

Blastrac Technology Overview

Presented By: Josh Jones





The world leader in design and manufacturing of portable shotblast systems.

Blastrac Global Organization includes:

Blastrac BV – Netherlands

Blastrac NA – Oklahoma City

Blastrac Canada – Toronto

Blastrac Asia – Shanghai

Diamatic USA – San Diego

Blastrac is solely a manufacturer of equipment. Our focus is on innovation of the shotblasting technologies and the advancement of new pavement preservation practices.



Benefits of Shotblasting

- *Environmentally Friendly*
- *No Containment Required*
- *Low Cost*
- *Restores Micro And Macro Texture*
- *Improves Water Dispersion And Reduces Hydroplaning*
- *Increases Friction*
- *Reduces Road Noise*
- *Cleans, Prepares Surfaces For Chemical Applications*



Project Highlight

US1 / Baltimore Pilot Project

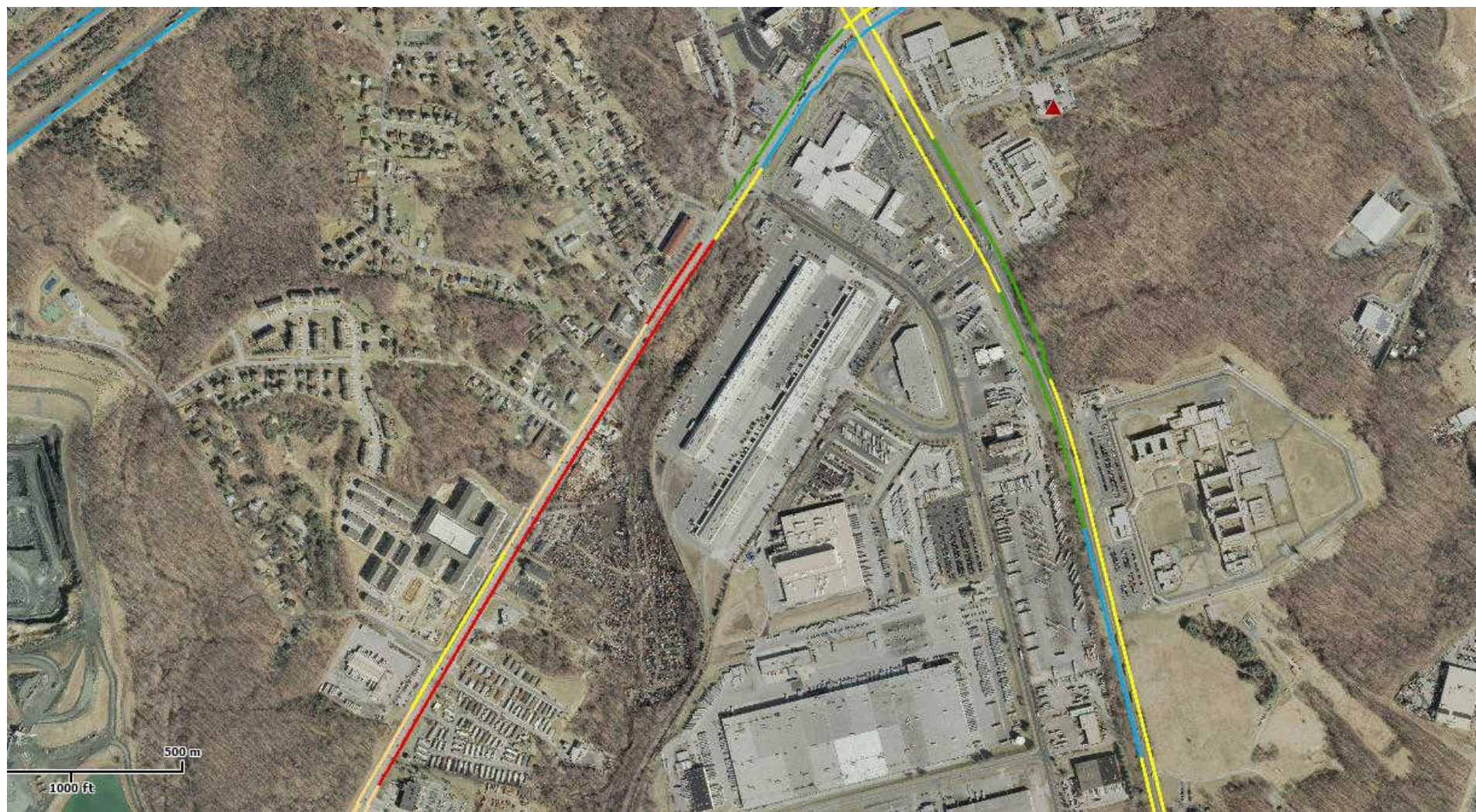
**Evaluation of Shotblasting to improve
surface texture characteristics**

Pre Abrasion Data

- Pavement surfaces consisted of both Asphalt and Concrete.
- Skid numbers average of 25.67 for the test section.

Methods of Measurement

- Dynamic Friction Test (DFT)
- Circular Track Meter (CTM)
- Outflow Meter
- Sand Patch
- Skid Trailer









DFT / CTM Results

- 73% to 90% improvement on old HMA
- 44% to 56% on new HMA
- 1% to 5% on concrete

DFT/CTM Testing on **New HMA Pavement**

	MPD ^[1]	Coefficient of friction ^[2]		
US1-T3	(mm)	20	40	60
Pre-Abrasion Treatment	0.66	0.49	0.44	0.40
Post-Abrasion Treatment	1.20	0.70	0.65	0.62
Improvement Ratio = (Post-Pre)/Pre×100% (%)	82	44	48	56

DFT/CTM Testing on **Old HMA Pavement**

	MPD ^[1]	Coefficient of friction ^[2]		
US1-T1	(mm)	20	40	60
Pre-Abrasion Treatment	1.01	0.36	0.36	0.36
Post-Abrasion Treatment	1.69	0.68	0.64	0.62
Improvement Ratio = (Post-Pre)/Pre×100% (%)	67	90	78	73

DFT/CTM Testing on **Concrete Pavement**

	MPD ^[1]	Coefficient of friction ^[2]		
US1-T2	(mm)	20	40	60
Pre-Abrasion Treatment	0.69	0.69	0.62	0.57
Post-Abrasion Treatment	1.04	0.72	0.63	0.59
Improvement Ratio = (Post-Pre)/Pre×100% (%)	51	5	1	5

Skid Test Results

	Pre-Abrasion Skid	Post-Abrasion Skid
Asphalt 1	33	59
Asphalt 2	26	60
Portland Cement Concrete	46	32*

Outflow and Sand Patch Test Results

LOCATION	-1-	-2-	-3-
Test type			
Sand patch prior to treatment	0.040 " 0.039 "	0.042 " 0.043 "	0.045 " 0.043 "
Sand patch after shotblasting	0.063 " 0.073 "	0.077 " 0.077 "	0.067 " 0.063 "
Flowmeter test prior to treatment	9 sec.	9 sec.	9 sec.
Flowmeter test after shotblasting	3 sec. 2 sec.	3 sec. 3 sec.	3 sec. 4 sec.

Thank You!!!

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