

# **LIBRARY SERVICES BUILDING PARKING LOT IMPROVEMENT SPECIFICATIONS**

## **1. GENERAL**

Perform all work in accordance with all provided specifications, applicable codes, local ordinances, the current Americans with Disabilities Act (ADA), all requirements of the City of Tavares, and Lake County.

**The Contractor shall provide all required labor, material, permits, engineering, maintenance of traffic (MOT), local and state inspections to provide a 100% completed project.**

## **2. PURPOSE**

The purpose of this solicitation is to select a Contractor to make improvements to the Lake County Library Services parking areas. The purpose of these improvements is to bring these areas into full compliance with current Americans with Disabilities Act (ADA) requirements.

## **3. SUBMITTALS TO BE PROVIDED PRIOR TO TIME OF BID AWARD**

The Contractor will be contacted prior to bid award and shall submit electronically the manufacturer's specification sheets and suggested installation procedures for the products that the Contractor intends to use. Products to include, but are not limited to, crack seal, blotting material, herbicide, and asphalt emulsion seal coat. The Contractor shall also submit a copy of their warranty documenting at minimum the items and details listed in Section 20.

## **4. REFERENCES**

All reference standards and specifications shall be the current issue or latest revision on the notice to proceed issue date.

- ASTM D5329: Standard Test Method for Sealants and Fillers, Hot Applied, For Joints and Cracks in Asphaltic and Portland Cement Concrete Pavements.
- ASTM D3111: Standard Test Method for Flexibility Determination of Hot-Melt Adhesives by Mandrel Bend Test Method.
- ASTM D113: Standard Test Method for Ductility of Bituminous Materials.
- ASTM D 2669: Standard Test Method for Apparent Viscosity of Petroleum Waxes Compounded with Additives (Hot Melts).
- ASTM D4: Standard Test Method for Bitumen Content.
- ASTM D6690: Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
- All pavements marking work shall be performed in accordance with the requirements of the latest edition of the Florida Department of Transportation standards including but not limited to "Standard Specifications for Road and Bridge Construction", "Design Standards" and the latest edition of the "Manual of Uniform Traffic Control Devices."

## **5. MAINTENANCE OF TRAFFIC (MOT)**

Maintenance of traffic shall be the responsibility of the Contractor, be part of the bid price, and shall conform to F.D.O.T.'s most current editions of "Roadway and Traffic Design Standards" for Design, Construction, and Maintained Systems and the Federal Highway Administration (FHWA) "Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways." These documents can be

ordered from FDOT, Maps and Publications Department, 605 Suwannee Street, Tallahassee, Florida, 32399-0450, Phone (866) 374-3368.

All costs associated with MOT must be included with the unit price. If the Contractor does not comply with FHWA and MUTCD (i.e. signs, qualified flaggers and/or barricades), the County reserves the right to direct the Contractor to cease operation until deficiencies are corrected. In addition, no road closures shall be allowed except in the case of emergencies and, shall have the prior approval of the applicable governing body.

The foregoing requirements are to be considered as minimum and the Contractor's compliance shall in no way relieve the Contractor of final responsibility for providing adequate traffic control devices for the protection of the public and Contractor's employees throughout the work area.

Prior to the commencement of work the Contractor shall provide a plan for MOT that includes any and all phasing &/or closings. Plan must be approved by the County's Project Manager prior to the commencement of work.

## **6. DESCRIPTION OF WORK**

### **ACCESSIBLE PARKING AREA**

Work in this area shall include the following:

- Remove & replace curb ramps to provide maximum running slope of 8.33% and not encroach into access aisle to include yellow Armor Tile detectable warning tile or equivalent equal
- Vegetation removal
- Asphalt repair and crack sealing
- Asphalt emulsion coating
- Remove and replace wheel stops and paint to match
- Restriping to provide correct size accessible parking spaces and access aisles including one (1) van accessible spot
- Installation of correct ADA signage at each parking space including van signage

## **7. WORK METHODS**

### **VEGETATION REMOVAL**

Vegetation growing through the surface of driveways or parking lots that are being prepared for crack sealing &/or seal coating shall be removed and sterilized by the use of a propane torch unit eliminating all vegetation, dirt, moisture and seeds. At the option of the vendor, a herbicide may be applied prior to the surface treatment application. This shall be applied far enough ahead of the surface treatment application to sufficiently give the vegetation enough time to properly brown so that when completing the final sweeping before surface treatment no vegetation is left. The method of removal is subject to the approval of the County's Project Manager.

If a chemical herbicide is used, it shall be applied according to the manufacturer's specifications. The vegetation shall be totally browned before the crack seal and the seal coating is installed. The person applying the herbicide shall have, or be under the supervision of someone that has, the proper State of Florida Pesticide Applicators License. A copy of this license shall be supplied to the County's Project Manager upon request. A log of all herbicides shall be kept and a copy shall be supplied to the County's Project Manager. This log shall contain the following information:

- a. The type of herbicide
- b. The manufacture of the product
- c. The mixture rate used

- d. The application rate used
- e. The application location
- f. The application date and time
- g. The weather conditions at the time of the application

### **POTHOLE REPAIR**

All potholes shall be repaired before the crack seal is applied. The Contractor shall saw cut the existing asphalt a minimum of 6" past the pothole and associated cracking in all directions. All saw cuts shall be performed to leave only square or rectangular shaped repairs. Any jagged or misshaped repairs shall be rejected and replaced by the Contractor at no additional cost to the County.

The vendor shall remove the asphalt and any loose base material. The area shall be filled with Type S III hot mix asphalt. Once the asphalt has been properly compacted, the final result of the installation shall provide even transitions to the existing area and have joints that are not excessive and a good quality ride is provided. No more than one-quarter (1/4) inch difference in height shall be allowed for the transition between the patch area and the adjacent area. Cold patch asphalt shall be allowed with approval from County's Project Manager.

### **CRACK SEALING**

#### **1. Materials**

- a. The vendor shall use Crafcro PolyFlex Type 3, product #34521 or equivalent crack sealer. Crack sealer shall be an asphalt-based product designed to be used to fill cracks and joints in asphalt. The product shall have the ability to seal out water.
- b. Crafcro Detack blotting material shall be used as, cement dust, or equivalent equal.

#### **2. Equipment**

- a. Equipment used to install the sealant shall be as specified by the manufacturer and shall have the ability to maintain the proper temperature of the sealant throughout the sealing process. This heating unit shall be a jacketed double boiler melter and shall be equipped with an agitation system. The applicator hose shall have a recirculation system or be equipped with a temperature controlled heating system. Pouring pots or gravity-fed sealant applicators shall not be used for sealing cracks and joints.
- b. The compressor shall have a capacity of 75 C.F.M., or more, to ensure an adequate supply of air to effectively clean the cracks and joints. Any pneumatic tool lubricator must be bypassed and a water separator/filter must be installed at the hose inlet connection to keep water and oil out of the lines.
- c. A hot compressed air lance can be used to clean, dry, and pre-heat cracks and joints prior to applying sealant. The air lance shall consist of a compressor propane system providing a high temperature, high velocity blast of air.

#### **3. Work Methods**

- a. All cracks or joints that are greater than one-quarter (1/4) inch shall be properly prepared and sealed using these crack sealing specifications and/or the manufacturer's specifications.
- b. No sealant shall be installed unless the ambient and pavement temperature are forty (40) degrees and rising. There shall be no fog and no chance of rain. If rain or fog delays the sealing operation, the cracks and joints shall be allowed to dry and shall have additional cleaning as required to remove any debris that may have been washed into the cracks or joints. The cracks and joints shall be completely dry before the seal treatment can resume.

The vendor may use the Hot Compressed Air Lance method of cleaning and drying the cracks and joints with the approval of the County's Project Manager. The vendor shall ensure the existing asphaltic concrete surface is not overheated if this method is used.

- c. All cracks and joints shall be cleaned free of all deleterious materials, including any dust, old sealant, and organic material by using high-pressure air. All cracks and joints are to be clean and sufficiently dry before any crack sealing material is applied. All old material and other debris removed from the cracks and joints shall be removed from the pavement surface immediately. Any cracks and joints that are not sealed the same day they are prepared shall be blown out with high-pressure air before the sealing operation continues. The vendor shall limit the amount of dust created from this operation.
- d. The temperature of the sealant shall be heated/maintained using the manufacturer's recommended procedures. The sealant compound shall be melted slowly with constant agitation until it is in a lump-free, free-flowing state, and within the temperature range recommended for application by the manufacturer. Care shall be taken to insure that the sealant is not heated above the recommended maximum temperature or for longer than the recommended time. The County's Project Manager shall have the right to reject the product if it is determined that this has occurred.
- e. The sealant shall be applied in the crack or joint uniformly from the bottom to the top and shall be filled without formation of entrapped air or voids. The level of the sealant shall be even with the surface of the asphaltic concrete. At no time shall the sealant be recessed more than one-eighth (1/8) inch below or raised one-sixteenth (1/16) inch above the adjacent surface. A squeegee may be used to remove excess sealant from the pavement surface when a crack or joint is overfilled. At no time shall the sealant overburden be more than one (1) inch from the crack or joint edges.
- f. A blotting material shall be broadcast or sprayed over the fresh sealant to prevent it from being picked up and tracked. Any excessive or spilled sealer shall be removed by the vendor using approved methods.
- g. The vendor shall be responsible for any claims of crack seal tracking. If there is a claim, the vendor shall be responsible for applying more blotting material as necessary and addressing the tracked material by either removing or repairing the item that was affected.

## **5. Curing**

- a. Crack sealing shall have a minimum of 30 days or Manufacture's recommended curing time before asphalt emulsion seal coat is applied.

## **6. Deficiencies and Repairs**

- a. Where the sealant settles in the crack or joint lower than one-eighth (1/8) inch below the adjacent asphaltic concrete surface, the surface of the sealant shall be cleaned and more sealant shall be installed to meet the specifications. The vendor shall be responsible to remove any excess material that is greater than one-sixteenth (1/16) inch above the adjacent asphaltic concrete.
- b. The sealant shall be removed at the County's Project Manager's discretion, and resealed if any of the following occur:
  - 1. The sealant contains imbedded foreign material other than dusting material.
  - 2. The sealant contains entrapped air bubbles.
  - 3. The sealant has de-bonded or pulled away from the crack or joint.
  - 4. The sealant has been excessively heated.

## **ASPHALT EMULSION SEAL COATING**

- a. Prior to application of coatings protect adjacent curbs, walks, fences, buildings and other items in the work area.
- b. Prior to seal coating asphalt repairs and crack sealing shall have sufficient curing time as required by the manufacturer's specifications. The surface shall also be thoroughly cleaned and free from all loose material, dirt, and debris using brooms, air blowers and/or power sweepers. Surface must be dry before coatings are installed.
- c. Vegetation removal, crack sealing, and asphalt repair repairs shall be completed as described above.
- d. Scrub and clean grease, oil, and gasoline spots with soap and water and prime according to seal coat manufacturer's specifications.
- e. Apply two coats of asphalt emulsion seal coat according to manufacturer's specifications.
- f. Application of the asphalt emulsion seal coat shall be done by using rubber faced squeegees, brooms, distributor bar /wand, or combinations of these or other techniques as approved by the County's Project Manager.
- g. Care shall be exercised to leave no unsightly appearance from handwork and the surface shall appear uniform with the machine surface. The same type of finish as applied by the spreader box shall be required
- h. Sealed areas shall be barricaded to traffic and may not be opened to traffic during the curing period as recommended by seal coat manufacturer's installation instructions.

## **STRIPING**

### **1. Paint Striping:**

Paint striping shall be installed to match existing except that accessible parking spaces shall be installed to meet most current ADA requirements. All work shall be performed in accordance with the requirements of latest edition, at the time the work request is issued to the Contractor, of the following manuals and publications, including, but not limited to: Section 710 from the Florida Department of Transportation "2013 Standard Specifications for Road and Bridge Construction" and any other sections applicable, Florida Department of Transportation "Design Standards" and the Federal Highway Administration "Manual of Uniform Traffic Control Devices.

### **2. Final Inspection**

The Contractor shall self-inspect all markings using the May 27, 2005 Florida Method of Test for Traffic Striping Retroreflectivity Designation: FM 5-579 or the latest editions now in force or hereafter adopted, to test and certify width, thickness, color and retroreflectivity. The Contractor shall submit the results to the County at the completion of the project. The County reserves the right to verify all test results. The County's test shall be final and binding.

Upon written notice from the Contractor that the work is complete, the County will review the submitted test results and if the County deems necessary, test the completed work using the May 27, 2005 Florida Method of Test for Traffic Striping Retroreflectivity Designation: FM 5-579 or the latest editions now in force or hereafter adopted, to test and certify retroreflectivity, width,

thickness and color. The County will notify the Contractor of any deficiencies. The Contractor will correct all deficiencies before final acceptance and payment is made.

An eighty (\$80) dollar inspection fee shall be assessed to the Contractor if an area tested by the County does not comply with the County specified standard, which fee shall be assessed upon has to be inspected a third time, an eighty (\$80) dollar inspection fee shall be assessed to the contractor for the third inspection and another eighty (\$80) dollar inspection fee for each subsequent inspection for that same area. The fee is assessed to offset the additional costs associated with County labor and vehicle usage required for unnecessary inspections. The fee(s) shall be deducted from the final invoice for that release order.

## **8. METHOD OF PAYMENT**

The Contractor shall be permitted to submit a partial payment invoice after each phase of the work is complete minus 10% retention. Invoices shall be submitted to **Facilities and Fleet Management, 32400 C.R. 473 Leesburg, FL 34788**, after all work has been completed. In addition to the general invoice requirements set forth below, the invoice shall reference the specific work element for which billing has been initiated and include a copy of the acceptance document that was signed by an authorized representative of the County at the time the specific work element was accepted. Submittal of the invoice shall not exceed thirty (30) calendar days from the delivery of the goods or services. Under no circumstances shall the invoices be submitted to the County in advance of the work being completed or delivery and acceptance of the items.

All invoices shall contain the contract and/or purchase order number, date and location of delivery or service, and confirmation of acceptance of the goods or services by the appropriate County representative. The Contractor shall also submit with their invoice a completed "Certification of Payment to Subcontractors and Suppliers" form. Failure to submit invoices and certification form in the prescribed manner will delay payment, and the Contractor may be considered in default of contract. Payments shall be tendered in accordance with the Florida Prompt Payment Act, Part VII, Chapter 218, Florida Statutes.

## **9. BUSINESS HOURS OF OPERATION**

All work is to be performed after regular County working hours. Regular working hours are Monday through Saturday, 8:00 A.M. to 5:00 P.M. Specific projects may require night and weekend work. At no time shall the Contractor's work interfere with the day-to-day operation of the County's facilities.

## **10. REPAIR**

The Contractor shall repair any areas of the site damaged as a result of the work. This includes, but is not limited to, sod, trees, plants, sidewalks, curbing, parking lot, irrigation, etc. All repairs are to be made using like materials.

## **11. CLEAN-UP**

All unusable materials and debris shall be removed from the premises at the end of each workday, and disposed of in an appropriate manner. Upon final completion, the Contractor shall thoroughly clean up all areas where work has been involved as mutually agreed with the County's Project Manager.

## **12. COMPLIANCE WITH FEDERAL STANDARDS**

All items to be purchased under this contract shall be in accordance with all governmental standards, to include, but not be limited to, those issued by the Occupational Safety and Health Administration (OSHA), the National Institute of Occupational Safety Hazards (NIOSH), and the National Fire Protection Association (NFPA).

### **13. MATERIAL SAFETY DATA SHEETS (MSDS)**

Any chemical item supplied under this contract shall be accompanied by a Material Safety Data Sheet (MSDS). The MSDS shall include the following information:

1. The chemical name and the common name of the toxic substance.
2. The hazards or other risks in the use of the toxic substance, including the potential for fire, explosion, corrosiveness, and reactivity.
3. The known acute and chronic health effects of risks from exposure, including the medical conditions which are generally recognized as being aggravated by the exposure to the toxic substances.
4. The primary route of entry and symptoms of exposure.
5. The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of or exposure to the toxic substances, including appropriate emergency treatment in case of overexposure;
6. The emergency procedure for spills, fire, disposal and first aid.
7. A description in lay terms of the known specified potential health risks posed by the toxic substance intended to alert any person reading this information.
8. The year and month, if available, that the information was compiled, and the name, address and emergency telephone number of the manufacturer responsible for preparing the information.

Any spillage of hazardous chemicals and/or wastes caused by the vendor must be reported immediately to the proper authority and the County's Project Manager. All spills shall be cleaned up in accordance with all local, State, and Federal Regulations. The cost of cleanup of any spillage of hazardous chemicals caused by the vendor shall be the sole responsibility of the vendor and the County will share no responsibility for these costs. A copy of a completed compliance order with local, State, and Federal agencies shall be given to the County.

If any hazardous chemicals or conditions are discovered by the vendor during the normal work operation, it is the responsibility of the vendor to immediately contact the County's Project Manager with a description and the location of the condition.

The County's Project Manager or other County representatives may periodically monitor the work for safety. Should there be safety and/or health violations, the County's representative may have the duty to require the vendor to correct the violation in an expeditious method. If there is any situation that is deemed unsafe by the County's Project Manager or other County representatives, the project will be shut down immediately upon notice and will not resume work until the unsafe condition has been remedied.

Should the work site be in a hazardous area, the County shall take reasonable actions to furnish the vendor with information concerning hazards such as the types or the identification of known toxic material, machine hazards, Material Safety Data Sheets, or any other information that would assist the vendor in the planning of a safe work site. The vendor retains the ultimate responsibility to ensure all work is performed in a manner consistent with all applicable safety standards and directives.

The vendor shall be aware that while working for the County, representatives from agencies such as the United States Department of Labor, Occupational Safety and Health Administration (OSHA), and the Division of Safety, State of Florida, are invitees and do not need to have warrants or permission to enter the work site.

The vendor shall designate a competent person of its organization whose duty shall be the prevention of accidents. This person shall be literate and able to communicate fully in the English language because

of the necessity to read job instructions and signs, as well as the need for conversing with management personnel. This person shall be the Vendor's Superintendent unless otherwise designated in writing to the County's Project Manager. All communications to the Superintendent shall be as binding as if given to the vendor.

#### **14. LABOR, EQUIPMENT, & MATERIALS SHALL BE SUPPLIED BY THE CONTRACTOR**

Unless otherwise stated in this solicitation the Contractor shall furnish all labor, equipment, and materials necessary for satisfactory contract performance. When not specifically identified in the technical specifications, such materials and equipment shall be of a suitable type and grade for the purpose. All material, workmanship, and equipment shall be subject to the inspection and approval of the County's Project Manager.

#### **15. QUANTITIES**

No guarantee is expressed or implied as to quantities or dollar amounts that will be used for this project. In no event shall Lake County be liable for payments in excess of the amount due for quantities of goods or services actually ordered.

#### **16. EMPLOYEES**

The Contractor shall provide competent, suitable, and qualified personnel to perform the work as required by the specifications, shall be fully responsible for the performance of his organization and completion of all work under this Contract, and shall, at all times, maintain good discipline and order at the work site.

#### **17. DRESS CODE**

The Contractor shall maintain a dress code for their employee's with a minimum of shirts, pants and work shoes/boots, in decent condition, at all times while the work is being performed.

#### **18. SUPERVISION**

Contractor shall supply a superintendent which has the ability to speak and understand English, and at least one responsible person who speaks and understands English shall be on the project during all working hours. He shall also designate a competent person of its organization whose duty shall be the prevention of accidents at the site. This person shall be literate and able to communicate fully in the English language because of the necessity to read job instructions and signs, as well as the need for conversing with management personnel. This person shall be the Contractor's Superintendent unless otherwise designated in writing by the Contractor to the County's Project Manager. All communications to the Superintendent shall be as binding as if given to the Contractor.

#### **19. LIQUIDATED DAMAGES**

The County and the Contractor recognize that, since time is of the essence for this agreement, the County will suffer financial loss if work is not completed within the specified time frame. The County will be entitled to assess, as Liquidated Damages, but not as a penalty, for each calendar day after the scheduled completion date the project continues. The project shall be deemed to be completed on the date the work is deemed complete to the satisfaction of the County. The Contractor hereby expressly waives and relinquishes any right which it may have to seek to characterize the Liquidated Damages as a penalty. The parties agree that the Liquidated Damages sum represents a fair and reasonable estimate of the County's actual damages at the time of contracting if the Contractor fails to complete the work in a timely manner. The Liquidated Damages are as follows:

**Specific Project Amount**

**Daily Charge Per Calendar Day**

\$5,000 and under.....	\$ 25
Over \$5,000 but less than \$10,000.....	\$ 65
\$10,000 or more but less than \$20,000.....	\$ 91
\$20,000 or more but less than \$30,000.....	\$121
\$30,000 or more but less than \$40,000.....	\$166
\$40,000 or more but less than \$50,000.....	\$228

Any Contractor that is in default for not completing the work within the time specified, at the option of the County, may not permitted to perform work for the County until the project is complete and the liquidated damages sum is satisfied.

**20. SANITATION**

The Contractor shall be required to provide and maintain adequate sanitary conveniences for the use of persons employed for the project. These conveniences shall be maintained at all times without nuisance, and their use shall be strictly enforced. The location of these conveniences shall be subject to the County’s Project Manager's approval. All such facilities shall be installed and maintained in accordance with applicable federal, state and local laws.

**21. WARRANTY**

All work performed under this contract shall be warranted for a minimum period of two (2) years for the materials and labor from the completion of the project and acceptance by the County.

The Contractor shall provide a written warranty that includes, but is not limited to, statements that warrant against the following:

1. the sealer losing its protection value or fading
2. the coating flaking, chipping, or suffering a loss of adhesion
3. abnormal wear

In the event that any of the listed deficiencies occur within the warranty period the Contractor will recoat with the specified material the affected area at no cost to the County.

It is the Contractor's responsibility to supply all material, labor, equipment and expertise to perform warranty work at no additional cost to the County. The Contractor shall provide the County with certification that all materials, mixtures, and workmanship meet or exceed the requirements specified herein. The Contractor shall complete all warranty repairs and permanent replacement as directed by the County, maintaining traffic control as specified herein. The Contractor shall repair said areas within thirty (30) calendar days from notification by the County.

In the event of any failure of the repaired area, in accordance with the performance criteria herein, the County and the Contractor will determine if the failure is due to the materials or workmanship being at fault. If the failure is due to the materials or workmanship being at fault, the Contractor shall repair the failed areas at no cost to the County.