



SCOPE OF WORK

Annual Requirements Contract for Pavement Leveling Services.

1.0 INTENT

The intent and purpose of this invitation to bid is to establish an annual requirements contract for pavement leveling services for the Department of Public Works and Transportation. These services shall include but not limited to raising and undersealing of concrete slabs, sidewalks, and pavement. During performance of work, Contract shall furnish all labor, equipment, and materials to control dust at all times.

The City reserves the right to make a bid award to either one vendor or to multiple vendors, whichever is in the best interest of the City. If the award is made to multiple vendors, it will be either as one vendor being the primary vendor and the other vendor the secondary vendor, or both vendors awarded jointly.

2.0 SERVICE

All services shall include but are not limited to the following:

- Vendor shall furnish all equipment and supplies needed for raising and undersealing of concrete slabs, sidewalks, and pavement. All equipment and supplies used must be capable of performing all operations in accordance with the specification.
- Vendor shall cut any exposed rebar or concrete joints that are preventing a level surface.
- All debris in way of performing work shall be cleaned and picked up prior to and after work is completed.
- Vendor shall provide written summary report containing location, area (sf), and quantity (lb.) to be signed off by a City representative at end of each work day.
- Each location shall be marked and noted for warranty purposes.
- Vendor shall ensure each location is leveled and no pooling of water will occur.
- Retainage will not be held for this project.
- Material - The material shall be a hydrophobic, closed cell, high density polyurethane system with the following physical characteristics and properties:

Property	Requirement
Density, minimum, per ASTM D 1622	4.0 ± ½ lb/ft ³ (64 ± 8 kg/m ³)



Compressive Strength, minimum, per ASTM D 1621	80 psi (550 kPa)
Tensile Strength, minimum	90 psi (620 kPa)
Volume Change, maximum	+5.0 percent
Curing Rate	90 percent of compressive strength within 15 minutes after injection

The polyurethane foam system will have a free rise density of 4.0 +/- lb./cubic foot, with a minimum compressive strength of 80 psi. The expansion of the polyurethane foam under pressure increases the foam density above the original free rise density value. The compressive strength is a function of density of the tested material; therefore, the foam produced during the lifting process will have a higher compressive strength than foam produced without restriction (free rise).

Final elevations shall be within ¼” (0.02 ft.) of the elevations proposed by profile. A tight string line or straight edge may be used to monitor elevations. Final elevations shall be verified. The Contractor shall be responsible for any blowouts or excessive lifting which may result from process and shall repair the damaged area to the satisfaction of the owner without additional cost.

The high-density polyurethane formulation shall reach 90% of full compressive strength within 15 minutes from injection. The method for verification of quantity used must be approved by the Owner prior to work being pre-formed.

Pumping units shall be equipped with a manufacturer’s certified flow meter to measure the amount of high-density polyurethane injected at each location. The certified flow meter shall have a digital output in both pounds and gallons.

A picture shall be taken of the flow meter prior to starting a project and another picture of the meter shall be taken after completion on each project to verify quantities. Flow meter shall be cleared to zero before starting work at each project. Project inspector shall verify the quantities for each project. Pictures of each location will be submitted daily.

The polyurethane material shall be measured in pounds.

Concrete Joint Grinding with Walk-Behind Scarifier/Grinder:

- Use of walk-behind scarifier for concrete grinder to eliminate mismatched or offset joints on arterial or residential concrete roadways at specific locations. Process to be used in conjunction with residential and arterial undersealing. Joints mismatched 3/4” or below may be ground for ride quality improvement. Anything greater than 3/4” should seek alternative method of repair. Offset maximum allowance after grinding has been performed will be 1/8”.



- Use of vacuum is required for all concrete grinding performed on roadways. Vacuum must meet all OSHA standards and requirements for silica dust control as described exposure.
- Approval of work to be performed at each specific location must be given by owner before work can begin. Work not approved will not be paid. Crew that is on location for Residential and Arterial Concrete Pavement Undersealing will perform specified concrete grinding services while on site.
- Pavement ride quality will be verified by placing a 4' straight edge at selected concrete pavement joints to determine if an elevation variance greater than 1/8" still exist. Testing locations will be selected by the city. Any variance greater than 1/8" will be grinded again until it meets the 1/8" variance requirement.
- The work performed, and equipment furnished in accordance with this item and measured as provided under "Measurement" will be paid for the unit price bid for items "Concrete Joint Grinding with Walk-Behind Scarifier Grinder".

3.0 TRAFFIC CONTROL

The contractor shall provide construction and maintenance signs, construction lights, barricades, channelizing devices and flagmen as required to provide for the safety of the traveling public. These items shall be in accordance with the recommended practices of the latest version of the Texas Manual on Uniform Traffic Control Devices for Streets and Highways (M.U.T.C.D.)

Traffic control will be broken into the following two categories:

Residential: The contractor will be required to provide all traffic control on residential streets as part of the unit cost.

Thoroughfare: Price for traffic control will be included in your price per pound. Thoroughfare street work cannot begin prior to 8:45 a.m. and must be cleared by 4:30 p.m. unless prior written approval is given by City.

Construction signs shall not be removed from the project until approved by the City.

- No street shall be closed except upon written authority from the city.
- At the end of each day, the contractor shall prepare the work to the satisfaction of the city to ensure safe driving at night; and shall place temporary pavement markings and maintain it until the city has approved the final inspection.
- Contractor shall submit a traffic control plan for approval four (4) days prior to starting work at any location. All barricades, detour signs for total closure of the street, and all maintenance of signs and removals upon completion of project shall be in accordance with Texas M.U.T.C.D.



- All street work and closures will require a four (4) day notice to city so it may be publicized in the local paper as necessary.
- Contractor shall provide all temporary pavement marking as needed and placed before removal of barricades for the safety of public until permanent markings are installed by owner.

4.0 SAFETY REQUIREMENTS

The Contractor must be thoroughly familiar with all prevailing safety measures pertinent to its operation and shall meet or exceed those measures. This shall include, but not necessarily be limited to Environmental Health Agency (EPA) regulations, State of Texas regulations, local city ordinances, and Occupational Safety and Health Agency (OSHA) regulations. In addition, the Contractor shall be wholly responsible for instructing its employees in these safety measures and seeing that they are fully complied with in every respect.

Vendor will provide all required safety signage, barricades, and flashers/strobes.

All employees shall follow all applicable safety procedures, have appropriate fuel safety training certification when required by federal or state law, have immediate access to all appropriate safety equipment, and shall be trained in the use of that equipment.

All vehicles shall have proper safety signage, be fit for their intended purpose, and meet all OSHA, and State of Texas requirements.

Vendors discovered working without necessary safety devices or equipment in place will be required to stop all work in progress until adequate equipment has been obtained and approved by to the Contract Administrator.

Any hazardous condition or any damage to City property is to be immediately reported to the City Contract Administrator.

Vendor will not permit unsafe practices. Examples of unsafe practices include but are not limited to: using inappropriate equipment for the job, operating with one arm of a bat wing mower raised with blades exposed and spinning, removing chains or other safety devices from equipment, traveling with an operator sitting in the back of a pickup truck with the tailgate lowered and operating mowing equipment at excessive speed. Unsafe practices will be grounds for termination of the contract.

5.0 SPECIAL PROVISIONS

Supervision - The Contractor shall, during all periods of contract performance, provide competent supervision of his employees to assure complete and satisfactory fulfillment of the work and the terms of this Contract. The Contractor or a capable, fully authorized representative must be immediately available during all work activities to receive any and all special instructions from the Contract Administrator.

Safety - Industry approved safety standards and equipment shall be used at all times.



The Contractor must be thoroughly familiar with all prevailing safety measures pertinent to its operations. This shall include, but not necessarily be limited to Environmental Protection Agency (EPA) regulations, Arlington City Ordinances, and Occupational Safety and Health Agency (OSHA) regulations. In addition, the Contractor shall be wholly responsible for instructing its employees in these safety measures and seeing that they are fully complied with in every respect.

Hazards - The Contractor shall at no time permit placing or use of equipment in such manner as to block traffic lanes or to create safety hazards. Contractor personnel shall provide appropriate warning devices when necessary and cooperate in the fullest in allowing through passage of other vehicles and personnel, even to the point of interrupting their own work, if necessary.

Defective Work and Damages - The Contractor shall be wholly responsible for and shall promptly correct or restore all defective Work or damages to any/all City facilities caused by its activities. Restoration and correction shall be to the complete satisfaction of the City. This shall apply to any part of a building, its appurtenances, the adjacent grounds, or any other tangible damage incurred in the performance of the Contract.

Failure by the Contractor to proceed promptly with corrective actions may be cause for cancellation of this Contract with amount(s) necessary to correct defective work and/or damage being withheld from payments due or to become due to the Contractor.

6.0 WARRANTY

When defective material and workmanship are discovered, required repairs are to be made under this guarantee and all such repair work shall be done by the vendor at his own expense immediately after notice has been given him by the Owner. Should the vendor refuse or fail to make the repairs within 3 days thereafter, the Owner may make the necessary repairs and charge the Contractor with the actual cost of the labor and materials required.

- A warranty of 10 years shall be required for each repair.

7.0 STORMWATER REQUIREMENTS

The Contractor shall implement Best Management Practices (BMPs) to prevent stormwater pollution in accordance with the current City of Arlington Stormwater Discharges Ordinance