



U.S. Department
of Transportation
**Federal Highway
Administration**

New Mexico Division

February 14, 2017

4001 Office Court Drive
Suite 801
Santa Fe, NM 87507
505-820-2021

**In Reply Refer To:
HFO-NM
ENGI 23**

Mr. Tom Church
Cabinet Secretary
New Mexico Department of Transportation
PO Box 1149
Santa Fe, NM 87505

Dear Secretary Church:

The Federal Highway Administration, New Mexico Division Office has reviewed the New Mexico Department of Transportation's (NMDOT's) request for approval of a Project Interest Finding (PIF) that would allow the NMDOT to specify a patented or proprietary product under State Project CN 2101490. The product is *NaturalPAVE XL Resin Pavement*. The product will be used as part of the pedestrian path through the Historic Community of Lincoln, NM on US 380, between MP 97.4 and 97.9.

In accordance with 23 CFR 635.411 and the supporting information provided in your request, your request is hereby approved specifically for this project and will have a sunset date to expire four years from approval.

If you have any further questions, feel free to contact me at (505)820-2035 or at max.valerio@dot.gov.

Sincerely yours,

Max Valerio, P.E.
Field Operations Engineer

For: J. Don Martinez
Division Administrator

cc:

Mr. Anthony Lujan, NMDOT
Mr. Armando Armendariz, NMDOT
Mr. Tim Parker, NMDOT
Mr. Alan Briley, NMDOT
Mr. Elias Archuleta, NMDOT
Mr. Michael Smelker, NMDOT
Ms. Tisha Lujan, NMDOT



February 9, 2017

J. Don Martinez
FHWA, New Mexico Division
4001 Office Court Dr. Suite 801
Santa Fe, NM 87507

Attn: Max Valerio, P.E., Area Engineer

RE: Public Interest Finding - 23 CFR 635.411(a)(2) – Natural Pave, CN 2101490

Dear Mr. Martinez,

The New Mexico Department of Transportation (NMDOT) is requesting a sole source Public Interest Finding (PIF) for **NaturalPAVE XL Resin Pavement** for use on CN 2101490, US 380, between MP 97.4 and MP 97.9. The project is being developed in our South Regional Design Division by Michael Smelker, Asst. Regional Manager. This project has unique environmental commitments due the project being located in the Lincoln National Historic Landmark and the NRHP Historic District. I have reviewed Mr. Smelker's request for a PIF and based on the information provided in his justification letter, see attached, he has demonstrated the *NaturalPAVE XL Resin Pavement* meets the environmental commitment and State Historic Preservation Officer (SHPO) acceptance and has no adverse effect on the Historic Landmark, NRHP Historic District or Contributing properties .

The NMDOT hereby requests that **NaturalPAVE XL Resin Pavement** be approved for use on CN 2101490, US 380, MP 97.4 to MP 97.9 in accordance with 23 CFR 635.411 (a)(2). We further request that the PIF be extended beyond the construction period for this project to allow for routine maintenance and pavement preservation activities, and therefore expire four years from approval date.

Please contact myself at 505-490-2736 or Armando Armendariz at 505-490-2740 if you have questions regarding this request.

Sincerely,

A handwritten signature in black ink, appearing to read "Elias Archuleta", written over a white background.

Elias Archuleta, P.E.
Chief Engineer

Cc:

Armando Armendariz, P.E.
Michael Smelker, P.E.

Gabriela Contreras-Apodaca, P.E.

Susana Martinez
Governor

Tom Church
Cabinet Secretary

Commissioners

Ronald Schmeits
Chairman
District 4

Dr. Kenneth White
Secretary
District 1

David Sepich
Commissioner
District 2

Keith Mortensen
Commissioner
District 3

Butch Mathews
Commissioner
District 5

Jackson Gibson
Commissioner
District 6



January 11, 2017

To: Elias Archuleta, Chief Engineer
1120 Cerrillos Road
Santa Fe, NM 87504

Susana Martinez
Governor

Re: Public Interest Finding: Title 23 CFR 635.411 – Natural Pave, CN 2101490

Tom Church
Cabinet Secretary

Dear Mr. Archuleta

The New Mexico Department of Transportation is currently completing the design for CN 2101490, US 380, between MP 97.4 to MP 97.9. Through the study and design phase of the project, the department has determined that sole source product NaturalPAVE XL Resin Pavement has been requested to be utilized for the path through the Historic Community of Lincoln, NM.

The purpose of the project is to provide a safe and efficient pedestrian access throughout the Village of Lincoln. The current path is intermittent, in poor conditions, and is not compliant with American with Disability Act (ADA). The project will be located along US 380 right of way, through the Lincoln Historic District.

Commissioners

Ronald Schmeits
Chairman
District 4

Special consideration was given to the surfacing material for the path in order to develop a facility that is contextually appropriate for the setting of the Lincoln National Historic Landmark and the NRHP Historic District that would be consistent with the preservation guidelines for the development for the County Historic District. The existing asphalt pathway would be reconstructed with the sole source product NaturalPAVE XL Resin Pavement, which is a polymer-stabilized aggregate to create a more natural appearance.

Dr. Kenneth White
Secretary
District 1

Multi-use paths within NMDOT commonly constructed out of asphalt (colored) and concrete (colored and pattern), which have both been analyzed during the public and environmental process. These materials have not been accepted by the community nor the Lincoln NHL and NRHP Historic District, because the color and texture of the standard asphalt and concrete were not present during the significant periods of Lincoln's history specifically the Lincoln County War. By replacing the asphalt path with polymer-stabilized aggregate, the function of the pedestrian path would be maintained but the materials and the overall visual impact of the path would be more consistent with the setting of the Lincoln NHL and NRHP Historic District. Replacing the materials would have no adverse effect to the NHL, NRHP Historic District or Contributing properties, and would be consistent with the preservation guidelines developed for the County Historic District.

David Sepich
Commissioner
District 2

Keith Mortensen
Commissioner
District 3

The County Historic District Regulation G.1. states all exterior construction shall be earth color, constructed of adobe, appearance of adobe, plastered, stuccoed, rock or of wood construction with the architectural style being that of the frontier period or territorial period.

Butch Mathews
Commissioner
District 5

Analysis has been completed based on the average unit bid price for concrete sidewalk and miscellaneous pavement, an estimated cost for the installation of the NaturalPAVE XL Resin Pavement for 1870 SQ YDS of multi-use path. The Natural Pave Resin Pavement will increase the project cost between \$30,000 to \$60,000 based on the cost estimate of the materials below.

Jackson Gibson
Commissioner
District 6

Item No.	Item	Unit	Quantity	Unit Cost	Amount
417000	Miscellaneous Paving	SQ YD	1870	\$72	\$134,640
608004	Concrete Sidewalk 4"	SQ YD	1870	\$60	\$112,200
417001	Resin Pavement	SQ YD	1870	\$90	\$168,300

The NMDOT Environmental section reviewed a similar type product Technisoil G5. This material has been utilized at small area in municipal recreation complex in Bloomfield, and the other location was a remote trail location in Pecos National Monument. In addition, this material has not been in place for very long nor has it been

subjected to a freeze-thaw cycle. Overall, this material is not particularly well defined and the manufacturer has no other installations in the mountain west to assist in evaluating the material's performance.

The NaturalPAVE XL Resin Pavement has been utilized within small segments of Natural Parks, including a local installation in the Guadalupe National Park south of Lincoln, NM. The Guadalupe Mountain National Park service has utilized several products and NaturalPAVE XL Resin Pavement was the only one that they would endorse. Overall, the products seem comparable in price and application, but the NaturalPAVE XL Resin Pavement sole source is based on the good thermal resistance and regional history based on the installation in the Guadalupe Mountains National Park.

The NaturalPAVE XL Resin Pavement has also been utilized by US Department of Agriculture, and Forest Service, along with a product review with US Department of Transportation Federal Highway Administration. The article and review of the Accessible trail surface with Resin Based Pavement: A Case Study is attached for reference.

The NaturalPAVE XL Resin Pavement has been determined as the sole source product to be utilized for the path within Lincoln County Historic District. This product meets the environmental commitment and SHPO acceptance to be used, which would not have no adverse effect to the NHL, NRHP Historic District or Contributing properties, and would be consistent with the preservation guidelines developed for the County Historic District. In addition, based on our research we do not believe there is an equally acceptable product that would meet the intent and requirements of this product.

I Michael Smelker, Assistant South Regional Manager of New Mexico Department of Transportation, do hereby certify that in accordance with the requirements of 23 CFT 635.411(a)(2), that this patented and proprietary item is essential to meet the environmental and historic requirements within the existing highway facilities, and within the Lincoln County Historic District, and considered to be in the public interest by providing ADA compliance facility.

The extent of the PIFF is for NaturalPAVE XL Resin Pavement to be utilized on, CN 2101490, US 380, between MP 97.4 to MP 97.9. NMDOT requests the extent of the PIFF to be extended beyond the construction time for this project to allow for any maintenance required, and therefore sunset date is four years.

I appreciate you taking your time for this consideration, if you should have any questions please feel free to contact me. I can be reached at 575-202-3339.

Sincerely,



Michael Smelker
Assistant Regional Design Manager
NMDOT South Region Design

Cc: Max Valerio, FHWA
Tisha Clark, NMDOT
Gabriela Contreras-Apodaca, NMDOT
Tim Parker, District 2
Alan Briley, District 2

Att: