



CP² CENTER NEWS

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Terminal blend chip seal project placed by County of Los Angeles Public Works

By Erik Updyke, L.A. County



Erik Updyke and Larry Dunlop opening the project.

The County of Los Angeles Department of Public Works Department has long been a major user of rubberized asphalt concrete and has utilized both asphalt rubber and terminal blends. Since 1997, the Department has hosted the Southern California Rubberized Asphalt Concrete Technology Center which provides technical assistance to other local agencies and their consultants. In May, 2008, the California Integrated Waste Management Board awarded Los Angeles County a grant to construct a chip seal using terminal blend binder. In July, 2008, the Los Angeles County Board of Supervisors formally accepted the grant. Exhibit A of the grant states "This contract will help build the knowledge base for terminal blend materials in pavement strategies such as chip seals by creating in-field test sections that will be monitored for material performance."

Roads suitable for chip sealing were identified using the Department's RoadMatrix Pavement Management System and field reviews of the identified potential segments. Segments of Avenue J and Avenue O, both east-west arterial roads, in the unincorporated community of Lake Los Angeles totaling seven centerline miles were chosen. These segments had a PCI of about 50, which would typically correlate to a rehabilitation strategy, but were deliberately chosen in order to provide a further

test of the terminal blend binder. In addition, one segment, Avenue J, received full pavement preparation, while the other segment, Avenue O, only received minor rut filling and edge restoration. In addition, at the request of the California Interlayer Association, a section of Avenue J (approximately 1600 feet in length) received a chip seal over pavement fabric.

The chip seal was placed the week of July 6, 2009. The work was coordinated and supervised by Larry Dunlop, the Department's Road Maintenance Superintendent of Road Division 555. Chip and binder spreading work was performed by vendors supported by Department road maintenance forces. Paramount Petroleum supplied the PG76-22TR binder containing 15 percent crumb rubber. Certificates of Compliance were furnished for each load delivered to the job site. Pre-coated 3/8 inch screenings were supplied by Vulcan Materials from their Littlerock quarry. Quality assurance monitoring was performed by Erik Updyke and Paul Deaville of the Department's Construction Division. Aggregate and binder content testing was performed by the Department's materials lab. Dr. Gary Hicks, of the California Pavement Preservation Center, observed the project on behalf of the California Integrated Waste Management Board.

Overall, the project went very smoothly except for the chip over fabric section. The binder temperature apparently caused some wrinkling in the edges of the pavement fabric and there was adherence of the fabric to the tires of the pneumatic rollers. A second application of binder and chips were applied to the affected areas. The Department will continue to monitor the performance of the pavement during the next few years.

