

City of South Daytona

Office of the City Manager / Department of Public Works

Post Office Box 214960 • South Daytona, FL 32121-4960 • 386/322-3080 • FAX 386/322-3080



MEMORANDUM

AGENDA ITEM

D15 DATE 2/9/2021

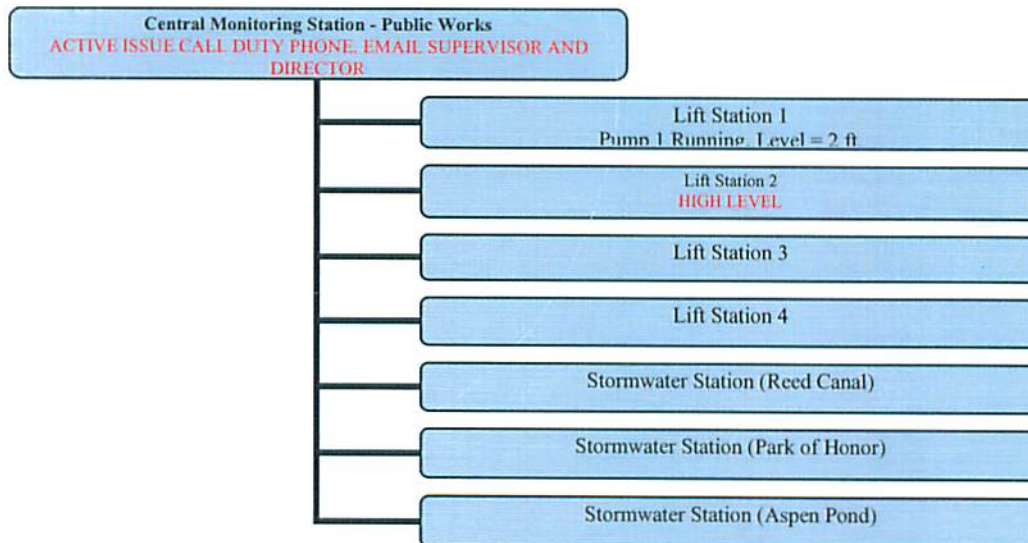
To: James L. Gillis Jr., City Manager

From: Brian Peek, Public Works Director *BP*

Re: Request for Purchase of Supervisory Control and Data Acquisition Equipment Services from Data Flow Services

Date: January 29, 2021

Our current system of monitoring our sanitary sewer and stormwater stations relies on our employees' attentiveness as well as residents. While there is faith in both, there are better ways to serve our residents. Supervisory control and data acquisition equipment, more commonly referred to as SCADA, allows for remote monitoring and notification of a multitude of conditions at pump stations. A central site is designated to which data is sent through radio signal from each equipped station. A depiction of this workflow can be seen below.



Many municipalities went to this technology decades ago as early versions of this equipment came to market in the 1970's. The City of Holly Hill recently went to bid for SCADA services and found Data Flow Services as the winning bidder. In accordance with our purchasing ordinance, the City can utilize this contract to address our needs.

Data Flow Services (DFS) is a manufacturer of SCADA equipment and has been in business since 1981. Port Orange, Holly Hill, Volusia County, and New Smyrna Beach are a few entities in our immediate area currently using this organization for services. In discussing the effectiveness and attentiveness of the company with other municipalities, no concerns were mentioned regarding the use of this firm.

At this point, we reached out to Tom Hogeland with DFS and requested a review of our stations and a quote to equip South Daytona with SCADA based off the pricing from Holly Hill's agreement.

Although the system has known benefits, it was necessary that the cost and options be evaluated for it to make good financial sense for both the Department of Public Works and the City as a whole. The option existed for us to purchase the system outright for a cost of \$353,557.00. However, coming from nothing to today's technology the learning curve will be steep, and DFS has other options that better fit our City. The SCADA as a Service (SaaS) option provides for the latest and greatest technology while effectively providing us with employees of 38 years' experience (age of DFS). As our Pump Station team consists of two people, the added hands and knowledge has a value of its own. This also allows us to focus our City Staff efforts on other maintenance and improvements. We will not by any means be "hands-off" with this system as it is our chance to learn, but we will have full support in the repair and upkeep. If DFS upgrades their software or hardware, we will be upgraded as well. This allows our system to keep up with the most current technology and security. At the close of our 10-year agreement we will have the option to purchase a seasoned system, with the experience of our own team backing it up.

Therefore, it is my recommendation we pursue the SaaS model of this system. DFS provided a quote for SCADA as a Service (SaaS) with a one-time upfront cost of \$98,476.00 and an annual cost of \$36,726.00 for the 10-year life of the contract. The initial upfront cost for the system will be funded utilizing the COVID CARES act money we received from Volusia County. The installation of this system will reduce hands-on contact with the station surfaces and reducing the risk of spreading disease. The yearly maintenance costs will be taken out of the Utility Service Fund.

The full agreement for this service is attached to this document (Exhibit A) for your review. The documentation was also submitted to the City Attorney, Wade Vose, for review. Mr. Vose returned with recommendation of adding an addendum allowing our elected council to terminate the agreement prior to the end of the 10-year span if funds are not available to continue the service. The contract addendum is also included in Exhibit A for review. This provision brings the agreement into compliance with the requirements of Article VII of the Florida Constitution which deal with long-term debt for Florida Cities, and for which 10-years would be considered long term.

With the SaaS costs now known, the value of the overall system can be assessed in comparison to our current methods of workforce time spent and fuel burned. Currently,

our Pump Station Maintenance team visits each of our 21 sewer lift stations as well as our 10 stormwater stations each weekday. Due to the importance of these stations' operation, they are also reviewed by the on-call employee over the weekend. The review of these stations takes on average 3 hours of one employee's time. This is not including any repairs that may need to be handled during this time and is based on the salary of the most junior employee. The following charts break down our current process costs assuming a 22 weekday and 8 weekend day month (260 working days and 105 weekend day per year):

Estimated Cost of Weekday LS Run w/out SCADA			
Time per Day			
3		hrs	
(5 Days Per Week)			
Total Cost to City (employee rate and fringe)			
		\$32.86	/hr
Day	Month	Year	
\$98.58	\$2,168.76	\$25,630.80	

Estimated Cost of Weekend LS Run w/out SCADA			
Time Per Day			
3		hrs	
(2 Days Per Weekend)			
Cost to City (overtime rate of x1.5)			
		\$49.29	/hr
Day	Month	Year	
\$147.87	\$1,182.96	\$15,526.35	

Total Workforce Cost w/out SCADA			
Day	Month	Year	
N/A	\$3,351.72	\$41,157.15	

Estimated Cost of Weekday LS Run w/ SCADA		
Time Per Day		
3	hrs	
(1 Day Per Week)		
Total Cost to City (employee rate and fringe)		
	\$32.86	/hr
Day	Month	Year
\$98.58	\$394.32	\$5,126.16

Estimated Weekend LS Run Time w/ SCADA		
Time Per Day		
0	hrs	
(0 Days Per Weekend)		
Cost to City (overtime rate of x1.5)		
	\$49.29	/hr
Day	Month	Year
\$0.00	\$0.00	\$0.00

Total Workforce Cost with SCADA		
Day	Month	Year
N/A	\$394.32	\$5,126.16

Since fuel is also a contributing factor and travel will be reduced driving to and from the stations, the following chart was created to evaluate the associated cost:

Fuel Cost Estimations			
Vehicle Economy	10	mpg	
Distance (Per Day)	20	miles	
Current Cost of City Fuel	\$2.11		
Fuel Cost of Run	\$4.22		

Weekdays		
Day	Month	Year
\$4.22	\$88.62	\$877.76
Weekend		
Day	Month	Year
\$4.22	\$33.76	\$443.10
Estimated Fuel Savings		
Day	Month	Year
-	\$122.38	\$1,320.86

Upon totaling both workforce cost and fuel cost, the following number is calculated:

Total Workforce and Fuel Savings per Year by Addition of SCADA
\$37,351.85

While this is shown as a savings, it is more accurate to consider it a reappropriation of City forces to more valuable tasks. The cost will still be present during the week as the employee works on other duties. However, the intent is to show that the yearly cost of SCADA as a Service with Data Flow Systems is inline with our current cost to perform this work through means of manual labor.

With the full evaluation of the cost and system, staff fully supports the SCADA as a Service option presented by Data Flow Systems and looks forward to the added value that SCADA can provide to the City and its residents.

As a final note, It is worth mentioning that very little will change in the visuals of our stations. However, an antenna is necessary to communicate between the central site and the station. This antenna will look similar to the example below standing around 10 feet in height:

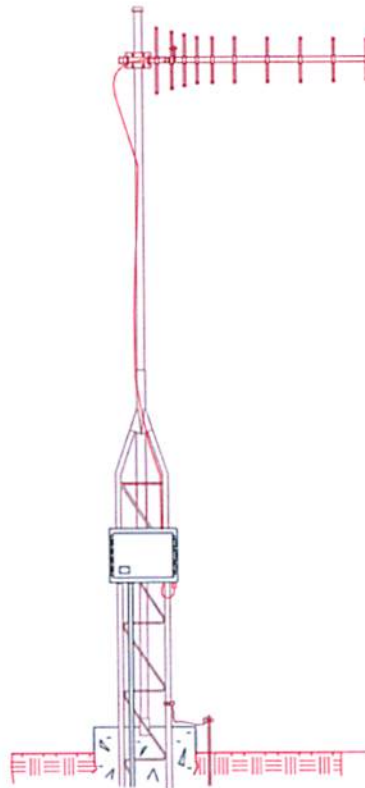


EXHIBIT A

STANDARD CONTRACT ADDENDUM

AND

SERVICE AGREEMENT

CITY OF SOUTH DAYTONA, FLORIDA
STANDARD CONTRACT ADDENDUM

THIS STANDARD CONTRACT ADDENDUM is made and entered into this 13th day of January, 2021, by and between the CITY OF SOUTH DAYTONA, a Florida municipality, hereinafter referred to as the "City", and Data Flow Systems, Inc., hereinafter referred to as "Contractor", concerning that certain agreement entitled UTILITIES SCADA SERVICES, dated December 20, 2019 ("Agreement").

WITNESSETH:

WHEREAS, Section 119.0701, Fla. Stat., requires that certain public agency contracts must include certain statutorily required provisions concerning the contractor's compliance for Florida's Public Records Act; and

WHEREAS, Section 768.28, Fla. Stat., sets forth certain mandatory limitations on indemnification and liability for Florida public agencies; and

WHEREAS, Florida law requires that public agency contracts be subject to non-appropriation and thereby contingent upon appropriation during the public agency's statutorily mandated annual budget approval process; and

WHEREAS, Section 448.095, Fla. Stat., imposes certain obligations on public agencies with regard to the use of the E-Verify system by their contractors and subcontractors.

NOW, THEREFORE, in consideration of the covenants set forth herein, the parties agree to this addendum as follows:

1. **Amendment.** This Addendum hereby amends and supplements the terms of the Agreement. In the event of a conflict between the terms of the Agreement and terms of the Addendum, the terms of the Addendum shall prevail.

2. **Public Records Compliance.** Contractor agrees that, to the extent that it may "act on behalf" of the City within the meaning of Section 119.0701(1)(a), Florida Statutes in providing its services under this Agreement, it shall:

- (a) Keep and maintain public records required by the public agency to perform the service.
- (b) Upon request from the public agency's custodian of public records, provide the public agency with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in this chapter or as otherwise provided by law.
- (c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for

the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the public agency.

- (d) Upon completion of the contract, transfer, at no cost, to the public agency all public records in possession of the contractor or keep and maintain public records required by the public agency to perform the service. If the contractor transfers all public records to the public agency upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon completion of the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the public agency, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the City.
- (e) Pursuant to Section 119.0701(2)(a), Fla. Stat., IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT: James L. Gillis, Jr., City Manager, (386) 322-3014, lgillis@southdaytona.org, 1672 S. Ridgewood Ave., South Daytona, FL 32119.

3. Public Records Compliance Indemnification. Contractor agrees to indemnify and hold the City harmless against any and all claims, damage awards, and causes of action arising from the contractor's failure to comply with the public records disclosure requirements of Section 119.07(1), Florida Statutes, or by contractor's failure to maintain public records that are exempt or confidential and exempt from the public records disclosure requirements, including, but not limited to, any third party claims or awards for attorneys' fees and costs arising therefrom. Contractor authorizes the public agency to seek declaratory, injunctive, or other appropriate relief against Contractor in Volusia County Circuit Court on an expedited basis to enforce the requirements of this section.

4. Compliance/Consistency with Section 768.28, Fla. Stat. Any indemnification or agreement to defend or hold harmless by City specified in the Agreement shall not be construed as a waiver of City's sovereign immunity, and shall be limited to such indemnification and liability limits consistent with the requirements of Section 768.28, Fla. Stat. and subject to the procedural requirements set forth therein. Any other purported indemnification by City in the Agreement in derogation hereof shall be void and of no force or effect.

5. Non-appropriation. City's performance and obligation to pay under this Agreement is contingent upon an appropriation during the City's annual budget approval process. If funds are not appropriated for a fiscal year, then the Contractor shall be notified as soon as is practical by memorandum from the City Manager or designee that funds have not been appropriated for continuation of the Agreement, and the Agreement shall expire at the end of the fiscal year for which funding has been appropriated. The termination of the Agreement at fiscal

year end shall be without penalty or expense to the City subject to the City paying all invoices for services rendered during the period the Agreement was funded by appropriations.

6. **E-Verify Compliance.** Contractor affirmatively states, under penalty of perjury, that in accordance with Section 448.095, Fla. Stat., Contractor is registered with and uses the E-Verify system to verify the work authorization status of all newly hired employees, that in accordance with such statute, Contractor requires from each of its subcontractors an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien, and that Contractor is otherwise in compliance with Sections 448.09 and 448.095, Fla. Stat.

7. **Venue and Jurisdiction.** Notwithstanding any of other provision to the contrary, this Agreement and the parties' actions under this Agreement shall be governed by and construed under the laws of the state of Florida, without reference to conflict of law principles. As a material condition of this Agreement, each Party hereby irrevocably and unconditionally: i) consents to submit and does submit to the jurisdiction of the Circuit Court in and for Volusia County, Florida for any actions, suits or proceedings arising out of or relating to this Agreement.

8. **Additional Terms.** Notwithstanding any of other provision to the contrary, the parties agree as follows:

A. None.

IN WITNESS WHEREOF, the parties hereto have executed and delivered this instrument on the days and year indicated below and the signatories below to bind the parties set forth herein.

Contractor:



Print Name: David Walker

Title: President

Company: Data Flow Systems, Inc.

City of South Daytona

Print Name: WILLIAM C. HALL
MAYOR

DATA FLOW SYSTEMS, INC.
SERVICE AGREEMENT

THIS AGREEMENT ("Agreement") is entered into as of the ____ day of _____, 20__ between DATA FLOW SYSTEMS, INC. of Melbourne, Florida (hereinafter "DFS") and, CITY OF SOUTH DAYTONA, whose address is 1672 S. Ridgewood Ave, South Daytona, FL 32119, (hereinafter "The Customer").

RECITALS

WHEREAS, DFS is engaged in the business of manufacturing, installing and servicing SCADA systems designed to impart the ability to remotely control and/or monitor electrical/electronic devices that are utilized in the operation of water-related utilities, such as wastewater collection, water and wastewater treatment, water distribution and water control and

WHEREAS, The Customer owns and operates water and wastewater utilities.

NOW, THEREFORE, in consideration of the above premises and the mutual promises and covenants contained herein and intending to be legally bound hereby, DFS and The Customer agree as follows:

1. Description of Service

DFS will provide to the Customer, the ability to remotely monitor devices at specified remote locations in Customer's service area by means of a SCADA system to be installed at the Customer's location. The RTUs will be used to control and/or monitor devices at the remote locations and treatment facilities. The SCADA Server will store the accumulated information in an organized format for the Customer's use. The one-time installation fee(s) include labor as well as the physical Rohn Tower Structures with concrete base that are installed to support the antenna hardware, the enclosures supplied by DFS to house the SCADA equipment, conduit and wire. These specific hardware items provided with the installation fee shall become property of the City. All other material and software provided as a services item (hereinafter referred to as the "Service Equipment"), will remain the property of DFS. The Service Equipment and Fees shall be described in ATTACHMENT A (DFS QUOTATION 201215-01-ES), herein referred to as "THE QUOTE" which by reference shall become part of this Agreement.

2. Duration of Agreement

The term of this Agreement shall commence upon its execution by both parties and shall continue until terminated pursuant to the terms and provisions contained herein.

3. Responsibilities of DFS

DFS, as the service provider, agrees to:

- A. Provide communications with the Service Equipment via radio as described by THE QUOTE to enable the Customer to control and/or monitor occurrences at the remote sites.
- B. Supply and install the Service Equipment described in THE QUOTE.
- C. Maintain the functionality of the Service Equipment so that it remains in good working order. This includes payment of all costs associated with repairs to the Service Equipment that are not due to insured hazards.
- D. Utilize the Customer-provided VPN secured network to provide remote support and service.
- E. Provide factory and on-site service for the repair of failed Service Equipment. DFS will require minimal assistance from the Customer such as cycling power, checking for blown fuses, swapping a module or component, and similar minimal activities items that cannot be accomplished remotely by DFS.
- F. Provide training at the Customer's site in the use of the Service Equipment as described in THE QUOTE.
- G. Provide the following insurance and indemnification:
 - a. DFS agrees to indemnify, defend and hold harmless the Customer, its officers, directors, employees and designated agents from and against any and all losses, liabilities, damages, injuries, causes of action, claims, demands, costs, and expenses (whether based upon tort, breach of contract, failure to pay

employee taxes or withholdings, failure to obtain workers' compensation insurance or otherwise), including legal fees and expenses, of whatever kind or nature arising out of or on account of, or resulting from claims, related to, any negligent act, error, or omission related to performance of obligations pursuant to this Agreement by DFS or its officers, directors, employees, representatives or agents. The provisions of this paragraph shall survive the expiration or earlier termination of this Agreement.

- b. DFS hereby represents that it has the professional experience and skill to perform the services required to be performed hereunder; that it shall perform said services in accordance with generally accepted professional standards and in expeditious and economical manner consistent with the best interests of District; and that it has sufficient capital assets and is adequately financed to meet all financial obligations it may be required to incur hereunder.
- c. DFS shall purchase and maintain:
 - i. Commercial general liability insurance, written on an occurrence basis, with minimum limits of one million dollars (\$1,000,000) per occurrence and two million dollars (\$2,000,000) general aggregate;
 - ii. Workers' compensation and employer's liability insurance sufficient to meet the statutory limit of the applicable worker's compensation law for the State of Florida, and employer's liability insurance with minimum limits of one million dollars (\$1,000,000) per occurrence with respect to any employee not covered by workers' compensation;
 - iii. Umbrella or excess liability insurance with minimum limits of one million dollars (\$1,000,000).
- d. All insurance coverages required by this Agreement shall be issued by companies and on forms acceptable to Customer. Should any of the above described policies be canceled before the expiration date thereof, notice will be delivered in accordance with the policy provisions. DFS shall provide certificates of insurance to Customer, showing Customer as additional insureds for all coverages referred to in subparagraph (c) above, with the exception of the worker's compensation and employer's liability insurance referred to in subparagraph (c) (ii).
- H. DFS responsibilities assume the Monthly Service Fees to be paid by the Customer are not in arrears. In the event of nonpayment of Monthly Service Fees, DFS agrees to give the Customer five (5) business days written notice before discontinuing service. Late Fees will be assessed per Section 8, Fee Schedules.

4. Responsibilities of The Customer

In order to maximize the effectiveness of the Agreement, the Customer agrees to:

- A. Assist in the simple maintenance of the Service Equipment as directed by DFS. The involvement of the Customer shall be limited to the performance of simple procedures, such as cycling power, checking for blown fuses, swapping a module or component, and similar minimal support activities items that cannot be accomplished remotely by DFS.
- B. Any onsite warranty-service provided by DFS that is determined to be caused by a non-DFS-equipment failure will be considered a billable activity (ie: visit determined customer's motor starter is faulty, or customer's transducer is bad). If the failure is indeed the DFS system equipment, the service will be provided at no charge. DFS will coordinate efforts with the Customer at no-charge to potentially eliminate the need for an onsite service visit.
- C. Maintain an operational VPN-secured network connected to the SCADA Server that may be utilized by DFS for remote support, service and system updates.
- D. Provide and maintain Workstation Computers connected to the SCADA System.
- E. Ship devices to DFS for repair when directed by DFS service personnel. The utility shall pay to ship any product to DFS, and DFS shall pay to return the product.
- F. Be responsible for the safe-keeping of the Service Equipment during the term of the Agreement.

- G. Abide by all Federal, State, County and local government codes and regulations regarding the use of the Service Equipment.
- H. Obtain, at its own expense, insurance coverage equal to the replacement value of the Service Equipment (\$5,000 per location) and naming DFS as the loss payee. If DFS, by reason of an insurance claim against any insured loss, shall receive any sums of money, such amounts may be applied by DFS towards the repair or replacement of the damaged/lost items, otherwise DFS may remove the damaged Service Equipment and replace it with Service Equipment equal to or greater in kind, quantity and quality. Alternatively, customer agrees to pay for the replacement of any uninsured Service Equipment should a loss occur.
- I. To the extent permitted by law, hold DFS harmless from and defend DFS against any and all liability, claims, damages, costs and expenses arising from the proper use of the Service Equipment.
- J. Be responsible for the maintenance and service of any third party or Customer-owned devices that are used in conjunction with, or interface to, the Service Equipment.
- K. Be responsible for removing any data that may reside in Service Equipment that you return or upon termination of the Agreement.
- L. Be responsible for all devices not provided by DFS that are connected to the SCADA System.
- M. Allow DFS personnel access to the Service Equipment for service and/or inspection as needed.
- N. Leave all Service Equipment in place as installed unless otherwise directed by DFS or unless agreement is terminated.
- O. Make the Monthly Service Fees payment(s) by due date.
- P. Remove all DFS-owned Service Equipment and ship to DFS, Melbourne Florida, within 45 days of the termination of this agreement. It will not be the responsibility of DFS to restore any site to its previous condition.

5. Warranty Against Infringement

DFS hereby warrants that the use of the Service Equipment shall not violate or infringe any valid licenses, trademarks, patents and/or copyrights held by third parties and undertakes that it shall defend, indemnify and save harmless The Customer, its officers, supervisors, employees, shareholders from and against any and all claims, actions and suits, whether groundless or otherwise, and from and against any and all liabilities, judgments, losses, damages, costs, charges, attorneys' fees, and other expenses by reason of such violation or infringement.

6. Intellectual Property: Confidentiality

All items of intellectual property developed, owned or controlled by DFS, including but not limited to licenses, patents, trademarks, copyrights, trade secrets, product designs, inventions, confidential business and technical information, and advertising and promotional materials, shall remain the exclusive property of DFS, and The Customer shall acquire no rights therein by virtue of this Agreement.

The Customer agrees that it shall keep confidential and shall not intentionally reveal or disclose any of said information or data or materials of the other party to anyone during the term of this Agreement or thereafter without the prior written consent of DFS.

7. Termination of Agreement

The Agreement commences at 12:01 AM on the date indicated on page one of this Agreement and shall continue for not less than One-Hundred Twenty (120) Service Fee payments (10 years) and shall continue thereafter on an annual basis or on a month to month basis, at Customer's choosing, unless either party gives notice of its intent to terminate at least 30 days prior to the end of the then existing period.

In the event that either DFS or The Customer fail to observe or perform any of the terms or conditions of this Agreement and (except for failure to comply with payment of installation and service fee provisions herein) fails to cure same after thirty (30) days written notice of same, or upon the failure of either party, for any reason, to

function in the ordinary course of business, or to enter bankruptcy, insolvency or reorganization proceedings, either voluntarily or involuntarily, DFS or The Customer (as the case may be) shall have the right to terminate this Agreement immediately by giving written notice to the other party.

This Agreement shall also be rendered void in the event of the commencement or enforcement of a regulation proclaimed by Federal, State or Local Government that, in effect, materially restricts either party or impedes the operation of the system.

8. Fee Schedules

A schedule of values for One-Time Install Fees and for Monthly Service Fees is provided in THE QUOTE.

The One-Time Install Fees for each location shall be charged for the installation of the Service Equipment, and invoiced when installation is complete. Partial invoicing of the One-Time Install Fees may apply at certain locations where extensive work is required.

Monthly Service Fees, which includes use of the provided Service Equipment, shall be payable in advance of service rendered. At the Customer's choosing, Monthly Service Fees shall be paid monthly, quarterly or annually. Monthly Service Fees shall begin when the Service Equipment for a specific site is installed at the site and operating as intended per THE QUOTE. Payments shall be received by DFS not later than the 5th day of each month (the Due Date) and in advance of service.

Late Fees will be assessed against delinquent Monthly Service Fees. Both parties agree that in the event the Customer fails to make payments when due, a late payment recovery fee equal to the greater of 10% of the unpaid balance or \$100.00 will be immediately assessed against the unpaid balance. Furthermore, both parties agree that interest will be charged against the unpaid balance for the greater of 18% per annum or the maximum rate allowed under state and federal law.

Service fee amounts in THE QUOTE will not change during the life of this agreement. Service Fees for new Service Equipment added after the commencement of this agreement are subject to new quotation and shall be calculated and paid on a pro rata basis until the next regularly scheduled Service Fee payment is due. At that time, the Monthly Service Fees for the new Service Equipment shall be added to the regularly scheduled Monthly Service Fees. Any One-Time Install Fees for new Service Equipment shall be paid along with the pro rata Monthly Service Fees.

9. Assignment

This Agreement is personal to the parties hereto. No assignment of this Agreement shall be made by either party without the prior written consent of the other party.

10. Disputes and arbitration

All disputes arising out of the interpretation of this Agreement shall be resolved exclusively by arbitration in Brevard County, Florida, before and according to the rules of the American Arbitration Association, and judgment on the decision or award of the arbitrator may be entered in any court of competent jurisdiction. In the event arbitration may not be had with respect to any dispute, the parties agree that such dispute shall be subject to the exclusive jurisdiction and venue of the courts of Brevard County, Florida, and the parties consent to the personal and exclusive jurisdiction and venue of these courts.

11. Notices

All notices under this Agreement shall be sent by certified mail, return receipt requested, and addressed as follows:

If to DFS:	Gary Hudson, Comptroller Data Flow Systems, Inc. 605 N. John Rodes Blvd. Melbourne, FL 32934
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If to The Customer:

JAMES L. GILLIS, JR.
CITY MANAGER
P.O. Box 214960
SOUTH DAYTONA, FL 32121-4960

12. Amendments

This Agreement constitutes the entire understanding between the parties. This Agreement supersedes all prior contracts and undertakings between the parties with regard to the marketing, selling, installing and servicing of the Service Equipment. This Agreement shall not be amended except by a writing signed by both parties.

13. Waivers

Either party's right to require strict performance of the other party's obligations under this entire Agreement shall not be affected by any previous waiver, forbearance or course of dealing.

14. Severability

Should any part or provision of this Agreement be held unenforceable or in conflict with applicable law, the validity of the remaining parts or provisions shall not be affected by such holding.

15. Counterparts

This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

16. Parties Bound

This Agreement shall inure to the benefit of and shall be binding upon the parties hereto and their representatives, successors and assigns.

17. Special Provisions

None

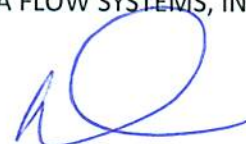
IN WITNESS WHEREOF, the parties hereto, by their duly authorized officers, have executed this Agreement as of the day and year first above written.

ATTEST:

DATA FLOW SYSTEMS, INC. (DFS)



BY:



David Walker
President

CITY OF SOUTH DAYTONA (THE CUSTOMER)

ATTEST:

JAMES L. GILLIS, JR.
CITY MANAGER

BY:

Print Name: WILLIAM C. HALL
 Title: MAYOR



Data Flow Systems

DFS QUOTATION 201215-01-ES

CITY OF SOUTH DAYTONA

TAC II SCADA SYSTEM

DECEMBER 15, 2020

This proposal has been modified to equated services provided within this proposal to be directly equivalency to SCADA as a SERVICE (SaaS) project provided and purchased by the City of Holly Hill, Florida. Additional documents are being provided for evaluation and confirmation of the pricing and services matching between the proposal, see Addendum A located at the end of this proposal for the breakout and explanation of pricing. Only products and services, a SaaS agreement, that can be directly evaluated are included within the proposal.

• **INTRODUCTION:**

The proposed TAC II SCADA System is designed specifically for water and wastewater applications. Highlights include ease-of-use and obsolescence-proof engineering. Each and every improvement we make to our system hardware and software is downward compatible with every one of our TAC II SCADA Systems, including those installed nearly 30 years ago. Even our oldest customers are able to take full advantage of our latest innovations and improvements. No other manufacturer who has taken such extreme measures to assure the support of their systems and to prevent obsolescence.

Please keep in mind that many of the features and services offered free of charge by DFS are either line-item cost and/or reoccurring cost with other SCADA system providers. Such DFS features and services include but are not necessarily limited to the following:

- No access limits or charges for additional HMI user seats
- No annual user fees
- No annual software license fees
- No incremental group rates for future points or tags
- No annual maintenance or annual service contract required
- No cost for SCADA software and/or module firmware revisions for life - All revisions and updates are free of charge
- No cost for "call-in" customer service technical support (during normal business hours) for system life
- No cost for DFS customer service department to the utility. Central Site remote access permits our technicians to troubleshoot in real-time alongside your technicians
- No cost for radio path studies and FCC license renewal services
- No cost for 911 alarm dialer, multiple communication/protocol drivers and system/user partitioning
- Three (3) year warranty on DFS hardware (including radio) against lightning and surge damage
- Free training twice a year is offered at our Melbourne, Florida facility

When comparing SCADA systems, it is of the utmost importance to consider the life cycle. The life cycle of a SCADA system is determined by manufacture and provider support for software version issues, system durability and availability, and compatibility of replacement parts. In most cases, the life cycle of other SCADA systems is only 7 to 10 years. On the other hand, DFS has yet to define our SCADA system's life expectancy. Many of our SCADA systems have been in continuous use for well over 20 years and are still running strong.

We ask that you consider what other SCADA system providers charge per year for the above-mentioned features and services, and extrapolate such cost over the life cycle expectancy of the system. We believe that when you compare the extrapolated value of others SCADA systems to that of DFS, you will conclude that we provide the most economical and durable SCADA system in the industry.

- **SCADA SOFTWARE & FREE SERVICES FOR LIFE OF SYSTEM:**

The proposed HT4 SCADA Software is manufactured by DFS and operates on a wall-mounted Hyper SCADA Server. A typical off-the-shelf "Windows PC" is utilized for HMI operator interface. Great attention has been paid to ease-of-use. The HMI platform is the familiar Internet Browser

Distinct benefits and savings are unlimited RTU I/O points, unlimited user access seats, built-in reports and trending programs, integrated 911 alarm dial-out modem, 411 remote access, mobile phone access, and the MariaDB open source database. It's important to note there are no on-going costs associated with the use of DFS' HT4 SCADA Software. All updates, revisions, and future releases of the HT4 SCADA software are available free of charge for the life of your system. NO MAINTENANCE CONTRACT REQUIRED! Detailed information is also available at www.scadaserver.com.

HT4 MOBILE: This system includes the HT4 Mobile feature. HT4 Mobile is an interface developed by DFS for use with a smartphone browser. Please note that HT4 Mobile requires Internet access by the HSS. The Internet connection, along with a secure VPN router access to the Internet, are the responsibility of the Owner. The smartphone(s) and cell service are the responsibility of the Owner. Also note that custom screens must be created for effective display of data on a mobile device. Custom screens for HT4 Mobile are not included in this proposal.

- **WARRANTY AND CUSTOMER SUPPORT: (INCLUDES 3 YEAR SURGE/LIGHTNING WARRANTY)**

DFS warrants the proposed system to be free from defects in materials and workmanship for a period of one year. All DFS plug-in modules, radios, power supplies and RTU pump-controllers, carry an additional two-year return-to-factory warranty and are covered against damage due to surge/lightning the entire 3-year period.

Our Service Department operates 24/7/365 to administer all service-related issues. Service personnel are full-time DFS employees based in our Melbourne, Florida office. DFS telephone tech support is offered free of charge during normal business hours for the life of the system. NO MAINTENANCE CONTRACT REQUIRED!

The proposed Hyper SCADA Server (HSS) incorporates remote maintenance access, which will allow DFS to perform remote diagnostics and troubleshooting free of charge during normal business hours for the life of the system. We have found that most service issues can be resolved remotely, resulting in immediate resolution. The UTILITY will be required to provide a telephone line (standard dial-up) connection, or a preferably secure VPN network connection, that permits DFS remote access to the HSS for the maintenance/warranty support, updates and software upgrades.

The system also incorporates a "911" alarm dial-out feature. The UTILITY will be required to provide one (1) telephone line (standard dial-up) to the HSS that is dedicated for the system's 911 feature (a modem). Alternatively, the UTILITY can purchase a Verizon Wireless T2000 phone line to cellular link adapter from a local Verizon Wireless store.

PROJECT OVERVIEW:

This proposal is based on providing and installing the TAC II Central Site Equipment and Remote Terminal Units (RTUs) at specific sites as detailed below. The Hyper SCADA Server (HSS) and Central Radio/Antenna (CTU) will be located at the Public Work Administration Building. The HSS must be located in a climate-controlled indoor area and connected to 120V power service. The radio system will utilize an FCC Licensed VHF frequency issued in the UTILITY's name. Except where otherwise specifically noted herein, all required materials, supplies, and

services are included.

BILL OF MATERIAL & SERVICES:

This quotation offers the following items:

1. (1) TAC II CENTRAL SITE PACKAGE: (See Addendum A, Pay Item 11)

THIS ITEM INCLUDES THE FOLLOWING:

(1) HYPER SCADA SERVER (HSS002-2):

- (1) Enclosure Assembly w/Door Window (NEMA 12 Steel, 24"W x 30"H x 8"D)
- (2) Modular Backplane
- (2) Hyper Server Module
- (2) Network Switch Module
- (1) Network Fiber Module
- (2) Power Supply Module
- (1) 7.0 Ah Backup Battery (UPS)
- (1) Debian, Linux Operating System
- (1) MariaDB, Open Source Database
- (1) HT4 SCADA Software
- (1) HT4 Mobile (screens, smartphone & service by UTILITY)

(1) CENTRAL TRANSCEIVER UNIT (CTU – MASTER RADIO): (See Addendum A, Pay Item 17)

- (1) NEMA 4X Fiberglass Enclosure (14"W x 16"H x 8"D)
- (1) CTU202 Modular Backplane
- (1) Telemetry Interface Module/radio
- (1) Fiber Interface Module
- (1) Power Supply Module
- (1) RTU Surge Protection Kit
- (1) 2.6 Ah Backup Battery
- (1) Polyphaser Coaxial Surge Protector
- (1) Rohn Tower Assembly (25' of tower above ground level) *(Cost of Tower is offset by equipment rental in Holly Hill, it is a wash. Price in Holly Hills is honored for this proposal.)*
- (1) CTA209 Dipole Antenna
- (1) Coaxial Cable w/Connectors
- (1) Fiber Optic Cable w/Connectors (to HSS)
- (1) FCC Licensing

(1) ONSITE INSTALLATION FOR CENTRAL SITE EQUIPMENT PACKAGE (PER DFS SCOPE OF WORK)

(1) ONSITE OPERATOR TRAINING: (See Addendum A, Pay Item 6)

Operator Training covers basic material for the HSS/HMI and RTU. The onsite training will be conducted over a consecutive 4-day period, with 8 hours of instruction provided on each day. Please note the maximum number of attendees is eight (8) people due to material presentation and effective instructor/student ratio.

2. (18) LIFT STATION RTU AND (9) STORMWATER CONSTANT SPEED PUMPS (See Addendum A, Pay Item 25)

The proposed Lift Station RTU (LS RTU) for above-sites incorporates a microprocessor-based multi-pump controller with integrated digital radio (TAC Pack TCU). This version of the TAC Pack TCU is designed to

operate up to three "fixed-speed" pumps (no VFDs). Its integrated digital radio allows it to function as an RTU. This product is designed for "stand-alone" control and does not require SCADA for proper local-operation. The TAC Pack TCU will be housed in a NEMA 4X Non-Metallic enclosure and mounted on a new tower, existing panel rack, or building wall as applicable. The use of a new tower, or modification of existing panel support rack for RTU mounting and antenna-mast, will be at DFS' discretion and as coordinated with UTILITY.

Please note that DFS will integrate the TAC Pack TCU to assume complete control of the lift station pumping operation. DFS will disconnect the existing pump controller, control hardware (relay logic, alternator, Phase Monitor, etc.) as required at each site during integration. The existing floats and/or transducer will be utilized.

Site Names

Lift Stations: 3, 4, 6-9, 11-22

Storm Water PS: Lake Aspen, Sherwood, Pike Ct., Citrus Ditch, Lakeview, Lantern, Jones St., Big Tree, Park of Honor.

EACH LS RTU SHALL INCLUDE:

- (1) Enclosure Assembly (NEMA 4X Non-Metallic, 18"W x 20"H x 9"D)
- (1) TAC Pack TCU (TCU001 w/Radio)
- (1) TCU Install Kit w/Terminal Hardware
- (1) 3-Phase Surge Protector
- (1) TCU Surge Protection Kit
- (1) 2.6 Ah Backup Battery
- (1) Rohn Tower Assembly or Modification of Panel Support Rack
- (1) Antenna w/Coaxial Cable
- (1) FCC Licensing Services
- (1) Onsite Installation & Misc. Material

I/O Points INCLUDED as standard with each LS RTU for sites listed above:

The following I/O points are provided standard with this product. On/Off, or Fault condition is indicated locally at the unit, and remotely at any SCADA HMI Workstation. Any monitoring point has the capability of being configured as an alarm in the SCADA software. Any unused points listed, i.e., there is no 3rd pump, is capable of being used to monitor/control other discrete devices.

TCU Monitor Points (DI & Logic)

- 1) Pump 1 Status*
- 2) Pump 1 Start Fault
- 3) Pump 1 Stop Fault
- 4) Pump 2 Status*
- 5) Pump 2 Start Fault
- 6) Pump 2 Stop Fault
- 7) Pump 3 Status*
- 8) Pump 3 Start Fault
- 9) Pump 3 Stop Fault
- 10) Pump 1 HOA in HAND
- 11) Pump 1 HOA in AUTO
- 12) Pump 1 HOA in OFF
- 13) Pump 2 HOA in HAND
- 14) Pump 2 HOA in AUTO
- 15) Pump 2 HOA in OFF

TCU Monitor Points (AI & Logic)

- 1) Well Level Transducer (4-20 mA)*
- 2) Well Level Transducer Input Fault
- 3) Auxiliary Analog Input (4-20 mA)*
- 4) Auxiliary Analog Input Fault

TCU Control Points (DO & Logic)

- 1) Pump 1 Control*
- 2) Pump 1 Disable
- 3) Pump 2 Control*
- 4) Pump 2 Disable
- 5) Pump 3 Control*
- 6) Pump 3 Disable
- 7) Total Station Disable
- 8) Alarm Horn Control*
- 9) Alarm Horn Disable

- 16) Pump 3 HOA in HAND
- 17) Pump 3 HOA in AUTO
- 18) Pump 3 HOA in OFF
- 19) Low Well Level Float*
- 20) Off Well Level Float*
- 21) Lead Well Level Float (spare DI if no floats)*
- 22) Lag Well Level Float (spare DI if no floats)*
- 23) Lag2 Well Level Float (spare DI if no floats)*
- 24) High Well Level Float*
- 25) Float Sequence Fault (n/a if no floats)
- 26) Auxiliary Discrete Input*
- 27) Phase Voltage Fault
- 28) Phase Sequence Fault
- 29) Phase AB Voltage*
- 30) Phase AC Voltage*
- 31) RTU Memory Fault
- 32) AC Power Fault*
- 33) DC Bias Voltage Fault
- 34) Alarm Silence Button*
- 35) Alarm Horn Status
- 36) Alarm Light Status

- 10) Alarm Light Control*
- 11) Alarm Light Disable
- 12) Auxiliary Output*
- 13) Auxiliary Output Override
- 14) Auxiliary Output Disable

**Represents physical wire connection, all other points are logic*

3. (3) LIFT STATION AND (1) STORMWATER WITH VFD OPERATIONS (See Addendum A, Pay Item 26)

The VFDTU RTU contains a Telemetry Control Unit with Radio (TACPAC TCU), Rail Input/Output (RIO) module, relays, loop isolators and other appurtenances to monitor and control up to three pumps both locally and remotely. The pumps can be manually controlled locally at VFDTU in both automatic and manual operations by using the Hand-Off-Auto selector switches on the TCU, or remotely if the local H-O-A selector on the TCU is in Auto via the HyperSCADA Server. Using the "Automatic" scenario, up to 3 Variable Frequency Drive (VFD) pumps are controlled to manage the process. The standard TCU program Ver. 2.0 was customized to operationally control VFDs and the VFDTU program still has many similar functions to the standard TCU operation.

Lift Stations 1, 2 & 5 Level Monitoring

The level at these lift stations are presently monitored using a bubbler system and pressure transducer. The control system for the dual air compressors are to remain as is.

VFD Drives

All four stations are of a VFD duplex configuration. The drives for each site are as follows;

- Lift Station 1: (2) Yaskawa P1000
- Lift Station 2: (2) Yaskawa P7
- Lift Station 5: (2) Yaskawa P1000
- SWPS Blue Villa: (2) Schneider Altivar 61/71

Noted - The ability to operate regular Float mode and to configure Modbus via the LCD screen has been removed from the functionality. To use additional Modbus points beyond the default configuration (1.00001-8, 1.10001-8, 1.30001-4 and 1.40001-4) must be configured via WinRTU or the PLC/TCU editor.

General Operation Principles

When placed in the "Hand" position, the pumps are started and the speed manually controlled using the buttons on the key pad of the TCU.

In the "Auto" control mode, the pumps are controlled by the automatic algorithm. The "Lead" VFD pump operates first, followed by the Lag and Lag 2 pumps. Pump staging is controlled by one of two methods and pump speed is control by one of two methods, all depending on the configuration of the TCU. Details of these operations are described later in this narrative. When in Auto the pump may also be manually overridden to start, or be disabled via the telemetry system. When a pump is manually overridden to start the pump's speed command will be set to the predetermined speed as set in the TCU. Any pump operating, including any pump operating under the automatic algorithm will also be brought to this speed. The details of the VFDTCU's operation are outlined below.

Process Controller

The VFD TCU is capable of two basic modes of process control, Fixed Set Point and Variable Level Control.

Fixed Set Point Controller

The aim of the Fixed Set Point Controller is to match the Process control Variable (PV) to the Process Set Point (Process Setpt). In a lift station application it would maintain a fixed level in the Wet Well, in doing so it will basically match the effluent flow to the lift stations influent flow. So in this case the controller would operate from the wet well transducer that controls the pumps staging (PV from Analog 1 input (C1), VFD PV Xducer 1 in the Menu).

The Fixed Set Point Controller can also operate using the AUX (C2) analog input as the PV (configured by the VFD PV setting in the TCU's VFD menu). An example of this usage would be providing control of a constant Flow requirement (PV coming in from a flow meter on Analog 2 (C2), VFD PV AUX) that would match the effluent flow rate of the pumps to the Process Setpt, keep in mind pump staging would still come from the XDUCER 1 (C1). A summary for this scenario would be, the pumps would be turned on and off by the wet well level (Xducer 1 (C1)), and once running would maintain a specific flow rate set point using a PV from (AUX (C2)).

To achieve either of the above applications the VFDTCU will vary the pump speed between the MIN and MAX SPD set points to maintain the PV as defined by the operator adjustable Process Setpt point using a PID algorithm. The PID algorithm may be tuned by adjusting the P, I, and D set points.

Variable Level Controller

Variable Level Control allows the well level to travel up and down between the LEAD OFF and LAG ON or LAG2 ON setting, the pump speed control is Proportional to the level. Only Analog 1 input (Xducer 1 (C1)) can be used in this controller and PROC SETPT sets the Min Speed for the VFD; LAG ON sets the MAX VFD speed with 1 VFD running and LAG2 ON when more than 1 VFD is running.

What this permits is a very unique method of operation for wet well control. As the level of the wet well reaches the LEAD ON set point, the first pump will start. The speed the VFD starts at, will be determined by the Level of the PROC SETPT and the LAG ON set point. The closer the LEAD ON set

point is to the LAG ON set point the VFD start speed will be closer to MAX speed and likewise, if set closer to the PROC SETPT the slower the start will be.

With this control arrangement the system can use more area of the wet well to modulate the VFD speeds and thereby dampening system surges. During periods of low flow cycling cannot be prevented, only minimized. This process was implemented to make an area of the wet well below min speed that could be used as a buffer to prevent pump cycling when moving into periods of low and very low flows.

VFD Speed Control

When in automatic the VFD speed control output will be limited by the operator defined MIN and MAX SPD set points. The MIN and MAX SPD set points are applicable during both automatic and manual operation. While operating under the automation programming all pumps will operate at the same speed once ramping is complete, with two exceptions: If any pump is placed into Hand locally at the TCU or if Pump 3 Lag is Enabled. If any pump is placed into HAND at the TCU all pump will operate at the OvrD Sped Set speed, and if PMP 3 LAG is Enabled Pump 3 will operate at the OVRD SPED SET speed.

Ramp Speed defines the acceleration of a pump when a VFD is initially called to run. It will gradually increase speed from 0% to the desired control output in increments defined by the RAMP SPD set point until the pump's speed equals the process control output speed. Once the VFD ramp speed has met the control output the ramp speed function is disabled. Ramp speed is applicable during automatic operation and when placing a pump in HAND.

Pump Staging Controller

The VFDTCU is capable of two modes of pump staging controls, Level (XDUCER 1 (C1)) and Speed.

Level

When LEVEL mode is selected the pumps will be staged on and off using their LEAD, LAG and LAG2 ON and OFF set points that correspond to XDUCER 1 (C1).

Speed

When SPEED mode is selected the VFDTCU will stage pumps on using their LEAD, LAG and LAG2 ON Level set points using XDUCER 1 (C1). Staging off the pumps will use a Speed set point (Spd Setpt in the TCU's VFD menu options) in conjunction with the ON set points and the Min Run Timer value. Operation will be in the following manner.

The basic staging off operation will begin when the speed command to the pumps is at or below the Spd Setpt. However, two additional criteria must also be met; first the PV from XDUCER 1 (C1) must not be at a level that the LEAD, LAG or LAG2 ON set point would be active for the pump being staged off, and the Timer to stage off must have timed out. The Min Run Timer value is used in the staging timer during the stop process when this method is used. The Min Run Timer value is configurable in the TCU's menu.

Additional Alternation Modifiers

The standard alternation scheme may be modified in with VFDTUCU additional options.

LAG 2 Pump Standby

The LAG2 STDBY option, when enabled, the Lag 2 position pump will be handled as a stand by pump and will only be called in the event the Lead or Lag pumps fault. It is not recommended and this option should not be used with regular TCU Alternation modifiers.

Pump 3 LAG only

The PMP 3 LAG option, when enabled, Pump 3 will always be called to run in the Lag position, and the speed of the Pump 3 will be fixed at the OvrD Spd Set. This option cannot be used with regular TCU Alternation modifiers.

The LAG2 STDBY option and PMP3 LAG options may be used together.

Alternation by Time

Alternation is typically triggered when the Lead pump is called to Run. The VFDTUCU is also capable of triggering the alternation using a HOUR ALT set point. When used pump alternation will occur on the hour that is programmed into the set point and Lead Pump run trigger is disabled. When the set point is set to 24 the HOUR ALT function is disabled.

Fixed Pump Rotation

When fixed Pump order is desired set the ALTERNATE option to "None", and ensure the VFDTUCU alternation modifiers are disabled, and select the lead pump using the LEAD option (1, 2, or 3). During this mode the pump assigned to the lead position will always be called to run as Lead. Lag and Lag2 will follow in order. For example, with the LEAD option set to 2; Lead will call Pump 2, Lag will call Pump 3, and Lag2 will call Pump 1.

Manual VFD Control

When a pump is placed into the HAND position or Overridden in Auto via telemetry, the pump will be called to run at a fixed speed determined by the operator defined OVRD SPD SET set point. Once called to run the pump speed may be adjusted up by using the 1 key (+1%) and 2 key (+5%) and down using the 7 key (-1%) and 8 key (-5%). Any change made to the manual pump speed will be stored in the OVRD SPD SET set point.

Float Backup Mode

The float backup mode in the VFDTUCU operates differently from the regular TCU depending on the configurations. If the High Float is ENABLED it will call all pumps when actuated and the speed Command to all pumps will be set at the OvrD Spd Set. If the Low Float is DISABLED the VFDTUCU will run the pumps until the High Float is no longer actuated and the Minimum Run Timer has expired, this operation is similar to a standard TCU operation. If the Low Float is ENABLED the TCU will maintain pumping operation until the Low Float is tripped, and the Minimum Run Timer has expired.

VFD TCU Set points

All set points residing in the TCU will have default factory set points when shipped. New set points values can be entered locally at the TCU via the LCD screen, or remotely from the Central telemetry via the PLC/TCU editor, default or custom screens if configured. The new values will be retained in the TCU in the event of a power cycle.

No Data Flow or Data Flow compatible equipment is currently located at this site.

The Utility will be required to provide personnel to make the site available when work is scheduled.

EACH VFD TCU SITE SHALL INCLUDE:

- (1) Stainless Steel NEMA 4X 36" x 30" x 10" Enclosure painted white UL
- (1) Rail Input Output Module (RIO032)
- (1) Telemetry Control Unit (TCU001)
- (1) Meanwell Power Supply 12V DC
- (2) 7.0 Ah Battery w/shelf
- (3) 120V TPDT Octal Relay w/Base
- (2) 12V DPDT Octal Relay w/Base
- (5) Edco DRS036 Din Rail Surge Protector
- (4) API Loop Isolator w/base
- (1) RTU Surge Protection (*TFS*, & *Polyphaser*)
- (1) Mounting hardware as required for panel
- (1) RS-485 Converter
- (1) Rohn Tower Assembly
- (1) Yagi Antenna w/Coaxial Cable
- (1) FCC Licensing Services
- (1) Onsite Installation & Misc. Material

VFD TCU I/O:

DIGITAL INPUT (DI)	DIGITAL OUTPUT (DO)	ANALOG INPUT (AI)	ANALOG OUTPUT (AO)
(2) DI PUMP STATUS PHASE MONITOR LOW FLOAT HIGH FLOAT INTRUSION ALARM	(2) PUMP START DO AUX OUTPUT DO ALARM LIGHT DO ALARM HORN	TRANSDUCER 1 SPEED FEEDBACK (2)	PUMP SPEED CMD (2)

4. LOT, RECOMMENDED SPARE PARTS (*See Addendum A, Pay Item 22*)

Includes:

- (2) TAC Pack TCU (for standard lift stations)
- (1) VFD-TCU w/Radio (for VFD lift stations)
- (1) RIO-032 I/O Expansion Device
- (1) Telemetry Interface Module/radio (for CTU)
- (1) Network Interface Module
- (1) Power Supply Module
- (1) TCU Protective Case (TPC003, for 3 TCU products)
- (1) Spare Module Protective Case (SMC009, for spare plug-in modules)

WORK TO BE PERFORMED BY DFS:

DFS will install the central site and all RTU equipment. DFS will install the antenna/tower hardware at each

location. DFS will mount the enclosure on the tower or inside building. Any conduit provided by DFS will be PVC rigid and/or flexible and is limited to 30 feet. Trenching under or cutting/patching of sidewalks, parking lots, streets, etc. is not provided by this scope and will be the responsibility of others. DFS will develop all RTU configurations w/HMI screens at the central site and provide operator training.

WORK TO BE PERFORMED BY UTILITY / UTILITY IT / OTHERS:

1. The UTILITY will be required to provide one (1) telephone line (standard dial-up) for the HSS that is dedicated for the system's 911 Alarm Dial-out Notification (a modem). Alternatively, a Verizon T2000 phone line to cell link adapter can be purchased and utilized for an additional cost and cellular data plan.
2. The UTILITY will be required to provide an additional telephone line (standard dial-up) connection, or preferably a secure VPN network connection that permits DFS to access the HSS remotely for the system maintenance/warranty support, updates and software upgrades.
3. The workstation computer offered below from DFS is optional. A primary workstation computer is required. Most existing modern workstation computer(s) can be setup by the UTILITY to access the SCADA system (HSS) via local network connection or remotely via VPN secured connection. All network connections to the SCADA System shall be the responsibility of the UTILITY.
4. If use of the included HT4 Mobile is desired, the UTILITY must supply a secure VPN router access to the Internet. The smartphone(s) and cell service are also the responsibility of the UTILITY. Also note that custom screens must be created for effective display on a mobile device. Custom screens for HT4 Mobile are not included in this proposal.
5. Contact DFS Service for specific VPN details and open port requirements for items above. This information is not published for security purposes.
6. Ensure 120 VAC power is near the location of the DFS equipment for connection to power.
7. All required instrumentation devices either exist, or shall be provided and installed by UTILITY/others. These devices must be installed prior to the DFS installation services.
8. Some sites may require tree-trimming to avoid adverse effects to the antenna RF signal. Any required tree-trimming is responsibility of the UTILITY.
9. All required underground locate information must be provided before DFS installation services can be scheduled. DFS will provide an underground locate information form. The UTILITY will be the underground locate Point of Contact. The UTILITY must provide a contact name and phone number for use by locate services should they need to gain access to a secured area or are unable to find the site based on locate info provided by UTILITY.
10. Any required permitting and associated fees.
11. Make sites available when work is scheduled, and have personnel available to operate system as needed when DFS work is scheduled.

PAYMENT & TERMS: All Prices in this proposal consider the Utility Tax exempt, so do not include Sales Tax

SCADA as a SERVICE (SaaS)

This quotation offers our SCADA as a Service (SaaS) program. Under the SaaS program, you pay a one-time install fee for installation of the system, then a monthly service fee to utilize the SCADA System. DFS will own and maintain the SCADA System equipment and keep in in good working condition for your use. The SaaS program includes lifetime equipment warranties, product repairs, upgrades, technical support, and DFS onsite service for the entire life of the program. The Utility will be expected to assist in the simple maintenance of the SCADA equipment that cannot be accomplished remotely by DFS, such as swapping a

failed module or component with a spare. If a simple module or component swap doesn't resolve the SCADA issue, DFS will provide onsite services and resolve the SCADA issue at no added charge.

The term of our Service Agreement requires no less than 120 monthly service fee payments per location. Upon expiration of the term the Utility can: 1) Continue the program on a month-to-month basis without change to the established service prices; or 2) Discontinue the SaaS program and return the equipment to DFS.

The "one-time install fee" is due upon acceptance of the SaaS agreement and the monthly billing period for each site will commence when the RTU equipment is installed and placed into operation at the site.

The Recommended Spare Parts as listed above will be provided with the SaaS option. The following represents the SaaS Pricing for the complete system as offered in the purchase quote above:

ONE-TIME INSTALL FEE:

QTY	ITEM	HH ITEM #	PER UNIT	TOTAL
1	CENTRAL SITE INSTALLATION FEE	11	\$4,006.00	\$4,006.00
1	CTU WITH ANTENNA/TOWER	17	\$1,470.00	\$1,470.00
1	TRAINING	6	\$1,680.00	\$1,680.00
18	LS CONSTANT SPEED INSTALLATIONS	25	\$2,108.00	\$37,944.00
9	SW CONSTANT SPEED INSTALLATIONS	25	\$2,108.00	\$18,972.00
3	LS WITH VFD INSTALLATIONS	26	\$8,601.00	\$25,803.00
1	SW WITH VFD INSTALLATION	26	\$8,601.00	\$8,601.00
		TOTAL		\$98,476.00

MONTHLY SERVICE FEES:

QTY	ITEM	HH ITEM #	UNIT MONTHLY FEE	TOTAL MONTHLY FEE	TOTAL ANNUAL FEE
1	TAC II CENTRAL SITE PACKAGE	11	\$254.00	\$254.00	\$3,053.00
18	LS CONSTANT SPEED OPERATION	25	\$67.50	\$1,215.00	\$14,580.00
9	SW CONSTANT SPEED OPERATIONS	25	\$67.50	\$607.50	\$7,290.00
3	LS WITH VFD OPERATIONS	26	\$215.00	\$645.00	\$7,749.00
1	SW WITH VFD OPERATIONS	26	\$215.00	\$215.00	2,580.00
1	SPARE REQUIREMENTS (*)	22 & 28	\$124.00	\$124.00	\$1,488.00
		TOTAL		\$3,060.50	\$36,726.00

(*) Cost difference in spares is due to less spares required on the project, fewer RTU modules.

SAAS NOTE: The Workstation Computer is not provided with, or covered by, the SaaS program. Purchase Optional Adder "A" if computer Workstation Computer is required.

Should you have any questions or require additional information, please contact Tom Hogeland at 321-259-5009.

OPTIONAL ADDERS – Not included in the SaaS Price (See Addendum A, Pay Item 12)**A. (1) PRIMARY WORKSTATION COMPUTER \$1,935.00**

Lenovo ThinkCentre M920q Tiny “All-in-one” Computer – per minimum specs below:

Display: 23.8" WLED Borderless Panel, 1080p, antiglare, multi-touch

System Stand: Lift/Tilt/Pivot Adjustment

Processor: Intel Core i7-8700T – 2.4GHz

Operating System: Windows 10 Pro 64

Memory: 16GB (8GB + 8GB) DDR4 2400MHz

Video Adapter: Integrated Intel HD Graphics

Audio: Integrated audio

First Hard Drive: 256GB Solid State Drive

Keyboard: Lenovo Essential Wireless Keyboard

Pointing Device: Lenovo Wireless Mouse

QUOTATION NOTES:

1. Only those items and services specifically listed above are included in this quotation.
2. Under the purchase and lease-purchase options, the DFS standard product and service warranty shall apply. A DFS lease-purchase contract is required.
3. A DFS Service Agreement (drafted by DFS, attached) is required with the SCADA as a Service (SaaS) option. Products provided under SaaS program may be new, used, previous legacy models, and/or reconditioned from DFS' SaaS equipment inventory.
4. All applicable taxes must be added to quotation total.
5. DFS will coordinate assignment of the station radio address directly with the utility to ensure that any existing scheme employed by the utility is adhered to and that consideration is given to methods which achieve the best polling loop efficiency.
6. Ensuring the site is ready when services are requested is the responsibility of the customer/contractor. Additional trips and site services beyond those listed above will be billed on a time and material basis via change order. If cause of the additional activity is responsibility of DFS, a change order will not be required.
7. This quotation identifies work that is the responsibility of others as defined above. It must be noted that if DFS personnel arrive at the job site as scheduled, and the "responsibility of others" work has not been completed, a Change Order will be required for the return trip.
8. DFS employees will not enter "Confined Spaces" and/or "Permit-Required Confined Spaces" as defined by OSHA. Any such requirement will be performed by others.
9. All electrical equipment to be accessed by DFS employees must be temporarily removed from service during the performance of our scope of work.
10. This quotation does not include any required permitting, sealed drawings, or associated fees.
11. DFS' Standard Warranty applies to this project. www.dataflowsys.com/products/warranty-statement.php
12. All DFS-supplied stainless-steel enclosures for outdoor applications are powder-coated white to meet internal heat requirements. Sun-shields and/or air conditioning is not required by the DFS warranty and shall not be supplied under this scope regardless of enclosure specification requirements.
13. Radio Study General Exception - The antenna requirements are based on our radio study. Our radio study calculations are produced by DFS proprietary software algorithms and trade secrets. This information is confidential and will not be provided. Radio study summary information and topological maps are general in nature and can be provided under this proposal during the submittal process when requested.

14. This quotation stipulates that DFS existing insurance provider(s) and policy coverage are acceptable. In the event that you require a change to insurance provider(s), additional coverage, and/or amending the terms of our existing policies, we reserve the right to void and withdraw this quote and replace it with an amended quote which contemplates and provides for the recovery of the cost associated with analyzing and complying with different insurance requirements. Policy information can be found at <http://www.dataflowsys.com/company/documents/insurance-coverage.pdf>
15. This quotation is formatted and priced for a direct purchase from the utility. If this scope is to be purchased by others, a revised quote is required to cover additional project administration charges. These additional charges cover routine contractor/developer requirements such as contract management, submittal preparation, project coordination, owner notices, etc.

APPENDIX A RENTAL PRICING FROM HOLLY HILL PROPOSAL

SCADA AS A SERVICE (RENTAL)

This Appendix A offers our SCADA as a Service (SaaS) program, which is essentially a SCADA equipment and software rental program. Our SaaS program includes the same items and services as a purchased system. Under the SaaS program, you pay a one-time install fee for installation of the SCADA equipment/software, then a monthly service fee to utilize the SCADA equipment/software. The installation fee includes labor as well as the physical Rohn Tower Structures with concrete base that are installed to support the antenna hardware, the enclosures supplied by DFS to house the SCADA equipment, conduit and wire. These specific hardware items provided with the installation fee shall become property of the City. DFS will own and maintain the SCADA equipment and SCADA software, and DFS will be responsible for keeping these items in in good working condition for the City's use. The SaaS program includes lifetime equipment warranties, product repairs, upgrades, technical support, and DFS onsite service for the entire life of the program. The City will be expected to assist in the simple maintenance of the SCADA equipment for actions that cannot be accomplished remotely by DFS, such as swapping a failed module or component with a spare. If a simple module or component swap doesn't resolve the SCADA issue, DFS will provide onsite services and resolve the SCADA issue at no added charge.

A DFS Service Agreement is provided with this bid. The agreement(s) provided in the City's bid package are not suited to accommodate our approach.

Pay Item Number	Description	QTY	One Time Fee	ANNUAL Service Fee
1	Mobilization	1	\$6,500.00	N/A
2	As Builds	1	Included	Included
3	Engineering Evaluation Study for the Whole System as outlined in the Scope of Services as outlined in Appendix A	1	Included	Included
4	Radio Frequency Path Analysis Study	1	Included	Included
5	Initial FCC Licensing Service and Fees	1	Included	Included
6	Two-week onsite SCADA Operational Training & Instruction for up to eight (8) utility personnel	1	\$1,680.00	N/A
7	Radio Repeaters and /or forward terminal units (if needed) with Antennas, Programming and Onsite Installation Services	1	N/A	N/A
8	One (1) Year Onsite Unconditional Warranty on complete	1	Included	Included

	SCADA System			
9	2 nd & 3 rd Year Return to Factory Warranty for all RTU I/O Modules, Radios and Power Supplies, to include damage by Lightning and Surge.	1	Included	Included
10	3-year return to factory Lightning Warranty for all RTU I/O Modules, Radios and Power Supplies damaged by Lightning and Surge.	1	Included	Included
11	Central Station Including All Components and Radio	1	\$4,006.00	\$3,053.00
12	WTP Workstation Computer	1	\$1,935.00	\$500.00
13	WWTP Workstation Computer for WWTP Lab and Tower	2	\$3,870.00 (for both)	\$1,000.00 (for both)
14	SCADA Server Hardware (to include redundancy)	1	Included	Included
15	SCADA Software Program	1	Included	Included
16	Onsite Installation, Integration and Programing for SCADA Server Hardware and Software	1	Included	Included
17	Central Terminal Unit (CTU) with Central Antenna System and Onsite Installation Services	1	\$1,470.00	Included
18	WTP Remote Terminal Units (RTU), Monitoring and Control, with Antenna System, PLC Programming and Onsite Installation Services	1	\$11,125.00	\$5,114.00
19	Radio Repeaters and /or forward terminal units (if needed) with Antenna System, Programming and Onsite Installation Services	1	N/A	N/A
20	Well Remote Terminal Units (RTU), Monitor and Control with Antenna System, PLC Programming and Onsite Installation Services	7	\$41,189.00 (for all 7)	\$5,783.00 (for all 7)
21	Well Remote Terminal Units (RTU), Monitor only with Antenna System, PLC Programming and Onsite Installation Services	4	\$14,431.00 (for all 4)	\$3,035.00 (for all 4)
21A	Elevated Storage Tank (EST) Remote Terminal Units (RTU), Monitor only with Antenna System, PLC Programming and Onsite Installation Services (THIS WAS A DUPLICATE ITEM)	1	\$3,241.00	\$729.00
22	Phase One recommended System Spare Parts (to include at least one of each type of RTU module used in the system)	1	N/A	\$1,495.00
PHASE 1 – FEE SUBTOTALS			One Time Fees	ANNUAL Service Fees
			89,447.00	\$20,209.00
			86,206.00	\$19,480.00

Pay Item Number	Description	QTY	One Time Fee	ANNUAL Service Fee
23	Phase Two: WWTP Remote Terminal Units (RTU), Monitoring and Control, with Antenna System, PLC	1	\$33,179.00	\$24,005.00

	Programming and Onsite Installation Services			
24	Phase Two recommended System Spare Parts (to include at least one of each type of RTU module used in the system)	1	N/A	\$988.00
PHASE 2 – FEE SUBTOTALS			One Time Fees	ANNUAL Service Fees
			\$33,179.00	\$24,993.00

Pay Item Number	Description	QTY	One Time Fee	ANNUAL Service Fee
25	Phase Three Lift Stations RTU (Fixed Speed) with Antenna System, RTU Programing and Onsite Installation Services	28	\$59,021.00 (for all 28)	\$22,694.00 (for all 28)
25A	<i>This number represents the cost of each from the above line ANNUAL/12 = \$67.54 (ROUNDED TO \$67.50)</i>	EA	\$2,108.00	\$810.5
26	Phase II Duplex VFD-Pump Lift Stations with Antenna System, RTU Programing and Onsite Installation Services RTUs	2	\$17,202.00 (for both)	\$5,166.00 (for both)
26A	<i>This number represents the cost of each from the above line ANNUAL/12 = \$215.25 (ROUNDED TO 215.00)</i>	EA	\$8,601.00	\$2,583.00
27	Radio Repeaters and/or forward terminal Units (if needed) with Antenna, Programing and Onsite Installation Services (Price Only to be determined after Design is complete)	1	N/A	N/A
28	Phase Three recommended System Spare Parts (to include at least one of each type of RTU module used in the system)	1	N/A	\$1,983.00
29	3-year return to factory Lightning Warranty for all RTU I/O Modules, Radios and Power Supplies damaged by Lightning and Surge.	1	Included	Included
PHASE 3 – FEE SUBTOTALS			One Time Fees	ANNUAL Service Fees
			\$76,223.00	\$29,843.00

Pay Item Number	Description	QTY	One Time Fee	ANNUAL Service Fee
30	FCC Licensing Services & Fees	1	Included	Included
31	FCC Radio License Renewal Services & Fees for life of SCADA System (minimum of 10 years)	1	Included	Included
32	Annual SCADA Software License Fixed Price for 10 year	1	Included	Included
33	Annual SCADA Software I/O Tag License for Ten (10) Years Fixed Price	1	Included	Included
34	SCADA Software User Seats/Clients License for Ten (10) Years	1	Included	Included

35	Annual SCADA Software Maintenance Cost fixed price for Ten (10) Years to include remote support, updates, Hardware (Including 3 Computers and 1 Server), revisions, and releases)	1	Included	Included
36	Annual SCADA Software Warranty fixed price for Ten (10) Years	1	Included	Included
PHASE 1 (CONTINUED) – FEE SUBTOTALS			One Time Fees	ANNUAL Service Fees
			\$ 0	\$ 0

ONE-TIME-FEE**Write Out the One Time Total Fee for the SCADA System:**

One Hundred Ninety Eight Thousand Eight Hundred and Forty Nine dollars (\$198,849.00)

RECURRING FEE (ONE YEAR)**Write Out the Total Recurring Annual Fixed Fee for the SCADA System for a period of 1 year:**

Seventy Five Thousand and Forty Five dollars (\$75,045.00)

RECURRING FEE (TEN YEARS)**Write Out the Total Recurring Annual Fixed Fee for the SCADA System for a period of 10 years:**

Seven Hundred Fifty Thousand Four Hundred and Fifty dollars (\$750,450.00)