MEMORANDUM

Date: February 26, 2018

To: The Honorable Chairman and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator

Re: Experiment Pilot Major Pavement Rehabilitation in Lieu of Reconstruction

As the Board recalls, the first-round selection of local roads to be repaired and/or rehabilitated through the road property tax was contentious, requiring a reconsideration related to the selection of specific streets in the Green Valley area.

During the discussion, the Board, with the exception of the Green Valley streets, approved the recommendation of the Transportation Advisory Committee (TAC). The District 1 representatives of the TAC and Supervisor Miller objected to the streets selected for preservation by the Transportation Department and approved by TAC. Street selection by the Transportation Department was designed to preserve to the extent possible existing investment in the system. The TAC District 1 representatives and Supervisor Miller preferred specific reconstruction in certain targeted areas. Some of the targeted areas had the significant community support, while others little, if any.

The two subdivisions that received the most actual public participation within District 1 at the TAC, were the Sabino Town and Country Estates and Moondance Patio Homes subdivisions. The cost for repairing the streets within both of these subdivisions because of the failed pavement condition is estimated by the Transportation Department at $340,149 based on the measured road widths and mileage. The staff estimate is based on milling the top two inches of asphalt and replacing it with two inches of new standard asphalt. These estimates vary slightly from the published local road repair program estimate since those were based on an average width. Recently, Tucson Asphalt approached the County as well as the Transportation Department for the use of a proprietary "Green Asphalt Overlay" product which is claimed to provide the same or similar performance as reconstruction. This treatment estimated by Tucson Asphalt to cost $198,410 for both Sabino Town and Country Estates and Moondance Patio Homes.

Recently, the County received bids for the first group of roads to be repaired and rehabilitated under the Board approved local road plan. These improvements will be awarded in the near future to the low-bidder, Cholla Pavement Management from Apache Junction, who is $235,678 below the engineer’s estimate. Hence, if the Board was so inclined, the local
streets in these two subdivisions, or any other similarly sized subdivisions in any Supervisorial district, could be rehabilitated with a green asphalt overlay.

I am enclosing a more detailed report regarding the matter from Deputy County Administrator Carmine DeBonis, Jr. County staff has no preference with regard to this matter; however, using the “Green Asphalt Overlay” as a pilot prototype may lead to further cost savings, if it can be demonstrated that this product achieves acceptable performance over time and could be applied to other subdivisions.

I have asked Deputy County Administrator DeBonis to bring this matter to the TAC for their recommendation.

If any Member of the Board is inclined to pursue this option, please place the matter on an agenda to provide appropriate direction regarding this matter.

CHH/lab

Attachment

c: Carmine DeBonis, Jr., Deputy County Administrator for Public Works
   Ana Olivares, Director, Transportation Department
TO: C.H. Huckelberry  
County Administrator  
FROM: Carmine DeBonis, Jr.  
Deputy County Administrator  
RE: Proposal from Tucson Asphalt for Sabino Town and Country Estates and Moondance Patio Homes

Your January 4, 2018 letter to Tucson Asphalt requested proposals for the use of their Green Asphalt product on roads in Sabino Town and Country Estates and Moondance Patio Homes. As you recall, both of these subdivisions were not included in Years 1 and 2 of the approved local road repair program. Residents from each of these subdivisions attended nearly all of the Transportation Advisory Committee hearings regarding the use of the $0.25 property tax for local road repair.

Estimates by staff for repairing the failed pavement in each of these subdivisions are $215,554 for Sabino Town and Country Estates and $124,595 for Moondance Patio Homes based on the measured roadway width and mileage. The cost estimate by staff was based on milling the top two inches of failed asphalt and replacing it with two inches of new standard asphalt. These estimates will vary slightly from the published Regional Local Road Repair Program estimates since those were based on averaged widths.

Tucson Asphalt submitted cost estimates for using their Green Asphalt Overlay. Those cost estimates are $126,721 for Sabino Town and Country Estates and $71,689 for Moondance Patio Homes. These quotes are for placing a one-inch Green Asphalt Overlay on top of the existing paved surface which Tucson Asphalt claims is equal in performance to 2-inch traditional asphaltic concrete mill and fill. Both quotes are less than the County estimate for a standard mill and fill repair by approximately 40 percent.

On January 4, 2018, you also sent a memorandum to Transportation Director, Ana Olivares and me indicating an interest in determining if Green Asphalt is a viable repair alternative and asking that we identify the best method to procure services for repairing the roads as a pilot program using the Tucson Asphalt product. You also indicated that if the initial two subdivisions appeared successful, you would request that we proceed to pilot eight additional subdivisions, two in each of the other four supervisorial districts with approximately the same street mileage as Sabino Town and Country Estates and Moondance Patio Homes.

Working with the Procurement Department, various methods of procuring the Tucson Asphalt services were evaluated, including the use of an existing Department of Transportation Job Order Contract (JOC); Project Management Office and Facilities Management JOC; and a State of Arizona JOC that contains cooperative language allowing the County to utilize that contract.

Based on a review of each of the reviewed options, the State JOC is the best means to contract the services for Sabino Town and Country Estates and Moondance Patio Homes. The contracting process would include a meeting with the contractor and the State's representative, Gordian, on the project site to develop a project scope. Tucson Asphalt would then finalize the proposed cost estimate through Gordian, who reviews it to ensure all of the requirements of the State JOC are met. Gordian would
send the proposal to the County for review and, if acceptable to the County, the contract would be awarded to Tucson Asphalt.

Regarding expanding the use of this product as a further pilot for eight more subdivisions with roads in similar condition, it is recommended that the Pima County Department of Transportation prepare a program to evaluate the viability of alternate paving materials and methods. Development of the program can be established by the end of June 2018 to include metrics for product performance and specifications for alternate materials and applications. Upon development of these criteria, it would be appropriate to further evaluate the use of alternate materials and methods and conduct a broader procurement solicitation for the additional envisioned pilot subdivisions.

Subject to your concurrence, we can proceed with Tucson Asphalt’s Green Asphalt Overlay for Sabino Town and Country Estates and Moondance Patio Homes and development of a program to define and evaluate the use of alternative methods and materials, as outlined above.

Please contact me if you have questions or require further information.

Attachments

C: Ana Olivares, Director, Department of Transportation
   Yves Khawam, Deputy Director, Department of Transportation
   Mary Jo Furphy, Director, Procurement
To: Carmine DeBonis, Jr.
   Deputy County Administrator
   for Public Works

   Ana Olivares, Director
   Transportation

Re: Green Asphalt Alternative

Date: January 4, 2018

From: C.H. Huckelberry
       County Administrator

As you can see from my letter to Mr. Joe Herrick, Public/Commercial Specialist, Tucson Asphalt, I would like to determine if green asphalt is a viable alternative to total roadway reconstruction. As you can see, I have asked Mr. Herrick for a field review to determine suitability of applying green asphalt to road repairs in specific subdivisions and a cost estimate associated with such a treatment.

Please review with the Procurement Director Mary Jo Furphy to how best to procure these construction services if we want to proceed with the pilot program. If the initial two subdivisions appear to be successful, I would then proceed to pilot eight additional subdivisions, two in each of the other four Supervisorial Districts, with the approximate same mileage of streets treated in Sabino Town and County Estates and Moondance Estates.

CHH/lab

Attachment
January 4, 2018

Joe Herrick
Public/Commercial Specialist
Tucson Asphalt
2425 West Curtis Road
Tucson, Arizona 85705

Re: Green Asphalt Application in Sabino Town and Country Estates and Moondance Estates

Dear Mr. Herrick:

I am enclosing the street subdivision plat maps for both the Sabino Town and Country Estates and Moondance Estates for your review. I would appreciate your field review of these streets to determine if the current condition of the streets would lend themselves to your green asphalt repair and overlay and, if so, would the four-year warranty apply to these streets treated with green asphalt? Finally, what would be the approximate cost of treating all the streets in both subdivisions with your green asphalt?

We are considering using this product in a pilot program to determine how well it can solve significantly deteriorated subdivision streets in lieu of total reconstruction. I have asked Deputy County Administrator for Public Works Carmine DeBonis to explore the procurement process for this pilot program and how best to proceed if your answer to these green asphalt questions and the repair costs of these subdivision streets is positive.

If this pilot program is successful, I intend to pilot eight more subdivisions with roads in similar condition, in the four other Supervisorial Districts in the unincorporated areas of the County.
I would appreciate a timely response to this inquiry.

Sincerely,

C.H. Huckelberry
County Administrator

CHH/lab
Enclosure

c: Carmine DeBonis, Jr., Deputy County Administrator for Public Works
    Ana Oliveras, Director, Transportation Department
COTILLO DRIVE

SARATOGA TOWN AND COUNTRY ESTATES
LOT 1 PHASE II
PHASE I CONSTRUCTION

STREET IMPROVEMENT PLANS

LGC ENGINEERING ASSOCIATES
January 18, 2018

Pima County Administrator’s
130 W. Congress. Floor 10
Tucson, Arizona 85701

To: Carmine DeBonis - Director of Public Works
Phone: 520-724-8480
Email: carmine.debonis@pima.gov

Reference: Sabino Town and Country Estates (Revision #2 1-18-18 11:02 am)
Green Asphalt™ Overlay

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<td>Notify Residents, Sweep, Tack Coat, Install Green Asphalt™ Rubber Poly Asphalt Overlay (Minimum 1&quot; Thickness Minus 1/4&quot; Maximum Tolerance), Includes Internal Quality Control, Includes Milling and Asphalt Surface Patching to be determined by Tac, As Needed to Maintain our Minimum Thickness and Satisfy Our 4 Year Warranty.</td>
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**Clarifications:**

1. “Tucson Asphalt Contractors” will hand out flyers to all residents that will be affected by the construction the standard letter will include a map and dates on when the overlay will be installed.
2. Preservation system program provides for a Four (4) year warranty, including surface raveling, shoving, peeling and reflective cracking, that includes the sealing of any cracks (1/4") or wider, post 42 months, during year four (4).
3. The following streets will have the “Green Asphalt™” installed under this proposal; 5240 to 5303 N. Coronado Place, 7890 to 8093 E. Coronado Road, 7974 to 8099 E. Magey Drive, 5400 to 5499 N. Magey Place, and 5200 to 5499 N. Stonehouse Place.

Thank you for the opportunity to provide pricing on the above project. Please feel free to call me should you require any additional assistance.

Sincerely,

Paul J. Polito – President
Tucson Asphalt Contractors, Inc
Cell: 520-877-0586
Email: paul@tucsonasphalt.com

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2425 W. Curtis Rd. • Tucson, AZ 85705 • Phone (520) 292-1125 • Fax (520) 408-0929 • Email: estimating@tucsonasphalt.com
A+ BBB Rating • License: ROC 116436-A & ROC 116437-B4
Tucson Asphalt Contractors, Inc. Green Asphalt™
Standard Terms for Public Agencies

Proposal #18-0035 To: Pima County Administrator’s Re; Carmine DeBonis

1) INTELLECTUAL PROPERTY NOTICE “IMPORTANT”. Green Asphalt™ is the intellectual property of Tucson Asphalt Contractors Inc. Green Asphalt™ is a proven product, and the result of Tucson Asphalts’ extensive development and expense. Sampling of the materials by any Agency, Buyer, Second, Third or Other Parties without the express written permission of Paul J. Polito, The President of Tucson Asphalt Contractors Inc., is strictly prohibited.

2) QUALITY ASSURANCE OPTION. Certifications, when required will be based on test results from our independent, Certified Geotechnical Lab. Tucson Asphalt’s regular testing of our Green Asphalt™ for Public and/or Private projects consists of 1 cold feed, 1 binder content, 1 sand equivalent and 1 extraction tests done daily, (see quality assurance sample letter from Atek) attached. Independent Test Results that are outside our design targets will comply with Pag section110.

3) 4 YEAR WARRANTY Green Asphalt™ Rubber Polymer Asphalt 4-year warranty applies to projects installed by Seller beginning in 2017. Warranty covers surface raveling, shoving, peeling and reflective cracking. Seller will seal cracks wider than ¼” as measured in the sun at noon in August of the 4th year; said cracks will be sealed with hot rubberized crack sealer prior to the end of the 4th year. Seller further warrants its completed work to the original owner, to be free from defects in materials and workmanship, however subject to limitations of theoretical quantities, and work items proposed. Repairing damage caused by normal wear and tear, abuse, weather, third parties and Acts of God are not covered. Seller will, at Sellers’ option, repair or replace limited and affected areas, defective in workmanship or materials. Warranty is void until all monies due are paid, including legal fees, change order monies, collection fees and interest. Warranties may be withdrawn for all or part of the work should the Buyers’ direction to precede, conflict with the recommendation of the Seller and/or should the Buyer decide to apply sealers or other surface coats to the Green™ within the warranty period, without the written permission of the Seller.

4) STANDARD EXCLUSIONS ARE; Any and all items of work, not specifically proposed, Security services, prevailing wages, certified payroll, night, overtime, weekend or holiday work, non-standard or unsafe labor practices. Sellers’ best efforts are directed to eliminating standing water, however we cannot guarantee complete and immediate run off in areas where less than 1/2 of 1% of fall occurs, overlay areas, or areas graded by others.

5) CANCELLATION; Stop Work. Prices are valid for 60 days from date of proposal. Seller may suspend, discontinue or cancel the work, or when, “in the Seller’s opinion”, a hostile, unhealthy, illegal or unsafe work environment exists, or when seasons or weather may threaten the finished product.

Buyer’s Signature: constitutes having read, understanding and acceptance of all of the items proposed and the standard terms creating a binding contract, original, fax, or email and same becomes part of any known contracts between the parties and is considered "the legal contract". Buyers’ plans and specifications may conflict with this contract and if so, the terms of this proposal shall prevail.

Principal Buyer’s Signature: ____________________________

Printed Name: ____________________________ Date: ____________________________

TO ORDER, PLEASE SIGN & RETURN. Mail, Email, or OUR FAX # IS 520-408-0929

2425 W. Curtis Rd. • Tucson, AZ 85705 • Phone (520) 292-1125 • Fax (520) 408-0929 • Email: inquiry@tucsonasphalt.com
A+ BBB Rating • License: ROC 116436-A & ROC 116437-B4
Paul Polito  
President  
Tucson Asphalt  
2425 W Curtis Rd  
Tucson, Arizona 85705

SUBJECT: Quality Assurance Services  
Project Name  
Project Location

Dear Mr. Polito:

ATEK has provided quality assurance services during construction of the referenced project. An asphalt sample was taken from the project site for oil content and gradation and a cold feed sample was taken from the plant for gradation and sand equivalent. A sample of the binder was provided by the supplier and has been turned over to Tucson Asphalt for storage for future testing if necessary.

The asphalt sample was tested by ignition method and an oil content and gradation was determined. The result of the oil content is within mix design specification. The gradation is within mix design requirements on the target screens.

The cold feed sample was tested for gradation and sand equivalent. The result of the sand equivalent exceeds the minimum specification. The gradation is within mix design requirements on the target screens.

ATEK appreciates the opportunity to be of service on this project. If you have any questions or need additional information, please contact us at 520-638-8142.

Respectfully submitted,

ATEK Engineering Consultants, LLC

Brian M Lasham  
Construction Services Manager
January 18, 2018

Pima County Administrator’s
130 W. Congress, Floor 10
Tucson, Arizona 85701

To: Carmine DeBonis – Director of Public Works
Phone: 520-724-8661
Email: carmine.debonis@pima.gov

Reference: Moondance Patio Homes (Revision #2 1-18-18 12:49 am)
Green Asphalt™ Overlay

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<td>Sf</td>
<td>80,100</td>
<td>$0.89</td>
<td>$71,289.00</td>
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| TOTAL                                                                               |      |          |           | $71,689.00|

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3. The following streets will have the “Green Asphalt™” installed under this proposal; 3250 to 3373 W. Firefall Place, 8206 to 8349 N. Midnight Way, 3200 to 3299 W. Moondance Way, 3324 to 3399 W. Starfall Place, and 8250 to 8299 N. Wheatfield Drive.

Thank you for the opportunity to provide pricing on the above project. Please feel free to call me should you require any additional assistance.

Sincerely,

Paul J. Polito – President
Tucson Asphalt Contractors, Inc
Cell: 520-977-0585
Email: paul@tucsonasphalt.com
Tucson Asphalt Contractors, Inc.

Green Asphalt™ Standard Terms for Public Agencies

Proposal #18-0036  To; Pima County Administrator's  Re; Carmine DeBonis

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Principal Buyer's Signature: __________________________________________

Printed Name: __________________________________________ Date: __________

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Paul Polito  
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Tucson Asphalt  
2425 W. Curtis Rd  
Tucson, Arizona 85705

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Brian M Lasham  
Construction Services Manager