

## PROJECT MANAGEMENT PROCEDURE

The projects anticipated under this contract are of several types. Beyond the technical nature of the projects, the County has service expectations that are equally as important, and which must be met by the consultants who serve them. The County's approach will be to award contracts to the most responsive, responsible consultant whose proposal represents the best overall value to the County when considering all evaluation factors. The selected consultant will provide a detailed scope of work, schedule, and fixed price for completing a requested task at which point the County will provide a purchase order and the consultant will complete the task. The County will expect that in doing so, the consultant will:

- Provide timely delivered services and resources.
- Supervise consulting and subconsultant staff including oversight of their work and performance.
- Manage the project (timeliness, budget, deliverables, contingencies) and track the progress.
- Quality assure all deliverables.
- Communicate regularly with County Project Managers.
- Professionally communicate with the public and represent the County regarding the project as requested.

The primary goal of a consultant serving under this contract will be to diligently address the six (6) functional behaviors described above. Our team's broad range of capabilities, extensive experience with the County, significant public contract knowledge, and local presence allows us to effectively address these six functional requirements.

**Timely services and resources** – We have significant in-house local resources to address most of the services required under this contract. Our water resources group managed by Douglas Dufresne, P.G. has seven (7) geologists, of which three (3) are professional geologists, and two (2) environmental scientists. Our Orlando office has significant geotechnical and other supporting staff to support the project needs as they are needed. Our approach will assure that each task will have sufficient staff assigned from our significant pool and that they will have specific knowledge of the work required and the County's needs and procedures.

**Supervising and overseeing subconsultants** – As mentioned, most of the services will be provided by Ardaman. Our team includes two (2) specialty subconsultants, Tetra Tech, who brings outstanding expertise in civil engineering services. This firm is respected for its capabilities and its staff has good relationships with Ardaman since Ardaman is a wholly owned subsidiary of Tetra Tech. The Program Manager, Douglas Dufresne, PG, worked with the same Tetra Tech staff for over twenty years prior to working directly for Ardaman. We have also included Southern Research Laboratories, Inc. (SRL) to provide environmental analytical lab testing services in the event that they are required. Ardaman has successfully worked with SRL since their inception over 15 years ago and have included them as M/WBE partner on many continuing service contracts for public sector clients. Therefore, our approach requires very little supervision of our subconsultants, and we commit that its staff will function as part of our staff.

**Manage projects and track progress** – Management of the projects, including budget, schedule, report deliverables and contingencies, will be the responsibility of the Program Manager and the Principal in Charge. We have assigned highly experienced individuals to these positions. Our staff is very experienced working under public sector continuing services contracts, and we know how to effectively manage multiple, simultaneous assignments. Further, our use of a common project management system, PM Portal, will allow efficient tracking of budgets and contingencies, and will improve administration and schedule.

**Quality assurance of deliverables** – Each of our discipline teams includes senior staff members whose responsibility is to exercise quality assurance on deliverables. These very experienced and knowledgeable individuals have "seen it all" and routinely provide internal consulting, mentoring and quality review to our project managers. In addition, the Discipline Managers will always be available to the staff to help maintain our quality program and to assure that quality is seen as one of our highest priorities. As long-time consultants to the County, we are aware of the quality requirements and expectations in this regard.

**Communicate regularly with County Project Managers** – Communication is one of the key elements to the success of any project and is especially important when working under public sector continuing services contracts. Our experience with such projects has taught us that to be effective, we must incorporate a broad and consistent communication system. This system will regularly include (weekly or monthly) status reports from our Discipline Managers to the County Project Manager. These reports will typically be provided via e-mail, but face-to-face visits are very effective if information needs to be shared and discussed with a group. Effective communication starts with the initial assignment and proposal. We will meet and discuss all aspects of the assignments to assure that our schedule and budget are realistic and have “buy in” from the County staff. We will also be available whenever the County requests us for meetings in County offices or on specific project sites, or to discuss the County’s interests with regulators. We will make a presentation of our results at important milestones and at the end of assignments. Basically, we strongly believe that we can be successful only if the County is fully aware of our progress and agrees with our decisions throughout every assignment. We commit to communicating regularly with the County for these reasons.

**Communicate with the public and represent the County** – Working on public sector contracts is decidedly different than working for private clients. Problems that arise on private projects are usually the concern of the owner, consultant and possibly an attorney. However, problems that arise on public projects quickly become the concern of other agencies and often everyone who reads the newspapers or watches the evening news. We recognize that the County staff, as public servants, are held to a very high standard, and we know that as consultants to the County, we must also assume this high standard. We must represent and advocate for the County before the public and other governmental agencies. As regular consultants to public clients, our team is fully aware of this responsibility and we readily accept it as our own. We have many experienced geologists, engineers, and scientists who are not only technically competent but have exceptional abilities regarding communication in meetings and presentations to the public. Our understanding of our responsibility and the presence of our senior staff will assure the County of committed and positive representation.

## INNOVATIVE APPROACHES AND TECHNIQUES

We recognize that monitoring, sampling, and testing of groundwater on agency permitted projects are important aspects of this contract. Ardaman’s geologists, engineers and technicians have provided such services on thousands of sites and have worked very closely with agencies to assure that the monitoring activities comply with the terms of any governing agreements and/or permits. Over the years we have identified some general improvements to the process along with some project specific innovations that have been beneficial to our clients.

- One of Ardaman’s most useful advantages is the capability to physically install groundwater monitoring wells. Ardaman’s local office includes six (6) drill rigs with crews experienced installing such wells. The ability to use in-house resources for this service will save the County time and cost, and will maintain a single point relationship, thus reducing administrative effort from the County.
- Ardaman geologists and engineers have devised ported well systems which allow sampling from different levels within the same well, thus increasing efficiency for both installation and ongoing sampling of the well.
- Ardaman’s groundwater remediation systems are equipped with electronic monitors through which operation of the system can be remotely monitored in real time. These systems frequently have electrical and mechanical problems which occasionally cause them to shut down unexpectedly. Without remote monitoring, a shutdown will be discovered during the next regular maintenance/monitoring visit, potentially after a significant amount of downtime. However, with Ardaman’s remote monitoring, a technician can be dispatched to repair the problem system immediately, therefore losing only a minimal amount of system run time.

- An example of a specific innovative solution occurred on a new retail facility proposed to be built on a former gasoline station site. The site included a groundwater monitoring well which had been sampled as part of a prior assessment of the site. Maintaining sampling from this well was important to assure continuity of the data. However, the plans for the site required that the building be built on top of this well. Rather than abandoning the well and installing a new one outside the building limits, Ardaman designed a piping system which allowed continued sampling of the well from an accessible location outside the building limits, thus preserving continuity of data from this well.

## COST ESTIMATING

Ardaman is ultimately responsible for providing our services on time and within the established budget. We coordinate our activities from the inception of a task by having a project initiation meeting or teleconference. During the initial conversations, we work together to establish the work scope, budget, and schedule. Establishing a mutually agreeable expectation is critical to a successful project. Our cost estimates are prepared by senior staff for each task assignment. The draft proposals are based on our understanding of the scope and our experience with similar tasks. We will research published information regarding the site as well as our internal database of over 150,000 project entries. We will use the information gained from research to better define the needs and cost of the project. After the draft is completed, we will openly discuss our scope, approach, and estimate with the County staff to clear up any misunderstandings and to modify the proposal to meet both the County's needs and the standard of care.

Ardaman's managers will be supported by an enterprise-wide, Oracle based project management system, PM Portal. Most of the team's staff will have direct and real time access to the PM Portal, and thus, will be able to readily share information across tasks and disciplines. Access to this centralized system will enhance administrative efficiency and afford the staff members a greater ability to maintain budgets and schedules. At the heart of the system is the internal reporting suite. Everyone identified as a Project Manager is provided with a weekly summary of the financial status of their projects. A project manager can, "at a glance" assess the budgetary status of any project currently under their management. The system also allows the manager to "drill down" into the numbers to obtain a wealth of financial and efficiency data that can aid in assessing the progress of the project and identify problems in the budget track before they become unmanageable.

As described above, Ardaman's in-house resources allow us to do most of the work without subconsultants, saving costs. Also, Ardaman engineers and geologists have traditionally been at the cutting edge of technology in our field, and we have investigative devices that provide superior data when compared to traditional methods, and this data can be used to save cost through innovation. Also, when making recommendations, our staff considers the life cycle costs and not just the initial cost of implementation. In many cases the initial cost may be relatively low, but long-term operational and maintenance may be more important to calculating the true value of the recommendations.

## WHY SELECT ARDAMAN

We believe that the information provided in our submittal clearly states Ardaman's capabilities to serve Lake County under this contract. In summary, please consider the following:

- Ardaman's experience with public sector continuing services contracts and especially with Lake County has taught us that our goals in serving the County are to be an advocate for the County's needs while being a "low maintenance" consultant. Specifically, we recognize that the contract belongs to the County, and our job is to serve your interests while minimizing the need for oversight by your staff and avoiding potential conflicts of interest with third parties involved with County projects.
- Ardaman has a large local presence (150 employees) and will provide most of the services using our in-house resources. This will reduce administrative efforts by the County and the inevitable cost of managing a team of

subconsultants. Our significant local personnel and equipment resources will positively impact our response and adherence to schedules.

- Ardaman geologists and engineers have an excellent relationship working with the regulatory agencies, FDEP and SJRWMD. Ardaman has held continuing contracts with the SJRWMD for nearly two decades and our company is under contract with FDEP as a petroleum cleanup contractor for the Central Florida District. Our history and performance with these agencies have enhanced our reputation as a company that is reliable and innovative. This reputation will be valuable on the County's projects.
- Ardaman is a local company with over 60 years of service in our community. Every decision made regarding Lake County projects will be made locally. Our experts live in Central Florida and will be readily available to the County whenever needed (without an air fare and hotel bill). Further, our senior staff members have long tenures with Ardaman; most exceeding 25 years. We have a deep understanding of our community that is reflected in the services that we provide to local government clients.



**ARDAMAN & ASSOCIATES**

**Program Manager**

**Douglas Dufresne, PG**

**Principal-In-Charge**

**John Garlanger, PhD, PE**

**Hydrogeologic Studies/Hydrology/  
Water Resource Planning/  
Consulting Services**

Douglas Dufresne, PG  
Valerie Davis, PG  
Michael Messing, PG  
Nestor Aceituno, PE  
Shankar Gautam, PE

**Well and Wellfield  
Design/Permitting/Testing/  
Analyses**

Valerie Davis, PG  
Michael Messing, PG  
Camilo Rojas  
Hayden Schmidt  
Nadia Hardman  
Sebastian Fearn

**Field Studies/Well Drilling  
Oversight/Groundwater  
and Soil Sampling**

Michael Messing, PG  
Camilo Rojas  
Hayden Schmidt  
Nadia Hardman  
Sebastian Fearn  
Russell Balde  
David Scarboro

**Geotechnical and  
Civil Engineering**

Colin Jewsbury, PE  
Ali Aydelotte, PE  
Ginny Goff, PE  
Eric Balog, PE  
Rod Cashe, PE (Tt)

**Water Use Permitting/  
Groundwater Modeling/  
Contaminant Transport Modeling**

Douglas Dufresne, PG  
Valerie Davis, PG

**Environmental Site Assessment/  
Contamination Assessment/  
Groundwater and Soil Remediation**

Carl Stephens, PE  
Katie Minter  
Ken Nicholson

**Environmental Analytical  
Lab Testing**

Sherri Payne (SRL)