Skidabrader

Hydroplane and Skid Resistance Demo 7/ 29/ 10

A 1000’ two lane asphalt section was Skidabraded to remove 8500# (approx. 3 to 4 cu. Yd.) of oxidized surface matrix from 2,350 sq. yds. of road surface. This had 2 desirable effects. It **created new drainage channels for hydroplaning resistance.** It also **exposed and etched new points of the original aggregate for skid resistance**. Drainage tests were done with an ASTM E-2380 outflow meter. Skid tests were done with an ASTM E-274 test unit using both the E-501 treaded tire and the E-524 bald tire.

www.skidabrader.com 1-800-342-4174

	Test Tire	7/28/2010	7/29/2010		
		Before	After		Improvement
South Bound Lane					
0 - 250 Ft.	ASTM E-524 Bald Tire	21.75	59.88		175%
250 - 500Ft.	ASTM E-501 Treaded Tire	36.93	72.42		96%
500 - 750 Ft.	ASTM E-524 Bald Tire	12.99	55.35		326%
750 - 1000 Ft.	ASTM E-501 Treaded Tire	36.07	68.43		90%
North Bound Lane					
0 - 250 Ft.	ASTM E-524 Bald Tire	16.72	58.72		251%
250 - 500Ft.	ASTM E-501 Treaded Tire	38.10	64.59		70%
500 - 750 Ft.	ASTM E-524 Bald Tire	17.36	60.18		246%
750 - 1000 Ft.	ASTM E-501 Treaded Tire	30.89	64.95		110%
	Average Bald Tire Test	17.2	58.53		249%
	Average Treaded Tire Test	35.49	67.59		91%
Hydrotimer Tests					
Average Outflow Time		22 Seconds	6 Seconds		266%

Initial tests of the unimproved surface show a difference between the bald and treaded tire of **17.20 to 35.49, or roughly double**. On problem pavements that have a wide variance between the bald and treaded tire tests, such as this, a **lack of surface drainage** is indicated. The outflow tests confirm that to be the case on this test section. **The Skidabrader restores surface drainage**, therefore the percent of improvement shown after Skidabrading with the bald tire is obviously greater than that of the treaded tire.