATIONAL ENHANCEMENTS		1	8		24		8			\$ 7,251.00
Phase 3 - INSCRIPTION CANYON/WHISPERING CANYON SYSTEM										\$ 42,514.00
Task 1 - IC/WC SYSTEM MODELING		4			4		80			\$ 13,424.00
Task 2 - IC/WC REPORT AND RECOMMENDATIONS		1	32		80			8	1	\$ 21,839.00
Task 3 - IC/WC OPERATIONAL ENHANCEMENTS		1	8		24		8			\$ 7,251.00
HOURS		12	190		308	0	208	184	4	906
BUDGET	\$	2,340.00	\$ 36,10	00.00	\$ 55,748.00	\$ -	\$ 30,992.00	\$ 23,368.00	\$ 272.00	\$ 148,820.00

PM = Project Manager
PrEE = Principal Electrical Engineer
SE = Staff Engineer
DD = Designeer/Drafter
Admin = Administrative Assistant/Clerical
SM = Survey Manager
2MS = Two Person Survey Crew PIC = Principal Engineer SrE = Senior Engineer PE = Project Engineer D = Designer DR = Drafter

CO = Construction Observer 1MS = One Person Survey Crew

CIVILTEC ENGINEERING, INC.