



SAMI SOLUTIONS

Hot In-Place Asphalt Recycling Vic Roads/Brimbank Council



Hot In-Place Asphalt Recycling Solution No. 4

New HIPAR Technology wins rideability "road test"



Carried out by a mobile recycling unit that heats, removes, rejuvenates, modifies and restores asphalt in a single continuous pass, the HIPAR method was praised for its time efficiency.

In March 1998, a project funded by Vic Roads and coordinated jointly with Brimbank Council was planned to restore 16,000 square metres of asphalt pavement on Main Road East, North Melbourne - one of Victoria's main secondary roads.

From a selection of alternate and traditional techniques, Brimbank Council and Vic Roads decided to utilise HIPAR (Hot in Place Asphalt Recycling) in conjunction with mill and re-sheet. Each technique was allocated 8,000 square metres of the road.

SAMI's innovative HIPAR technology is an alternative to the traditional mill and re-sheet,

one that is revolutionising the rehabilitation of asphalt pavements. This unique recycling process has proven to be time efficient, cost competitive, environmentally sound and able to restore asphalt pavements to "as new" condition.

Main Road East displayed extremely poor ride characteristics in the form of longitudinal asphalt deformation. The poor ride quality of the road was attributed to it being built on a saltic plain. Years of rapid moisture level changes resulted in volumetric soil variations that lead to the longitudinal deformation.

The Results?

Working adjacent to the traditional mill and re-sheet technique, the HIPAR technology demonstrated its capabilities. Engineers from Brimbank Council and Vic Roads concluded that the percentage improvement in rideability of the section of pavement restored by HIPAR was greater compared to the traditional technique.

Prior to the commencement of restoration Main Road East registered a roughness count of 120. The traditional method achieved a roughness count of 65 to 70. The HIPAR transformed its allocated area into a comfortable stretch of



Lygon Street Melbourne, showing cracking and asphalt deformation.



The new pavement is re-laid, neat to kerb and ready for traffic.



road that now has a roughness count of 40 to 45.

Ian Cossens, Surfacing Engineer, Vic Roads said, "an outstanding feature of the HIPAR method was the level of analysis and planning that the SAMI team provided in preparing the road's surface".

"From SAMI's professional and careful preparation, outstanding ride quality results were achieved using HIPAR".

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Indo Norvelis of Brimbank Council said, "The traditional mill and re-sheet method underwent

numerous stages, leaving a grooved road surface exposed to traffic. HIPAR however, ran a smoothly, efficient One Stage operation which allowed us to immediately reopen the road to traffic, minimising delays to the public.

Ian Cossens went on to say, "The HIPAR method truly is a cost effective alternative method for repairing roads. It is environmentally sound and a major cost saver - requiring you to use only a minimum amount of new materials".

The cost of HIPAR is 30% less than the traditional technique used for the Main Road East project.

"The cost and time efficiency of HIPAR has opened the doors for future projects using this method of road restoration", said

Mr. Norvelis.

Vic Roads has already used the HIPAR method in many other projects throughout Victoria including Lygon Street in Carlton, Middleborough and Blackburn Roads in Box Hill and various other municipalities within Melbourne.

With SAMI's HIPAR process, traffic delays are minimised and environmental pressures of extracting and disposing of asphalt materials are virtually eliminated.

In times when road engineers are constantly asked to do more with less, the revolutionary new HIPAR process allows additional road improvements for the same level of funding.



For further information on any of the products featured in this Case Study or any of SAMI's other specialist road maintenance products and services, please contact:

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