

Exhibit A

City of Winter Springs 2024 Fire Hydrant Inspections and Testing February 2024

SCOPE OF SERVICES

GENERAL

Hydrant maintenance is essential to public safety, property protection, and optimized water quality (related to flushing). In accordance with Seminole County Fire Department's annual requirement, the City of Winter Springs will be completing fire hydrant inspections and testing in 2024. Carollo Engineers, Inc. (CONSULTANT) and Hydromax USA (SUBCONSULTANT) will provide services for all Winter Springs fire hydrants to be located, inspected, exercised, lubricated, documented, and painted. Hydrants will also be flow tested (compliant with AWWA M-17 standards). The previously developed potable water hydraulic model will also be utilized to further generate hydrant flow data. Communication with the residents of Winter Springs will be a priority as hydrant exercising/change in direction of flow may cause some discoloration to potable water.

Carollo Engineers Inc. (CONSULTANT) will provide these engineering services to the CITY under the terms of the Agreement for Continuing Civil Engineering Services. This scope of services is an effort to provide an encompassing but not all-inclusive list of duties and responsibilities that may be requested from the CONSULTANT under this task authorization.

TASK 1 – PROJECT MANAGEMENT, QUALITY ASSURANCE/CONTROL, AND COMMUNITY OUTREACH

Task 1 includes aspects of project and quality management to provide effective delivery of the PROJECT. Specific items included in Task 1 are detailed in the subtasks described below.

Task 1.1 – Project Management, Communications and Meetings

The CONSULTANT will provide overall project management and communication between the SUBCONSULTANT and the CITY. The CONSULTANT will track and manage the budget, project tasks, and schedule.

The CONSULTANT will attend and manage project meetings, as needed. This project anticipates as-needed progress meeting to be held in the allotted budget to facilitate coordination, review design modifications, and make decisions to keep the project moving forward.

Task 1.2 – Quality Assurance/ Control

The CONSULTANT will coordinate quality control and quality assurance review of the project including review of all deliverables, and oversight/facilitation of communication between the CITY, SUBCONSULTANT, Seminole County Fire Department, and any regulatory agencies.

Task 1.3 – Community Outreach

The CONSULTANT will coordinate with the CITY's Public Communications Officer to ensure residents are properly informed of the ongoing maintenance activities in their area. Because some natural discoloration to potable water could occur as a result of changes in flow direction (when hydrant valves are opened/close), transparent, timely, and effective communication with the Winter Springs community will be a key component of this Task.

Task 1 Deliverables:

- As-needed meeting agendas, presentations, and minutes (electronic).
- Monthly progress reports (pdf).
- As-needed community outreach documentation.

TASK 2 – DEVELOPMENT OF HYDRANT INSPECTION PLAN

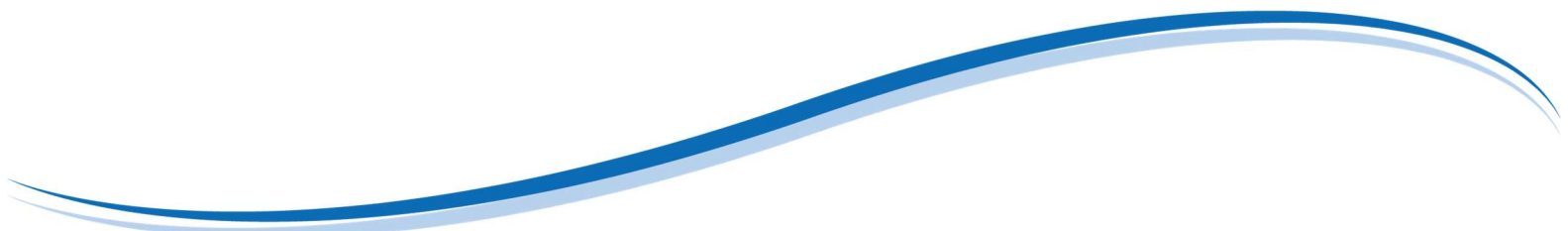
Under this task, the CONSULTANT will use the CITY's GIS and calibrated hydraulic model to develop an inspection plan to assess and inventory all Winter Springs' fire hydrants. A high-level flushing plan will also be developed as hydrant exercising, which may cause a change in direction of flow, could potentially result in discoloration to potable water. Through strategic planning, the intent is to manage the order of hydrant flushing and respective flow patterns within the distribution system. The CONSULTANT will provide support and guidance to the SUBCONSULTANT with inspection and flushing procedures, in addition to as-needed field oversight within the allotted budget.

Task 2 Deliverables:

- Hydrant inspection plans (PDF).

TASK 3 – HYDRANT INSPECTIONS AND TESTING

Under Task 3, Hydromax USA (Hydromax), the SUBCONSULTANT, will complete hydrant inspections at all of the CITY's fire hydrants, in accordance with AWWA M-17 standards. Some of the services under their scope include: locate and access each fire hydrant, lubricate operating nut and all nozzle outlets, open hydrant, verify hydrant valve completely seals, record static pressure, document all findings, scrape/wire brush/paint all hydrants, etc. All hydrants will also be flow tested but some may be physically flowed, while others are tested via the potable hydraulic model. Please refer to the attached SUBCONSULTANT scope for full details.



Task 3 Deliverables:

- Inspection reports for all Winter Springs fire hydrants (PDF).

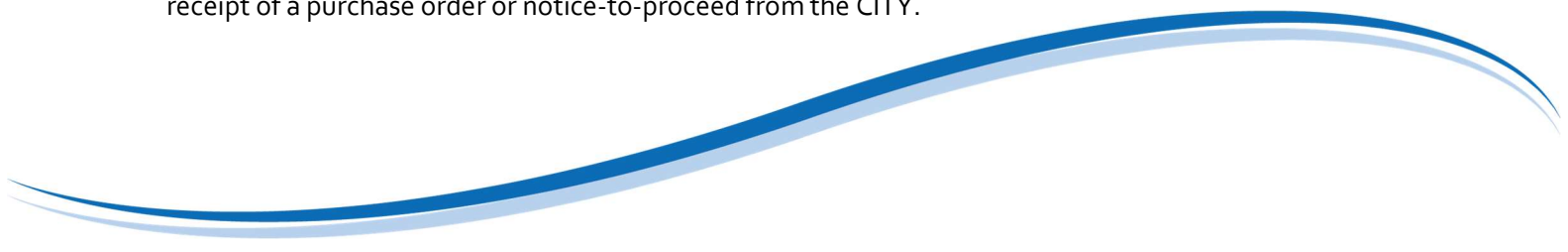
CITY RESPONSIBILITIES

Because of the nature of this project, certain assumptions apply to this Scope of Services. To the extent possible, these assumptions are stated within this document and are reflected in the budget. If the project task requirements are different from the assumptions presented in this Scope of Services, or if the CITY desires additional services, the resultant change in scope will serve as a basis for amending this project assignment or initiating the development of a new project assignment as agreed to by both the CITY and CONSULTANT. The following assumptions and CITY responsibilities apply to this project:

- The CONSULTANT shall be entitled to rely upon the accuracy of the data and information supplied by the CITY without independent review or evaluation.
- The CITY shall attend all workshops and review meetings to maintain the progress of the project according to the schedule.
- The CITY will provide the CONSULTANT with access to treatment facilities for data gathering, data validation and the design process.
- The CITY will assist with data collection and site testing as necessary, including accompanying the CONSULTANT and leading operation of the facility.
- The CITY will provide all required information within the period established in the schedule contained in this Scope of Services. The schedule is based on timely receipt of data and the bid process from the CITY. The CITY shall review Draft deliverables and provide comments to the CONSULTANT on a prompt basis.
- The services to be performed by the CONSULTANT are intended solely for the benefit of the CITY. No person or entity not a signatory to this Scope of Work shall be entitled to rely on the CONSULTANT's performance of its services hereunder, and no right to assert a claim against the CONSULTANT by assignment of indemnity rights or otherwise shall accrue to a third party as a result of this Scope of Work or the performance of the CONSULTANT's services hereunder.
- In providing opinions of cost, financial analyses, economic feasibility projections, and schedules for potential projects, the CONSULTANT has no control over cost or price of labor and material; unknown or latent conditions of existing equipment or structures that may affect operation and maintenance costs; competitive bidding procedures and market conditions; time or quality of performance of third parties; quality, type, management, or direction of operating personnel; and other economic and operational factors that may materially affect the ultimate project cost or schedule. Therefore, CONSULTANT makes no warranty that the CITY's actual project costs, financial aspects, economic feasibility, or schedules will not vary from CONSULTANT's opinions, analyses, projections, or estimates.

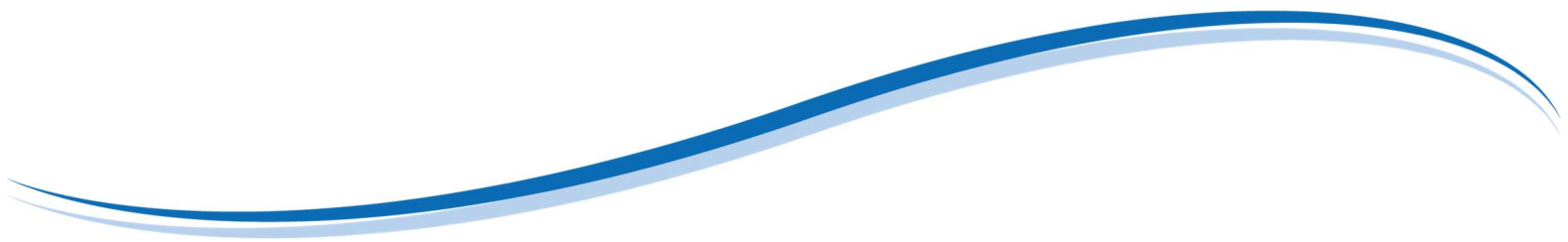
SCHEDULE

The scope of services outlined in this task authorization will be performed for up to 12-months from receipt of a purchase order or notice-to-proceed from the CITY.



PROJECT FEE

The compensation terms are based on an Hourly Not-to-Exceed basis with an upper limit of \$153,021.82 as shown in Exhibit B. Labor rates are based on the contract fee schedule shown in the base contract.



City of Winter Springs 2024 Fire Hydrant Inspections and Testing Budget													EXHIBIT B		
Labor Hours and Costs													Other Direct Costs		Task Total
													Subconsultants		
Task No.	Task Description	Principal Professional	Senior Professional ES VIII	Lead Professional ES VII	Project Professional ES VI	Proj Prof ES IV	Professional ES III	Assistant Professional ES II	Senior Technician ET VIII	Word Processing	Total Hours	Labor Cost	Expenses	Hydromax USA	
		\$291.00	\$250.63	\$228.05	\$208.69	\$176.05	\$153.63	\$133.89	\$166.67	\$86.63					
1	Project Management, QA/QC and Community Outreach	8	8	0	8	24	12	0	0	4	64	\$12,417.84	\$1,000.00	\$0.00	\$13,417.84
2	Development of Hydrant Inspection Plans	16	16	0	48	32	80	0	0	16	208	\$37,993.28		\$0.00	\$37,993.28
3	Hydrant Inspections and Testing	0	0	0	0	0	0	0	0	0	0	\$0.00		\$101,610.70	\$101,610.70
TOTALS		24	24	0	56	56	92	0	0	20	272	\$ 50,411.12	\$1,000.00	\$ 101,610.70	\$153,021.82

Winter Springs

Florida

Fire Hydrant Testing & Maintenance Program

February 20, 2024



February 20, 2024

Kunal Nayee, PE
Senior Engineer
Carollo Engineers
200 E Robinson Street, Suite 1400
Orlando, FL 32801

RE: Fire Hydrant Testing & Maintenance Program

Dear Kunal,

On behalf of Hydromax USA, I am pleased to submit this updated proposal for a Fire Hydrant Testing & Maintenance Program. Given the excellent qualifications of our team and personnel, experience with similar projects, and strong regional presence in Florida, Hydromax USA is uniquely qualified and well-positioned to help the Carollo Engineers and the City of Winter Springs develop and implement this program.

Established in 2003, Hydromax USA's team of world-class professionals and innovative solutions enable water and wastewater utilities to accelerate operational excellence, promote the continuity of critical infrastructure, protect the communities they serve, and invest funding where it matters most. HUSA has additional capabilities in the areas of non-intrusive/non-destructive pipeline condition assessment, leak detection, sanitary sewer evaluation surveys and multi-sensor inspections to give Winter Springs a full and accurate picture of its buried infrastructure. Simply put, we help communities thrive!

Our in-house crews and project managers have first-hand experience working with buried infrastructure for water and wastewater utilities, including Delray Beach, Orange County, Seminole County, and Tarpon Springs. Based upon a robust record of performance, our clients recognize that HUSA brings an exceptional ability to meet their needs for advanced data collection and they select us again and again.

As an ESRI Silver Partner, we have 70+ full-time GIS professionals in our data center that specialize in client information management, condition assessment program analytics, and customer reporting. Our proven processes and best practices in the areas of progress reporting, risk management and quality assurance help us to plan for and deliver projects on time and within budget.

Our team continues to be excited about this opportunity and looks forward to working with Carollo Engineers and the City of Winter Springs in the weeks ahead. Should you have any questions regarding the enclosed submittal, please do not hesitate to contact me directly at (727) 463-9191 or shannon.gooch@hydromaxusa.com. Thank you again for your time and consideration.

Respectfully,

Shannon Gooch

Shannon Gooch
Business Development Manager



Hydromax USA / Firm Capabilities

Hydromax USA provides a comprehensive suite of field assessment services supported by state-of-the-art technologies, industry-leading equipment, innovative techniques, and a team of dedicated and passionate professionals. We transform infrastructure data into actionable business intelligence, enabling our clients to make informed decisions regarding the renewal of their buried infrastructure and investment of critical resources.



Figure 1. Houston Program Valve Trailers

Water Field Services

- Valve assessment
- Fire hydrant maintenance
- Fire hydrant painting
- Asset mapping
- Unidirectional flushing
- Minor repairs
- Leak detection
- Pipeline condition assessment

Wastewater Field Services

- CCTV Inspections
- Sonar, Laser/LiDAR
- Pipeline cleaning
- Manhole inspections
- Flow Monitoring
- Smoke Testing
- Leak detection
- Pipeline condition assessment



Figure 2. Raleigh NC Hydrant Painting Program

Core Values



Safety

Safety is our highest priority, and we embrace our duty to protect each other, the communities we serve, and the environment.



Quality

Our holistic, digitalized approach to quality management ensures every result is traceable, verifiable, accurate, and complete.



Innovation

We collect critical asset data and develop actionable insights that accelerate operational excellence, reduce infrastructure risk, optimize resources, and protect vital resources.



Collaboration

We strive to become a true extension of our customer's team through our commitment to transparency, respect, credibility, and collaboration.

HYDRANT ASSESSMENT AND MAINTENANCE PROGRAM

Hydrant maintenance is an essential part of good distribution system management. Few things can harm a utility's reputation so quickly as a fire hydrant that does not work in an emergency.

Annual system-wide hydrant maintenance can help to improve the utility's ISO rating. It is also a visible sign to the public that the utility is "on the job" making sure fire hydrants are in working order to protect their property and personal safety. Annual hydrant maintenance can also play a vital part in maintaining water quality when incorporated into an organized flushing program. Hydromax USA's hydrant assessment and maintenance program is designed to comply with AWWA standards (including publication M17 - Installation, Field testing, and Maintenance of Fire Hydrants) and meet the requirements of oversight environmental agencies. Hydromax USA works to develop a comprehensive hydrant assessment and maintenance program that meets the individual needs of each utility.

Hydromax USA will develop an overall schedule of work to be approved by the Client, prior to commencement of work. HUSA will also provide all spatial and feature class attribute data collected, metadata, including a detailed citation describing field data collection practices, equipment settings, post processing procedures, base stations used for differential correction and expected accuracy will be submitted with final and interim data deliveries.

Hydromax USA can perform required repairs to bring hydrants in the system to 100% operability. Repairs will be captured, and HUSA will work with the utility to provide this data in a format suitable for Client documentation in the GIS systems.

Hydromax USA will also evaluate and analyze the results of the hydrant assessment program and develop an evaluation report for the Client. The evaluation report will include an analysis of the results of the program, findings, and recommendations. The following deliverable reports will be provided to the Client.

- Validated compliant database
- Annotated maps which depict the program area
- A list of recommended hydrant repairs
- Work orders for these repairs
- Repair Services



Figure 3. Hydrant Program in Cocoa FL



Figure 4. Hydrant Flushing in Memphis TN

Project Management Support

Hydromax USA employs a critical path project approach utilizing PMI principles and philosophies. This is designed to ensure a continuum of the following:

- Management of key decisions and milestones during this project.
- Preparation of initial project development plan (including the schedule of work tasks and key personnel to perform the work in the field to meet the milestones and objectives)
- Coordination of communications and meetings with the Utility as needed or requested to review technical concepts and alternatives, gathering staff feedback, and coordinating activities with the project team.
- Oversight of the execution and development of the project deliverables.

This comprehensive approach is not just employed by the project manager who owns it, but each member of the support team and field crew to provide superior hydrant assessment service.

Project Scheduling / Project Reporting

Hydromax USA will prepare a formal project schedule for review and approval by the utility. Hydromax USA uses two primary methods to communicate project planning and project management. Project plans are formally prepared using MS Project and distributed to the project team for approval and coordination. If the project includes geographic assignments, the project schedule is updated to include this information for stakeholders inside and outside the municipality. Often this information is communicated to customer service to address customer questions regarding Hydromax staff field personnel performing assigned activities.

Hydromax USA utilizes our custom HUSA Operations Dashboard to provide client management real time access to field activity and program results. The dashboard will provide a vehicle for Hydromax to provide program metrics to the Utility daily and will form the foundation for monthly progress reporting. The Utility will be able to see detailed hydrant physical and operational condition as they are found by our field crews.

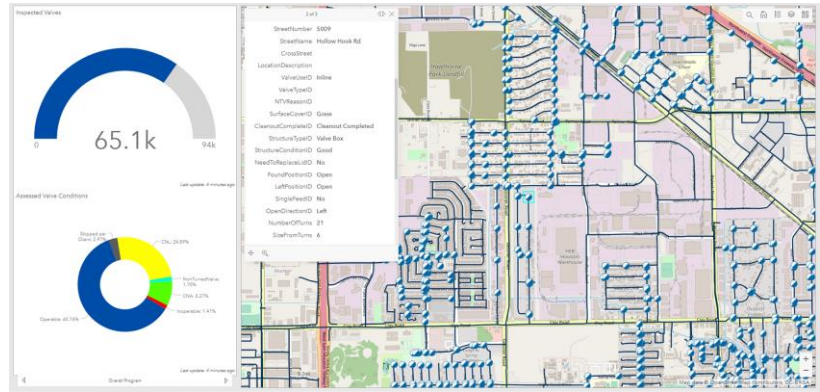


Figure 5. Hydromax USA Project Dashboard

Responsiveness – Routine, Urgent, Emergency

The Hydromax team is fully poised to deliver and mobilize the necessary equipment for this program’s operational needs. Most importantly, we can quickly mobilize a vast array of equipment to support the needs of the Utility during conditions where the ability to serve the public is in jeopardy or has been compromised. The utility’s operations teams will have access to Hydromax teams for unscheduled activities as the contract requires. Phone information will be available for the on-site Project Lead and Operations Manager as well as the Manager of National Water Distribution Services to ensure access to the full complement of resources that Hydromax USA can bring to bear if needed.

HYDRANT MAINTENANCE AND ASSESSMENT ACTIVITIES

HUSA is responsible for obtaining all permits, approvals, etc., required by the governmental agency with jurisdiction. HUSA will follow the minimum requirements set forth in these specifications. All work will comply with all applicable provisions and standards of the following recognized entities: State and local building and plumbing codes, American National Standards Institute® (ANSI®), American Water Works Association® (AWWA®), National Sanitation Foundation® (NSF®), US Environmental Protection Agency (EPA), US Food and Drug Administration (FDA) and the US Occupational Safety and Health Administration (OSHA).

SINGLE FIRE HYDRANT TESTING & MAINTENANCE

Hydromax USA will perform the following services in accordance with AWWA M-17 Manual for Fire Hydrants: Installation, Field Testing, And Maintenance:

- Locate and access each fire hydrant
- Locate access and exercise fire hydrant isolation valve
- Check fire hydrant nozzle height for correct ground clearance
- Identify make, model, nozzle size and year of hydrant manufacture
- Lubricate operating nut (if appropriate for hydrant make/model) and all nozzle outlets with noncorrosive FDA approved lubricant
- Open hydrant with nozzle caps in place to check for seal leakage
- Verify that hydrant main (bottom) valve completely closes
- Flow hydrant to maximum rate, record working pressure and calculate flow rate and gallons flushed.
- The use of a calibrated combination pitot gauge and hydrant diffuser is required for all hydrant flushing.
- Close hydrant completely. Back off the opening nut enough to take the pressure off the packing.
- Remove all outlet nozzle caps, clean the threads, check the condition of the gaskets replace as required, and lubricate the threads. Check the ease of operation of each cap.
- Check outlet nozzle chains for free action on each cap. If the chains bind, open the loop end around the cap until they move freely.
- Record static pressure
- Re-attach hydrant nozzle caps
- Obtain and record GPS site coordinates of hydrant.
- Document any operational deficiencies and/or miscellaneous findings.
 - Provide alerts for all inoperable or low flow hydrants.
- Propose a sample schema for valve assessment data collection, final field and attributes to be agreed upon during kickoff meeting.
- Data shall be delivered monthly to the Client in an ArcGIS compliant format.
- Optional Adder: Scrape, wire brush, and paint hydrant appropriate color. Paint shall be Sherwin-Williams or approved equal. Coating shall be spray applied to a minimum of a 4 ml dry coat thickness.
- Optional Adder: De-chlorinate with LPD250 diffuser and de-chlorination tabs.
- Optional Adder: Replace (if defective) hydrant ID tag or install (if not present) hydrant ID tag.
- Optional Adder: Replace (if defective) blue reflective road marker or install (if not present) blue reflective road marker. Reflective pavement markers in blue shall be used to identify the hydrant locations. Each marker is to be placed on the center line of the roadway lane closest to the hydrant.

TWO-HYDRANT FIRE HYDRANT TESTING AND MAINTENANCE (FUTURE)

Hydromax USA will perform the following services in accordance with AWWA M-17 Manual for Fire Hydrants: Installation, Field Testing, And Maintenance. Hydromax USA will attempt to use a combination of larger hydrant ports and additional hydrants to obtain the 10-psi drop. However, there is no guarantee that the 10-psi drop will be achieved during 2-hydrant testing.

- Locate and access each fire hydrant
- Locate access and exercise fire hydrant isolation valve
- Check fire hydrant nozzle height for correct ground clearance
- Identify make, model, nozzle size and year of hydrant manufacture
- Lubricate operating nut (if appropriate for hydrant make/model) and all nozzle outlets with noncorrosive FDA approved lubricant
- Open hydrant with nozzle caps in place to check for seal leakage
- Verify that hydrant main (bottom) valve completely closes
- Flow hydrant to maximum rate up to 15 minutes or until clear, whichever is less, record working pressure and calculate flow rate and gallons flushed. If hydrant fails to flow clear in the initial 15-minute flush, contact the Client.
- Close hydrant completely. Back off the opening nut enough to take the pressure off the packing.
- Remove all outlet nozzle caps, clean the threads, check the condition of the gaskets replace as required, and lubricate the threads. Check the ease of operation of each cap.
- Check outlet nozzle chains for free action on each cap. If the chains bind, open the loop end around the cap until they move freely.
- Record static pressure
- Re-attach hydrant nozzle caps
- Inspections will be conducted on adjacent hydrant pairs to facilitate the 2-hydrant fire flow test procedure.
- When the first hydrant is flowed, the second hydrant becomes the M-17 “test hydrant” for measurement of residual pressure drawdown in the system. The order is then reversed when the second hydrant is inspection flowed and the first hydrant becomes the “test hydrant” for fire flow determination.
- Hydrant inspection pairs will always be chosen to maintain the test hydrant on the upstream side of the system water feed such as on single feed mains.
- Obtain and record GPS site coordinates of hydrant.
- Document any operational deficiencies and/or miscellaneous findings.
 - Provide alerts for all inoperable or low flow hydrants.
 - Document all pertinent data into an electronic spreadsheet or database including the following:
 - Hydrant ID tag number
 - Hydrant address location
 - Hydrant GPS site coordinates
 - Date of flush or service
 - Hydrant brand
 - Hydrant model number
 - Hydrant year
 - Hydrant size
 - Hydrant flow rate obtained
 - Hydrant static and residual pressures
 - Flow at 20 PSI calculation
 - Hydrant pressure after 2 minutes of flushing
 - Total gallons flushed during service
 - Degree of operating difficulty

- Deficiencies and/or repairs required to be immediately reported to the City.
- Data shall be delivered to the Client in an electronic format compatible with ArcGIS/ArcMap system or SQL database.
- Optional Adder: Scrape, wire brush, and paint hydrant appropriate color. Paint shall be Sherwin-Williams or approved equal. Coating shall be spray applied to a minimum of a 4 ml dry coat thickness.
- Optional Adder: De-chlorinate with LPD250 diffuser and de-chlorination tabs.
- Optional Adder: Replace (if defective) hydrant ID tag or install (if not present) hydrant ID tag.
- Optional Adder: Replace (if defective) blue reflective road marker or install (if not present) blue reflective road marker. Reflective pavement markers in blue shall be used to identify the hydrant locations. Each marker is to be placed on the center line of the roadway lane closest to the hydrant.

High Pressure Hydrant Additional Safety Procedures

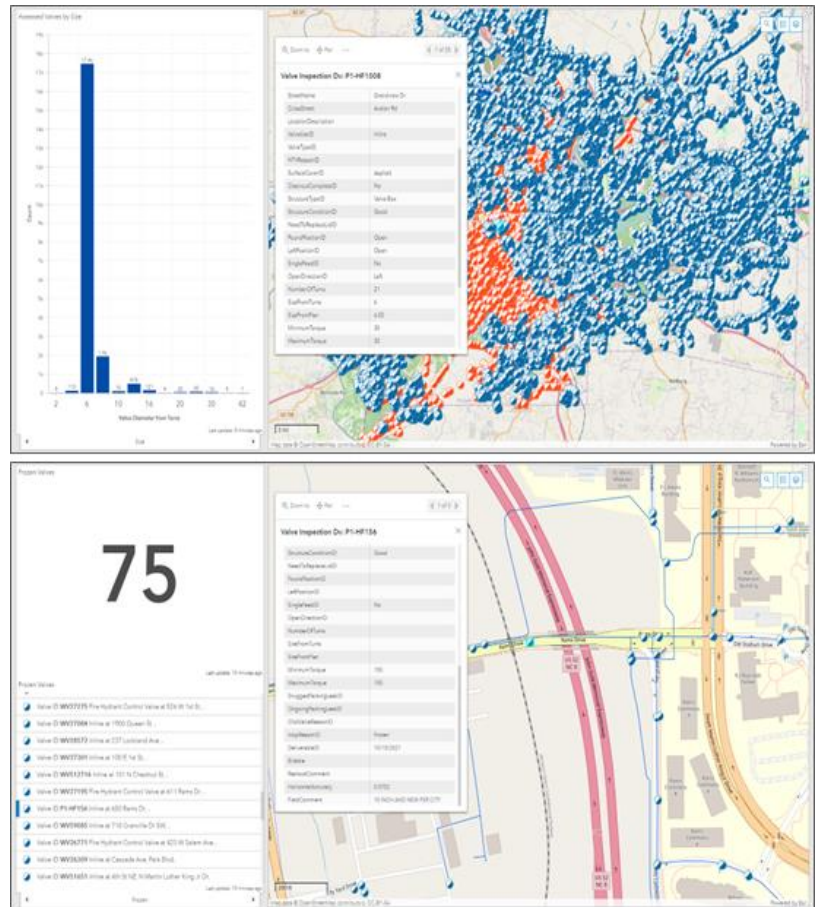
When a hydrant over 125PSI static pressure is encountered, Hydromax USA will perform the following additional safety procedures to complete hydrant testing:

- Upon obtaining working pressure, if determined to be over 125 psi, work will halt to complete the following steps.
- Check/tighten hold down bolts at flange.
- Install Hose Monster to hydrant and secure the other end to hitch mounted diffuser or another stationary anchor.
- Proceed with flowing per the above specifications.
- Upon completion check/tighten hold down bolts at flange.

WEB-BASED PROJECT MANAGEMENT DASHBOARD

Hydromax USA will provide a web-based application capable of providing City the following real time program metrics and information.

- Progress tracking: Detailed summary of expected appurtenances throughout the program, as well as actual inspections performed.
- Aggregated information on operating condition and other operational information attribution of assets assessed by the service provider.
- The ability to interactively view the location and attribution of single assets or group of assets.
- The ability to compare year-over-year assessment to track system changes over time.
- Customizable assignment capabilities for individual field work team.
- Feature-driven multimedia content delivery of ancillary information for appurtenances
- Customizable data import of additional asset information



PRICING (Revised 2.20.24)

The listed quantities are estimated. Any additional work that is required will be billed at the unit rate.

Core Program

Item	Description	Est. QTY	UOM	Unit \$	Extended \$
1	Single hydrant maintenance (scrape, wire brush, two color paint)	1200	EA	\$78.67	\$94,404.00
2	2-hydrant M-17 hydrant testing	10	EA	\$160.67	\$1,606.70
3	Extended flush time (15-minute increment)	100	EA	\$56.00	\$5,600.00
Core Total					\$101,610.70

Additional Services

Item	Description	Est. QTY	UOM	Unit \$	Extended \$
4	Furnish and install fire hydrant ID tag		EA	\$12.00	
5	Furnish and install blue reflective road marker		EA	\$10.00	