1. **SCOPE OF SERVICES**

The Contractor shall have the experience, ability, equipment, and tools to perform the cleaning, flushing, and video recording of storm water drainpipes, box culverts, and water quality units in conjunction with the County's needs. As part of this work, the Contractor may be required to temporarily plug and dewater individual storm drain segments. Details for each project will be presented to the Contractor on a Project Order Form issued by the County.

This work shall take place in a variety of pipe sizes from twelve (12) inches up to seventy-two (72) inches, inlet boxes, box culverts, and water quality units**. It should be anticipated that the majority of the work will be in short job increments of approximately thirty (30) feet, fifty (50) feet, or one hundred (100) feet in length, although there will be pipes with substantially greater lengths.**

All activities shall be performed in accordance with the requirements of Federal, State and Local environmental standards and laws. Erosion and water pollution control shall be accomplished, meeting the requirements of the most current version of the Florida Department of Transportation (FDOT) “Standard Specifications for Road and Bridge Construction,” Section 104.

**This is an indefinite quantity contract with no guarantee of the volume of work to be performed. The County does not guarantee a minimum or maximum dollar amount to be expended on any contract(s) resulting from this Request for Proposals.**

1. **CONTRACTOR’S RESPONSIBILITIES.**

The Contractor Shall:

* 1. Provide services to the County on an As-Needed Basis.
  2. Designate a project manager that shall speak English and have available communication devices with internet access to ensure proper communication and documentation during operations.
  3. Clean the storm drainpipe, inlet box, box culvert, or water quality unit so that the drainage capacity is one hundred percent (100%) of the existing capacity. Cleaning shall be done in a manner so as not to damage the storm drainpipe, inlet boxes, box culvert, water quality unit, or the surrounding area.
  4. Be responsible to supply water needed as part of their operations. The County does not have a water supply. The Contractor will be required to contact the applicable municipality to obtain water.
  5. Be responsible to properly dispose of all debris removed as a result of the cleaning. The Contractor shall ensure that the disposal complies with all Federal, State and Local laws and regulations and provide documentation of the disposal from an approved facility. (F.S. 403.7071, F.S. 403.7071) Receipts indicating that the Contractor has properly disposed of the debris within the guidelines of all appropriate laws shall be supplied to the County with each invoice.
  6. Provide the County with a schedule of completion, with the work commencing within fourteen (14) days of receipt of the Project Order Form. The Contractor shall consult with the County Project Manager prior to any schedule variance, including when work is interrupted due to weather, breakdowns, etc. The notification shall occur the day before any scheduled variation is to take place and must be agreed to by the County Project Manager. No extensions of time shall be given for equipment failure or weather conditions. If the Contractor is in default for not completing the work within the specified time, the Contractor may be removed from the bidder’s list, at the option of the County, and not permitted to bid work for the County until the project is complete.
  7. Furnish equipment of a type and quantity to perform the work satisfactorily within the time specified herein. All equipment to be used in the execution of this contract shall be in safe working condition and shall be free of any excessive fluid leaks. All equipment shall be subject to approval by the County Project Manager. The County reserves the right to inspect all equipment before it is placed on site or while it is in service. If at any time, the County Project Manager determines the Contractor’s equipment to be deficient in safety devices, to be unsafe or to be inappropriate for the job; the Contractor shall remove the equipment from service immediately and the equipment shall remain out of service until the deficiency is corrected and have been made to the satisfaction of the County Project Manager. Inspection and approval of the Contractor’s equipment by the County Project Manager shall not relieve the Contractor of responsibility or liability for injury to persons or damage to property caused by the operation of the Contractor’s equipment, nor shall it relieve the Contractor of the responsibility to meet the established time for the completion of the work. All moving vehicles shall be equipped at a minimum with properly operating amber flashing or white strobe lights. All safety devices installed by the manufacturer shall be in place and in proper working order at all times.

1. **COUNTY RESPONSIBILITIES.**
   1. The County reserves the right to award to one or more vendors.
   2. The County will provide a detailed Project Order Form for each project.
   3. The County shall locate and designate all manhole access points for the work, provide right of entry to these points.
2. **TECHNICAL REQUIREMENTS**
   1. **PIPE CLEANING**
      1. For the purposes of cleaning and submitting pricing in the pricing section of this solicitation, the percentage of pipe blockage shall be calculated as follows:

* Light cleaning – 10% or less of the pipe being blocked by debris
* Medium cleaning – 11% to 30% of the pipe being blocked by debris.
* Heavy cleaning – above 30% of the pipe being blocked by debris
  1. **PLUGGING AND DEWATERING**
     1. The manner in which the dewatering shall be accomplished shall be approved by the County Project Manager before the work shall commence. The costs will be based on the size and length of the pipe calculated at the unit price as shown on the bid sheet.
     2. When plug installation is required to complete the work the costs shall be based on the size of the pipe and shall be invoiced at the unit price submitted in the pricing section of this solicitation. The submitted price shall include both the installation and removal of the plug.
     3. Temporary plugs used to block the storm pipes for dewatering purposes must be removed prior to rainfall events or at the determination of the County Project Manager at no additional cost to the County. The Contractor shall be held accountable for any and all damages due to flooding caused by blocking of the storm drainpipe system if not removed in a timely manner.
     4. When pumping and bypassing is required, the Contractor shall supply the pumps, conduits, and any other equipment necessary to divert the flow of storm water around the section in which the work is to be performed. The bypass system shall be of sufficient capacity to handle the existing flow plus any additional flow that may occur during a rainstorm. The Contractor will be responsible for furnishing the necessary labor and supervision to set up and operate the pumping and bypassing system. If pumping is required on a twenty-four (24) hour basis, pumps shall be equipped in a manner to keep noise to a minimum.
  2. **WATER JET CLEANING**
     1. Cleaning of the pipe, inlet box, box culvert, or water quality unit, shall be completed with the use of high-velocity jet (hydro-cleaning) equipment. The equipment shall have a minimum capacity of fifty (50) gallons per minute and a working pressure of two thousand (2,000) pounds per square inch. The nozzles shall be capable of producing a scouring action from fifteen degrees (15°) to forty-five degrees (45°) in all size lines designated to be cleaned. All high-velocity cleaning equipment shall be constructed for ease and safety of operation. There shall also be available a high-velocity gun for washing and scouring manhole walls and floor. The gun shall be capable of producing flows from a fine spray to a solid stream.
  3. **ROOT TREATMENTS**
     1. Roots shall be removed from the designated sections where root intrusion is a problem. Special attention should be used during the cleaning operation to assure complete removal of roots from the joints. Any roots which could prevent the proper application of chemical sealants shall be removed. Procedures may include the use of mechanical equipment such as, but not limited to, rodding machines, bucket machines and winches using root cutters and porcupines, and equipment such as high-velocity jet cleaners. If it is found that the process of removing the roots from the pipes is causing damage to the pipe, the operation shall be stopped, and the County Project Manager shall be consulted before further work commences.
     2. Chemical root treatment may be used by the Contractor at the option of the County, with prior written approval. Root intrusion shall be treated with an approved herbicide. Before treatment commences, the Contractor shall receive written approval from the County Project Manager for the type of herbicide and the application procedure to be used. The application of the herbicide to the roots shall be done in accordance with the manufacturer’s recommendations and specifications and it shall be applied in such a manner to preclude damage to surrounding vegetation, which could also include vegetation that may exist in a surrounding body of water. Any damaged vegetation so designated by the County Project Manager shall be replaced by the Contractor at no additional cost to the County. All Material Safety Data Sheets for all chemicals used, including fuel used in any equipment, shall be supplied to the County.
  4. **COLOR VIDEO INSPECTIONS**
     1. Equipment required to perform video recording under this contract shall have a lens capable of rotating three hundred and sixty degrees (360°). Lighting for the camera shall be suitable to allow for a clear picture of the entire peripheral of the storm drainpipe. The camera shall be operative in one hundred percent (100%) humidity conditions. The cameras, recording equipment, and other components of the video system shall be capable of producing picture quality to the satisfaction of the Project Manager, and if unsatisfactory, the equipment will be removed, and no payment will be made for an unsatisfactory product result
     2. Video operations shall commence after the cleaning of the drainage pipe, box culvert, or water quality unit has been completed unless otherwise directed by the County Project Manager. All water flow shall be interrupted during the video process so that the entire pipe including the bottom portion will show in the recording.
     3. The Contractor shall furnish to the County a color copy of all video inspections of the storm drains at rates of no greater than thirty (30) feet per minute, unless otherwise designated. The color video shall include a narrative stating the location and an explanation of deficiencies.
     4. Accurate and continuous footage readings shall be superimposed on the video recording for each storm drain line observed. The video shall also include the date of the observation and a number designation for each manhole or inlet box in the segment of pipe. The deficiencies to be noted include: cracked pipe, joint leaks, failed patches, subsidence, intrusions, and stained pipe. The camera shall make a full revolution of all joints, pick-up holes, and any other suspected areas in order to identify any deficiencies along the entire perimeter of the joint. All suspect areas shall be viewed by the camera in such a way as to make a clear analysis of the system. The quality of the video shall be such that all deficiencies are clear and visible.
     5. If during the operation, the camera will not pass through the entire manhole section or drainpipe segment, the Contractor shall set up the equipment so that the viewing can be performed from the opposite manhole. If the camera fails to pass through the entire manhole section or drainpipe segment a second time, the task shall be considered complete, and no additional viewing will be required. The Contractor shall invoice the County at the per linear foot unit rate for the footage that was actually completed.
  5. **WATER QUALITY UNITS**
     1. It shall be the responsibility of the Contractor to ensure that all units are properly cleaned as per the manufacturer’s specifications. The County anticipates cleaning each unit one (1) time per year. The quantity of services may increase or decrease depending on the amount of debris that has accumulated within the unit. It is the responsibility of the Contractor to ensure that the debris, including oils or other chemicals, removed from the unit is properly disposed of as required per this solicitation.
     2. There are currently thirty-one (31) water quality units in Lake County. A listing of the location and type of water quality units can be found as an attachment to this solicitation.
  6. **BOX CULVERTS**
     1. It shall be the responsibility of the Contractor to ensure that all structures are properly cleaned at the discretion of the County. The County anticipates cleaning each structure biannually or once every two years. The quantity of services may increase or decrease depending on the amount of debris that has accumulated within the structure. It is the responsibility of the Contractor to ensure that the debris removed from the culvert is property disposed of as required per this solicitation.
     2. There are nineteen (19) structure locations in Lake County. The Contractor shall invoice the County per cubic yard of spoils removed. A listing of the locations can be found as an attachment to this solicitation.
  7. **DOCUMENTS AND REPORTS**
     1. The Contractor shall provide the County with a detailed summary report of all work completed for each Project Order. Each report shall include the following:
* The culvert size, length of the segment, sump depth within the inlet box, storm drainpipe inverts at each end, and type of storm drain.
* An outline including the type and severity of each observed defect.
* Field report copies to further assist the County in understanding and using the results of the viewed project.
* An aerial map depicting the location of the storm drainpipe or inlet box, box culvert, or water quality unit shown. Any deficiency detected from the video or observed during the cleaning process shall be indicated on the map with the footage of where the deficiency occurs.
* Video, if requested, of the pipe.
  + 1. This report shall be submitted to the County Project Manager within ten (10) calendar days of completion of all field activities and within the stated time of completion for each project.

1. **BASIS OF PAYMENT**
   1. Payment shall be made at the prices submitted in this solicitation. Pricing submitted shall include all: labor, equipment, materials, fuel, maintenance of traffic, mobilization, debris removal and disposal, and all incidentals necessary to complete all work as specified. The Contractor shall be compensated at the unit price, as specified in the Contractor’s bid proposal, multiplied by the actual units completed and accepted by the County, less any damages assessed.
   2. Each Project Order Form issued to the Contractor will have estimated quantities. If for any reason the estimated quantities are significantly different than the actual quantity, the Contractor shall notify the County of the discrepancy prior to the commencement of work.
   3. The Contractor shall provide to the County all field reports, video inspections, and debris removal tickets with or prior to submitting an invoice for payment.

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