



TO: Board of Contracts and Awards
FROM: Michael P. Slevin III, P.E., Environmental Services Director
Kurtis D. Kingsolver, P.E., Public Works Director/City Engineer
Geoffrey M. Smyth, P.E., Division Manager, Science & Engineering
COPY: City Council, City Manager, City Clerk, SBE Coordinator, LEAP Coordinator,
Jessica Knickerbocker, P.E., Project Manager, and Samol Hefley,
Finance/Purchasing
SUBJECT: Contract for Permeable Pavement Standards Based on Lessons Learned, Not
Practical to Bid, Contract No. SR1566051753 – December 18, 2018
DATE: December 4, 2018

RECOMMENDATION SUMMARY:

The Environmental Services Department requests a contract be awarded to Miles Resources LLC, Puyallup, WA, in the amount of \$493,600, plus a 20 percent contingency, for a cumulative total of \$592,320, plus any applicable tax, budgeted from the ES Surface Water Fund 4301, for the field testing construction of new permeable pavement mix designs and a stormwater collection system with bioretention treatment facilities.

STRATEGIC POLICY PRIORITY:

- Encourage thriving residents with abundant opportunities for life-long learning.
- Assure outstanding stewardship of the natural and built environment.

The Environmental Services Department has partnered with Washington State University (WSU) and the Tacoma School District to complete the Permeable Pavement Standards Based on Lessons Learned Project at the School of Industrial Design, Engineering and Art (IDEA) site.

BACKGROUND:

The City of Tacoma received a Puget Sound National Estuary Program (NEP) grant from the Puget Sound Partnership facilitated by the Washington State Department of Ecology. This Near Term Action was the second highest ranked project in the state. It will field test new permeable mix designs and new material testing procedures, to further pavement durability, enhance permeable pavement standards, and increase confidence in permeable pavements. The IDEA parking lot and access road, near South Park Avenue and South 68th Street, were chosen for the permeable pavement study.

Permeable pavements have been proven to be a cost effective solution to managing stormwater while maintaining functioning roadways and parking lots. This technology has advanced rapidly over the past ten years and this effort aims to take industry standards even further. Solid specifications and reliable material testing is imperative to the long term success of permeable pavements.

A stormwater capture system and bioretention treatment facilities will also be constructed to allow for water quality monitoring of the pavement. The work was identified by project partner WSU whom is funding design of the reference systems and is providing funding for this scope of work under a separate Memorandum of Understanding (MOU) with Environmental Services.



ISSUE: The purpose of this project is to further study stormwater treatment and durability of permeable pavements, enhance design standards, and increase confidence in permeable pavements. Kevlar fibers, carbon composite fibers, and recycled asphalt shingles will be the mixes tested. These mixes are the leading edge of permeable pavement, with few local contractors having applicable construction experience. The project site and partnership with WSU and the School District allows the learning to extend to future engineering students, while improving the overall learning environment.

ALTERNATIVES: One alternative would be to not construct a stormwater project in this location and return the Department of Ecology grant funding and supplemental funding from WSU. This option would continue to rely on separate and individual groups to improve this technology, slowing the advancement. This would provide no learning opportunity to the City or the students at IDEA.

WAIVER OF COMPETITIVE SOLICITATION: Miles Resources LLC is the only local contractor that has worked with the carbon composite fibers, Kevlar fibers, and recycled asphalt shingles in permeable pavement. It is imperative to the performance and testing of the asphalt section that the fibers are mixed properly into the asphalt. Miles Resources LLC has the only relevant and recent experience in mixing fibers into this type of asphalt. Due to the nature of this project being located at a local high school, construction must be coordinated with the school to ensure the safety of the students. The NEP grant that is funding the permeable pavement expires in July of 2019, which leaves little room for unanticipated encounters during construction. The WSU funding anticipates capturing water quality data this rainy season.

CONTRACT HISTORY: New contract.

SUSTAINABILITY: This project will be constructed following Greenroads project requirements.

SBE/LEAP COMPLIANCE: Contracting for the referenced project is in compliance with the Small Business Enterprise (SBE) regulation requirements per the grant funding agreement which initiated this project work.

DISADVANTAGED BUSINESS ENTERPRISE: Contracting for the referenced project is in compliance with the SBE regulation requirements per the grant funding agreement which initiated this project work.

**FISCAL IMPACT:****EXPENDITURES:**

FUND NUMBER & FUND NAME *	COST OBJECT (CC/WBS/ORDER)	COST ELEMENT	TOTAL AMOUNT
4301 ES Surface Water	ENV-03027-04	5330100	\$592,320
TOTAL			\$592,320

REVENUES:

FUNDING SOURCE	COST OBJECT (CC/WBS/ORDER)	COST ELEMENT	TOTAL AMOUNT
Washington State University	521900	6300005	\$143,600
WA State Dept. of Ecology Grant	521900	6300005	\$350,000
4301 ES Surface Water	521900	Rate Revenues	\$98,720
TOTAL			\$592,320

FISCAL IMPACT TO CURRENT BIENNIAL BUDGET: \$592,320**ARE THE EXPENDITURES AND REVENUES PLANNED AND BUDGETED? No****IF EXPENSE IS NOT BUDGETED, PLEASE EXPLAIN HOW THEY ARE TO BE COVERED.**

The construction will be covered mostly by WSU and the Ecology grant, with the surface water utility providing the 20 percent contingency funds.



City of Tacoma

Date: December 4, 2018
To: Patsy Best, Procurement and Payables Division Manager
From: Michael P. Slevin III, P.E., Environmental Services Director

Subject: Waiver of Competitive Solicitation Request
 Sole Source Purchase – TMC 1.06.257.A
 Not Practicable to Bid – TMC 1.06.257.B
Field Testing of Permeable Mix Design

For your review and recommendation.

The Environmental Services Department requests a waiver of the competitive solicitation process for field test construction of new permeable mix designs and a stormwater collection system with bioretention treatment facilities. The vendor is Miles Resources LLC, Puyallup, WA.

“Follow-on” Contracts:

Is this purchase based on a previous competitive solicitation conducted by the City or other agency? If yes, provide the contract information, specification number, etc., and explain the relationship of this request to the previous contract.

N/A

Waiver Criteria:

1. Is there only one feasible supplier of the product or service in the marketplace? Yes
If “yes”, such certification should be from the manufacturer (not the authorized distributor) and attached. The certification should describe what the product or service is and the relationship between the manufacturer and authorized distributor.

If No , briefly explain.

2. Support your contention that it would be futile to advertise and competitively bid the product/service.

Due to the nature of this demonstration and design intensive project with construction located at a local high school, construction must be coordinated with the school to ensure the safety of the students. The NEP grant has \$350,000 budgeted for construction of the permeable pavement expires in July of 2019, which leaves little room for unanticipated encounters during construction.

WSU is contributing \$143,600 towards the construction of a stormwater capture system and bioretention treatment facilities to allow for water quality monitoring of the pavement. The traditional competitively bid process is lengthy and would not allow for the water quality monitoring to occur this rainy season and delaying the results by a year. If not constructed to capture this rainy season, WSU may withdraw these funds.

3. Describe the screening efforts made to identify potential suppliers.

In April 2018, the City notified the Permeable Pavement Task Force of this research project and asked for those interested to submit a letter of interest. This Task Force includes consultants, engineers, state asphalt and concrete directors, material testing labs, WSDOT and three construction companies.

4. Describe any technical or unique product/service attributes that prevent drafting specifications for a competitive solicitation to which more than one supplier could successfully respond.

Miles Resources is the only local contractor to work with incorporating the kevlar fibers, carbon composite fibers, and recycled asphalt shingles into the construction of pavement. Projects experience includes:

- Kevlar Fibers - City of Tacoma has only piloted this product one time, on 40th Street constructed 2017. Fibers have also been piloted by the City of Puyallup, but have not been tested sufficiently to incorporate into the standards.
- Carbon Composite Fibers - Miles performed the first and only installation of carbon composite fibers at the Boeing facility in Auburn earlier this year. They worked closely with WSU on the specifications for the recycling of the fibers and most importantly how to incorporate them into the mix evenly, and to pave them with even distribution. This will be the first full scale application, and material testing of permeable asphalt with these fibers. There were many lessons learned with this project and their knowledge is key to a successful project here.
- Recycled Asphalt Shingles (RAS) - Miles has extensive experience with adding RAS to standard asphalt and was the inspiration for testing it within this project. The current standard specification does not allow RAS in porous asphalt due to the fines associated, fugitive fiberglass, and the difficulty with feeding the shingles into the mix consistently. Leaders in the asphalt industry agree that this should be a great application for RAS, but to our knowledge has not been piloted or tested at scale in Washington State. This will require a highly experienced contractor with substantial experience with RAS.

They have been serving on the Permeable Pavement Task Force that developed and continually updates Washington State's permeable pavement specifications.

5. Reference the example line item in the Purchasing Policy that best fits this request.

An immediate and important need for proposed construction, installation, repair, materials, supplies, equipment, or services where the delay that would result from following the requirements of the competitive solicitation process would cause financial loss to the City or an interruption of vital services to the public;

6. Describe the efforts made to assure that the City is receiving the lowest or best price possible.

This research project requires small batches or permeable pavement to be places for testing purposes. This work is unique, very labor intensive and would be very pricy if competitively bid. It is anticipated that this approach will provide the City with the best price possible.

7. Is this a one-time purchase? Yes No Total amount: \$592,320, plus any applicable tax.
If "no," estimated total dollar amount over contract term as allowed per waiver of competitive solicitation procedure: \$_____, plus applicable sales tax

8. Waiver includes freight and authorization for up to 10 percent contingency where a good faith estimate is provided. Any increase beyond the 10 percent contingency requires authorization.

The total amount authorized including contingency shall not exceed \$200,000 without approval by the Public Utility Board or City Council, as appropriate.

9. **Other supporting documentation attached?** Yes No

10. Funds for this purchase are available in the 4301 ES Surface Water.

11. **PROJECT COORDINATOR:** Geoffrey M. Smyth P.E., Science & Engineering Division Manager

Buyer Justification Notes:

Confirmed with James Newhouse at Miles Resources LLC that the City is receiving the best pricing for the nature of the work.

Miles has previous experience working with the carbon composite fibers, kevlar fibers, and recycled asphalt shingles with the Pervious Pavement projects with Environmental Services.