Town of Arlington
Purchasing Department

REQUEST FOR QUOTES
#19-16

POROUS PAVEMENT MATERIAL

The Town of Arlington is soliciting quotes to Furnish and Deliver Porous Pavement Material House pursuant to Chapter 30, Section 39M. Quotes will be accepted by the Town Manager's Office/Purchasing Dept. , Town of Arlington, Massachusetts, until **10:00 A.M. Wednesday, April 17, 2019** at the following address:

Town of Arlington
Office of the Purchasing Agent
730 Massachusetts Avenue
Arlington, Massachusetts 02476

Quotes can be emailed (dlanzillotti@town.arlington.ma.us) or Mailed.

Quotes must be received by the above stated time. Quotes received after this time will not be accepted.

Proposals must be submitted on the form provided.

Further information may be obtained by contacting Domenic Lanzillotti, Purchasing Officer at (781) 316-3003.

The Town Manager reserves the right to cancel any request for quotes, to reject in whole or in part any and all quotes, when it is deemed in the best interest of the Town or Arlington to do so.

Adam W. Chapdelaine
Town Manager

April 5, 2019

PRICE PROPOSAL FORM

TOWN OF ARLINGTON
PURCHASING DEPARTMENT

POROUS PAVEMENT MATERIAL

DEADLINE: **Wednesday April 17, 2019 @ 10:00 A.M.**

Mr. Adam W. Chapdelaine
Town Manager
Arlington, MA 02476

We, the undersigned, herewith submit proposal for furnishing and delivering Porous Pavement Materials to the Town of Arlington, Massachusetts all in accordance with the Request for Quotes furnished to us.

EST. QUANT.	MATERIAL	UNIT PRICE
9,310 sq. ft.	Porous Pavement Materials per specifications attached	$_____/sq. ft.

COMPANY NAME:_____

ADDRESS:_____

_____

SIGNED BY:_____
(PRINTED)

_____
(SIGNATURE)

DATE:_____

PHONE:_____ FAX:_____

EMAIL:_____

CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity, or group of individuals.

_____

(Signature of individual submitting bid or proposal)

_____

(Name of individual submitting bid or proposal)

_____

Name of Business

_____

Date

Pursuant to M.G.L. Chapter 62C, Section 49A, I certify under the penalties of perjury that I have complied with all laws of the commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

_____	_____
Social Security Number or Federal Identification Number	Signature of Individual or Responsible Corporate Officer and Title

NON-COLLUSION FORM

MUST BE SIGNED ANDSUBMITTED WITH BID

TOWN OF ARLINGTON

TOWN HALL, 730 MASSACHUSETTS AVENUE
ARLINGTON, MASSACHUSETTS 02476
TELEPHONE 781-316-3090

REQUEST FOR QUOTES: Porous Pavement Materials Procurement

PROJECT DESCRIPTION

The Town of Arlington seeks quotes for approximately 9,310 square feet of porous pavement material procurement and drop-off.

PROJECT BACKGROUND

The Spy Pond Shoreline Stabilization Project will begin construction in Spring 2019. The primary goals of the project are to preserve shoreline habitat and improve water quality while addressing erosion. The project will include bank stabilization and the upgrade of park amenities, including resurfacing park pathways with a porous pavement material to upgrade the park to ADA-Compliance.

The Town of Arlington will purchase the porous pavement material directly for the park upgrades. The pathway work needs to be completed by June 30, 2019, so the material needs to be delivered no later than April 22, 2019. Training for installation will be the responsibility of the project contractor, Haven Contracting Corp.

SCOPE OF SERVICES

MATERIAL

Please refer to specification 02500 Flexible Porous Paving.

QUANTITY

Approximately 9,310 square feet of porous pavement material.

- State the built in amount of material contingency for the 9,310 square feet (e.g. 2%).
- Provide a unit price for any additional material by square foot, should more product be needed.

DELIVERY

Please refer to specification 02500 Flexible Porous Paving.

All material to be delivered in one shipment on date specified by owner or Haven Contracting. At least 3 business days notice will be provided to successful bidder. Bidder is responsible for unloading product in location designated by owner or Haven Contracting (approximately the Spy Pond Park parking lot on Spy Pond Lane, to be confirmed onsite during the day of the delivery). Any damage incurred during transit or unloading will be responsibility of the bidder.

Additional requirements

- Per M.G.L. c.30 §39M, a 50% payment bond needs to be included in the quote
- Quotes need to be submitted with a Certificate of Non-Collusion (separate attachment)

TOWN OF ARLINGTON

TOWN HALL, 730 MASSACHUSETTS AVENUE
ARLINGTON, MASSACHUSETTS 02476
TELEPHONE 781-316-3090

INSTRUCTIONS FOR SUBMISSION OF PROPOSALS

Please submit an electronic copy (by email) of your proposal including examples of relevant work, references, scope of services, schedule, and fee proposal by 10:00am, Wednesday, April 17, 2019 to the attention of:

Domenic Lanzillotti, Purchasing Officer

dlanzillotti@town.arlington.ma.us

PROPOSAL EVALUATION

Contract to be awarded to the responsive and responsible bidder offering the quantity of specified material at the lowest price.

SCHEDULE

Proposals will be reviewed and contract awarded no later than May 1, 2019.

SECTION 02500

FLEXIBLE POROUS PAVING

PART 1 - GENERAL

1.01 SUMMARY

A. The work of this Section includes subgrade preparation and installation of:

1. Flexible porous paving for path surfacing, widths vary

1.02 RELATED WORK UNDER OTHER SECTIONS

A. The following related work will be performed under the designated SECTIONS:

1. Section 01568, EROSION AND SEDIMENT CONTROL
2. Section 02100, SITE PREPARATION
3. Section 02120, EARTH EXCAVATION, BACKFILL, FILL, AND GRADING
4. Section 02800, SITE IMPROVEMENTS
5. Section 02900, PLANTING
4. Section 02952, RESTORATION SEEDING

1.03 REFERENCES

A. ASTM D3385 -Standard Test Method for Infiltration Rate of Soils in Field Using Double-Ring Infiltrometer

B. AASHTO T-180 - Standard Method of Test for Moisture-Density Relations of Soils

C. ASTM C1701 – Standard Test Method for Infiltration Rate of In Place Pervious Concrete

D. ASTM C 666 - Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing.

E. ASTM D 2047 - Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring Surfaces as Measured by the James Machine.

F. ASTM D 4798 - Standard Practice for Accelerated Weathering Test Conditions and Procedures for Bituminous Materials (Xenon-Arc Method).

G. ASTM F 1292 - Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment.

H. ASTM G 155 - Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials

1.04 DESIGN/PERFORMANCE REQUIREMENTS

A. Independent Test Data of Permeable Surfacing:

1. Porosity: Calculated void content of 27 percent.

2. Permeability: Coefficient of permeability for a 6 inch diameter core sample of 5.98x101 inches/second. Flow rate for a 6 inch diameter core sample of 0.043 CF/Sec.

3. Compressive Strength:
   a. 10,000 lbs Test: Average reading after 4 hours after release, 0.0609
   b. 20,000 lbs Test: Average reading after 3 hours after release, 0.0350

4. Durability: Weathering: Accelerated Weathering in accordance with ASTM D 4798, Cycle A, ASTM G 155. Xenon UV exposure, 120 hours.

5. Durability: Freeze-Thaw: ASTM C 666, Method B, 300 cycles of freeze/thaw; Panel 1 Mass Change minus 1.2 percent, Panel 2 Mass Change minus 0.5 percent, Panel 3 Mass Change plus 5.6 percent. No change in visual appearance from all panels

6. Slip Resistance: Static Coefficient of Friction when tested in according to ASTM D 2047, Average of 0.66

7. Safety: Critical Fall Porous Pave XLS: Tested in accordance with ASTM F 1292, maximum critical fall height of 4 feet.

8. Safety: Critical Fall Porous Pave XLS with Foam: Tested in accordance with ASTM F1292, maximum critical fall height of 7 feet.

9. Safety: Chemical Leaching: EPA Tested for metals, mercury, semivolatiles; The analyte was not detected at or above the reporting limit.

10. Flame Resistance: Tested in accordance with ASTM E 84, Flame Spread Index 90, Smoke developed Index 600.

1.05 SUBMITTALS

A. Product Data: Manufacturer's data sheets on each product to be used, including:

1. Preparation instructions and recommendations.

2. Storage and handling requirements and recommendations.

3. Installation methods.

B. Shop Drawings: Project specific shop drawings shall include as a minimum: plan view, cross-section, and product data.

C. Submit the name and address of the materials producer and the location from which the materials are to be obtained.

D. Selection Samples: For each finish product specified, two complete sets of color charts representing manufacturer's full range of available colors and patterns.

E. Verification Samples: For each finish product specified, two samples, minimum size 5 inches (127 mm) round, representing actual product, color, and finish.

F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

G. Submit name and contact information of company responsible for performing paving operations as soon as this information becomes available.

F. Constructed Samples - Submit the following:

1. Sample Panel: Construct a 5' x 5' sample of flexible porous paving for approval. The sample shall show all aspects of finish appearance. The sample, upon approval, shall be maintained as the standard of minimal quality for approval of all proposed surfacing and paving work required for the project.

H. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic cleaning and maintenance.

1.06 QUALITY ASSURANCE

A. Manufacturer Qualifications: Manufacturer with a minimum for three years documented experience with the products specified.

B. Installer Qualifications: Certified Porous Pave personnel or authorized agents experienced in performing work of this section who has specialized in installation of work similar to that required for this project.

C. Pre-Installation Meetings:

1. Convene a pre-installation meeting a minimum of two weeks prior to start of porous surfacing system.

2. Verify project requirements, sub-base and base conditions, manufacturer's installation instructions and coordination with other related work.

3. Require attendance of parties directly affecting work of this section, including the Contractor, Architect, engineer, and installer. Manufacturer's representative may attend by phone conference as needed.

4. Review installation procedures and coordinate installation with other work around installation area.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

B. Binder components shall be shipped in sealed water-tight containers.

C. Granite aggregate shall be shipped in commercial-grade, moisture-proof 50 lb pre-measured bags.

D. Storage: Store materials in accordance with manufacturer's instructions.

E. Store binder above 45 degrees F. Rock and stone must be kept dry and stored out of direct sunlight to prevent condensation inside the bags.

F. Handling: Protect materials during handling and installation to prevent damage.

G. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic maintenance as required.

1.08 PROJECT CONDITIONS

A. Protection of Existing Conditions:

1. Protect adjacent work from splashing of paving materials. Remove all stains from exposed surfaces of paving, structures, and grounds. Remove all waste and spillage.

2. Do not damage or disturb existing improvements or vegetation. Provide suitable protection where required before starting work and maintain protection throughout the course of the work.

3. Restore damaged improvements, including existing paving on or adjacent to the site that has been damaged as a result of construction work, to their original condition or repair as directed to the satisfaction of the Owner’s Representative, and authority having jurisdiction at no additional cost.

B. Safety and Traffic Control:

1. Notify and cooperate with local authorities and other organizations having jurisdiction when construction work will interfere with existing roads and traffic.

2. Provide temporary barriers, signs, warning lights, flaggers, and other protections as required to assure the safety of persons and vehicles around the construction area and to organize the smooth flow of traffic.

C. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

D. Do not place Hard Surface Porous Paving System when the following conditions exist.

1. Unstable wet, saturated, muddy or frozen base.

2. During rain or snow.

3. When air temperature is less than 45 degrees F or more than 95 degrees F for at least six hours after installation.

E. Do not begin installation of porous pavements until all hard surface paving adjacent to porous pavement areas is completed.

F. Protect partially completed porous surfacing against damage from other construction traffic when work is in progress.

1.09 WARRANTY

A. Warranty: Porous Pave material, when installed by certified Porous Pave personnel or authorized agents, will carry a warranty for materials of two years from the date of installation. Porous Pave's warranty is limited to the structural and mechanical integrity of the installed materials.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Acceptable Manufacturer: Porous Pave Inc., which is located at: 4385 E. 110th St.; Grant, MI 49327; Toll Free Tel: 888-448-3873; Tel: 231-834-7720; Fax: 231-834-5537; Email:request info (sales@porouspaveinc.com); Web:www.porouspaveinc.com

B. Substitutions: Not permitted.

2.02 MATERIALS

A. CRUSHED STONE SUB BASE

1. Crushed Stone Sub-base material, see Section 02120 EARTH EXCAVATION, BACKFILL, FILL, AND GRADING.

B. PERMEABLE SURFACING: Porous Pave is a pour-in-place permeable paving material. With 27 percent void space that delivers 5,800 gallons per hour per square foot permeability.

1. Porous Pave XL - Strongest, most durable blend consisting of 50 percent recycled rubber chips and 50 percent kiln-dried aggregate, plus a Hard Binder, for hard-wearing permeable pavement.

2. Kiln-Dried Aggregate: Washed, kiln-dried, consistently sized all-granite aggregate.

3. Recycled Rubber Chips: Clean, consistently sized rubber chips, 99 percent of steel fragments removed. Consistent rubber chip colors are infused not just a thin outer coating.

4. Color: Shall be Brown or Tan, verified and selected by the Owner.

5. Hard Binder: B5HN hard binder.

2.03 FABRICATION

A. Mix permeable surfacing components to the base mixing ratio required for the mix and color specified.

1. Mix in mortar mixer 45-60 seconds or until material is evenly coated with binder, over-mixing may change the color of the material.

2. Mix different colors separately.

PART 3 – EXECUTION

3.01 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. Verify layout, gradients and elevations of subgrade and base are correct. Notify the Engineer if not acceptable. Do not begin preparation or installation until unsatisfactory conditions have been corrected.

C. Ensure that adjacent hard-surfaced paving work is completed before installing porous pavement system.

D. If substrate preparation is the responsibility of another installer, notify Engineer of unsatisfactory preparation before proceeding.

3.02 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Carefully protect adjacent materials not to receive surfacing to avoid exposure to binder or mix. Materials will stain and cannot be cleaned.

3.03 SUBGRADE PREPARATION

A. Prepare subgrade as specified in the contract documents.

B. Construct subgrade to ensure that the required paving thickness is obtained in all locations.

C. Keep all traffic off the subgrade during construction to the maximum extent practical. Regrade subgrade disturbed by delivery vehicles or other construction traffic, as needed.

D. Compact material added to obtain final subgrade elevation.

E. Place geotextile at location as specified on the Contract Drawings.

F. Determine subgrade permeability at locations selected by the Engineer in accordance with ASTM D3385 before porous paving placement. Confirm that subgrade permeability meets have a mean tested infiltration rate between 0.5 and ten inches per hour. Infiltration is to be considered infeasible in soils with tested infiltration rates of less than 0.5 inches per hour.

G. Contractor shall coordinate the scheduling of the testing and allow adequate time for Engineer to review.

H. A written memo with the infiltration rates shall be provided to the Engineer for review prior to the Contractor being given authorization to proceed with the porous paving placement.

I. In the event that subgrade does not meet the permeability requirements at locations, additional excavation and placement of crushed stone subbase will be required at the direction of the Engineer.

3.04 SUBBASE

A. Prepare subbase in accordance with contract documents, with 95% compaction per AASHTO T-180.

3.05 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Install each area to be surfaced in a single monolithic pour with no expansion strips.

C. Provide 2 inches of XL over a compacted aggregate base.

3.06 FIELD QUALITY CONTROL

A. The full permeability of the pavement surface shall be tested by application of clean water at the rate of at least 5 gpm over the surface, using a hose or other distribution devise. Water used for the test shall be clean, free of suspended solids and deleterious liquids and will be provided at no extra cost to the Owner. All applied water shall infiltrate directly without puddle formation or surface runoff and shall be observed by the Owner’s Representative and Owner.

3.07 PROTECTION

A. Protect installed products until completion of project.

B. Protect adjacent materials.

C. Protect porous surfacing until fully cured.

D. Avoid construction traffic over installed surfacing.

E. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION 02500