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PaveScan RDM™

Image Your World.

PaveScan® RDM 2.0

PaveScan RDM 2.0 – What is it?

Can be used as a:

- **Q/C Tool**
  - Roller Pattern Issues
  - Paver Issue
  - Number of Trucks Issue
  - Asphalt Issue
- **Q/A Tool**
  - PWL Reports
  - Google Earth Reports
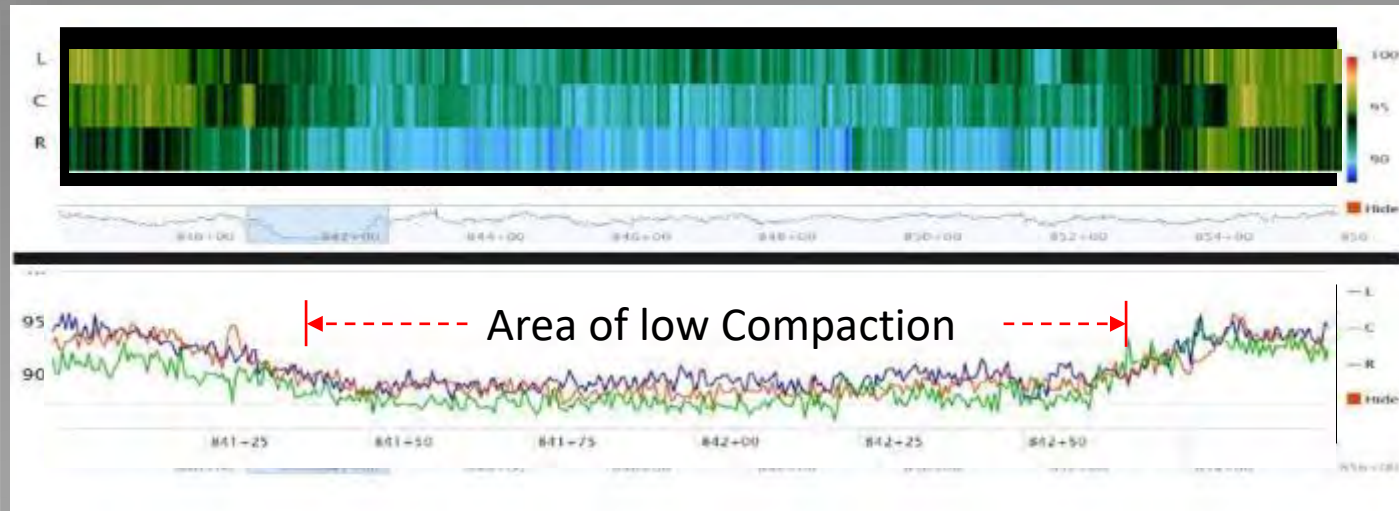- **Forensic Tool**

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How it Works

A Quick Lesson on Dielectric

Material	Dielectric Value
Air	1
Water	81
Asphalt	4-7 (give or take)

Features

Area of low Compaction

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Asphalt

Sub-Layer

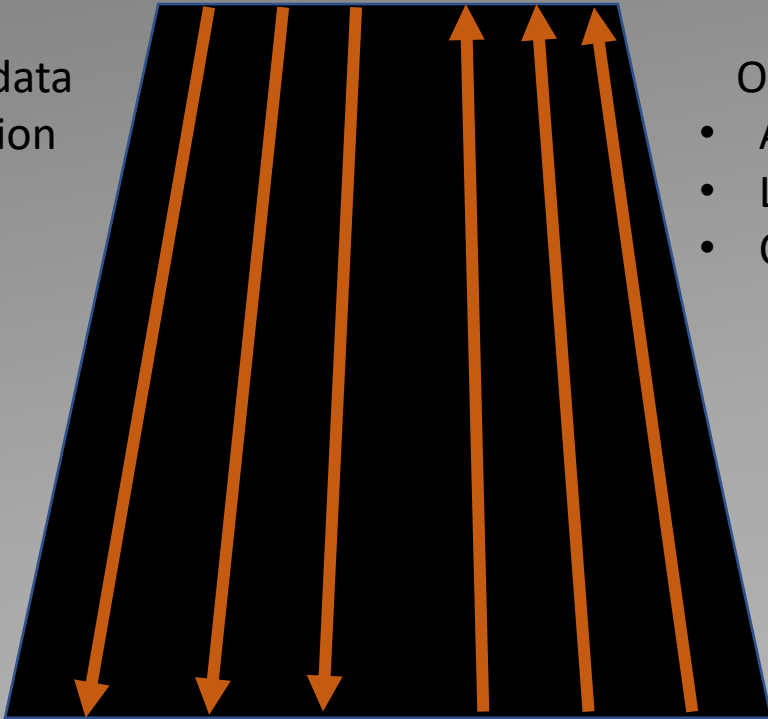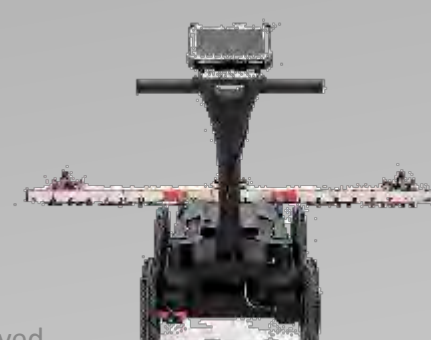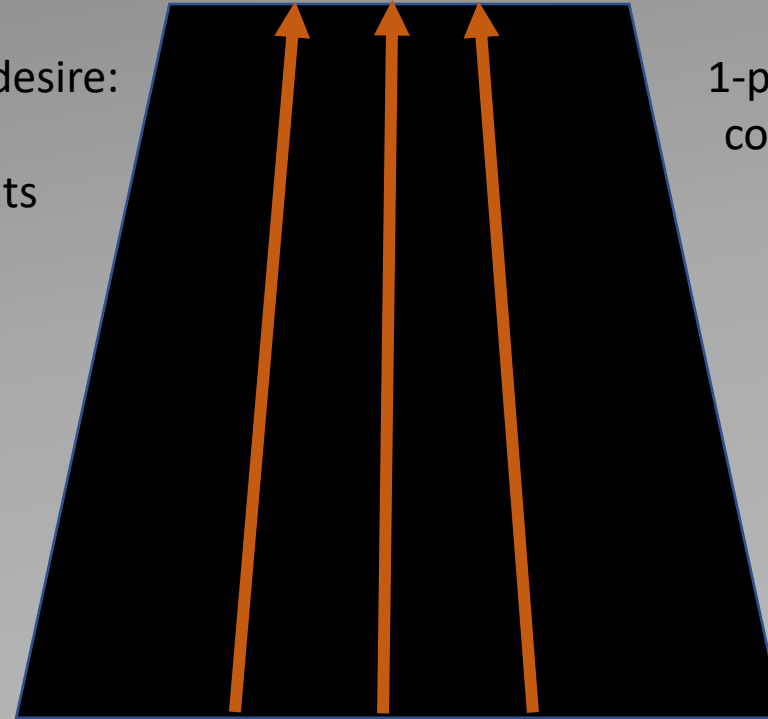◯ Air Voids

Collection Process

2-pass data collection

Or whatever you desire:
- Across the lane
- Longitudinal Joints
- Combination

1-pass data collection

System QA Procedures

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Procedures were developed to assure the accuracy of the sensors. Note: These methods can be saved and used for "Apply QA Dielectric Correction".
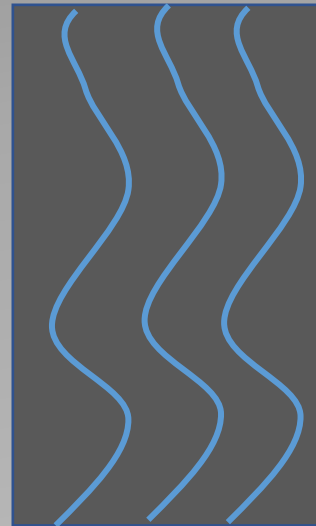Recommended to be done once per day, just one of these procedures. If data looks odd, then can be done at the end of the day.

HDPE Block

Each Sensor, Dielectric = ~2.35, +/- .05

Swerve Method

1. Suggested On-Site, walk about 250 feet using a swerve pattern
2. Outside sensors no closer than 1 foot from the longitudinal joint
3. Turn around and walk back 250 feet using the swerve pattern
4. Dielectric of sensors should be about .05 of each other

Repeat Line Method

1. Suggested On-Site, draw a single line about 6-10 feet across the lane
2. Walk each sensor, one at a time, *perfectly* along the line
3. Dielectric of sensors should be about .05 of each other

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Calibration using Cores

- Field Cores are used for the correlation of dielectric to density (% void or % compaction)
- Field cores can come from a test strip or after one day of on-site data collection

- Core locations are determined by the system or DOT
- Dielectric is taken at the core location PRIOR to coring
- Cores are taken to the lab for density measurement (% void or % compaction)

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Collecting Data

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Bus Tour Test Results

Test Location #1

RDM-96.89%
Nuclear Guage-96.29%
Core Results-96.80%

Core vs. RDM- .09%

Bus Tour Test Results

Test Location #2

RDM Average-95.85%
Nuclear Guage-93.24%
Core Results-97.60%

Core vs. RDM-1.75%

Bus Tour Test Results

Test Location #3

RDM-97.86%
Nuclear Guage-98.20%
Core Results-98.30%

Core vs. RDM-0.44%

Bus Tour Test Results

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All Test Location
RDM Lot Average-97.13%
RDM Core Average-96.87%
Nuclear Guage-95.91%
Core Results-97.57%

Core vs. RDM Cores-0.70%

Core vs. RDM Lot-0.44%

Questions

Thank You!!