



MEMORANDUM
Missouri Department of Transportation

TO: Eric Schroeter - Design

CC: Dave Ahlvers-Construction/Materials

FROM: Bill Stone

DATE: July 8, 2016

SUBJECT: MOBA Infrared Scanner

I do hereby certify that in accordance with the requirements of 23 CFR 635.411(a)(2), no equally suitable alternate exists for this patented or proprietary item.

State Design Engineer

The research section at MoDOT would like to request the use of a MOBA Infrared (IR) Scanner for use on asphalt paving projects. The MOBA IR scanner is a proprietary product that is mounted on the back of an asphalt paver and monitors the temperature of the top surface of the asphalt. The purpose of the scanner is to monitor the deviation in pavement temperatures that can lead to asphalt segregation. It is able to provide the temperatures without being in direct contact by use of the infrared technology.

The request is to allow for the use of this proprietary scanner and software on asphalt projects. This is the only scanner that the research section is aware of that provides a real-time display that the operator of the paver can use to monitor the asphalt temperature. The technology improves quality control by provided the contractor the information it can use to adjust their operation to provide for a more uniform pavement surface temperature. The software has also been developed with a web based link that the asphalt pavement temperatures can also be monitored from a remote site using a password protected link.

Through the Strategic Highway Research Program (SHRP2), MoDOT was awarded one of these scanners and has a license to use the proprietary software that also provides for a report that MoDOT will be using the scanner as the basis for incentive/disincentive payments on upcoming asphalt paving projects. MoDOT was one of 9 states and the FHWA office of Federal Lands that was awarded the same scanner through this SHRP2 grant opportunity. MoDOT also recently conducted a SHRP2 IR Scanner Showcase in St. Joseph to highlight the use of the scanner and its software. There were several of the other states in attendance for the showcase.

Listed below are the project that is request approval for the proprietary MOBA IR Scanner. These projects have been selected to receive grant funding from the Federal Highway Administration (FHWA) from the Accelerated Innovation and Deployment (AID) program.

| Job No | Letting Date | District | County | Route |
|--------|--------------|----------|-----------|-------|
| 5S3202 | 9/23/2016 | CD | Cooper | 0 |
| 5P3117 | 10/21/2016 | CD | Morgan | 52 |
| 4I3111 | 10/21/2016 | KC | Clay | 29 |
| 3I3042 | 9/23/2016 | KC | Lafayette | 70 |
| 2P3099 | 10/21/2016 | NE | Macon | 36 |
| 2P3100 | 10/21/2016 | NE | Macon | 36 |
| 9S3171 | 10/21/2016 | SE | Ripley | 142 |
| 6S3123 | 10/21/2016 | SL | Jefferson | 61 |
| 7I3072 | 10/21/2016 | SW | McDonald | 49 |