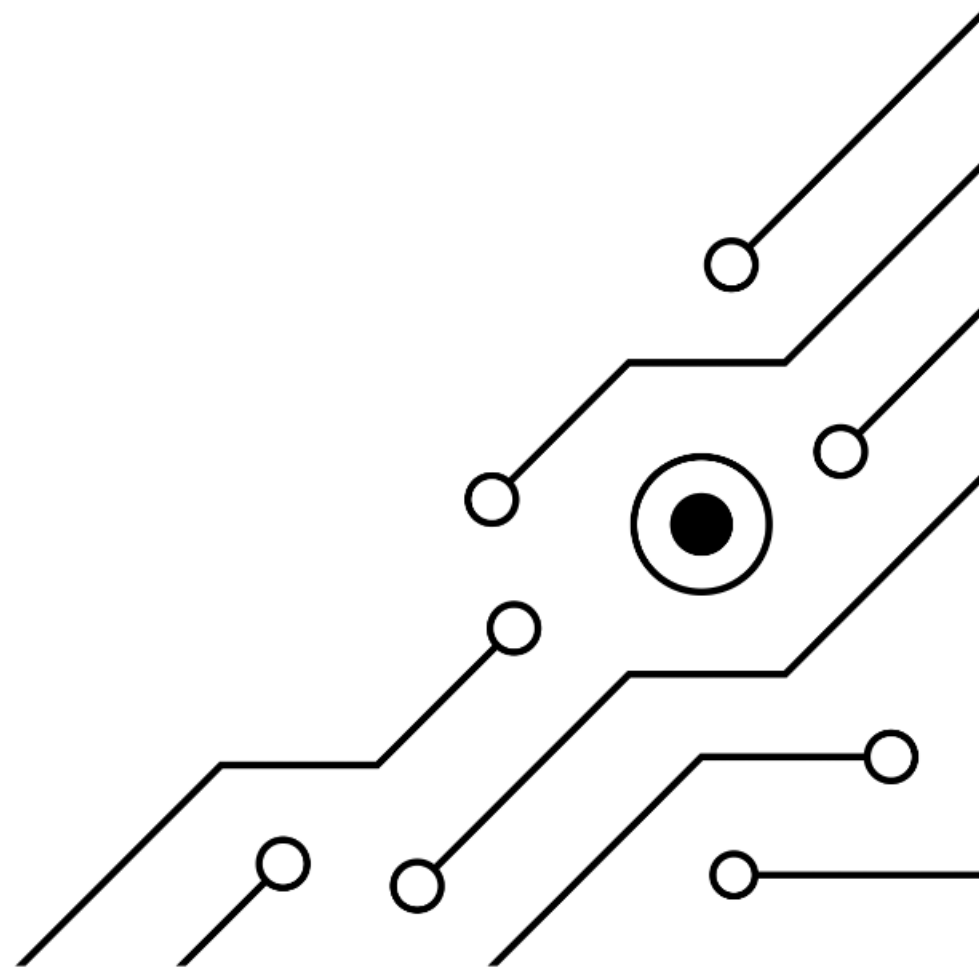


New Innovations in the Paving World



Asphalt

94%

Roads



Roads

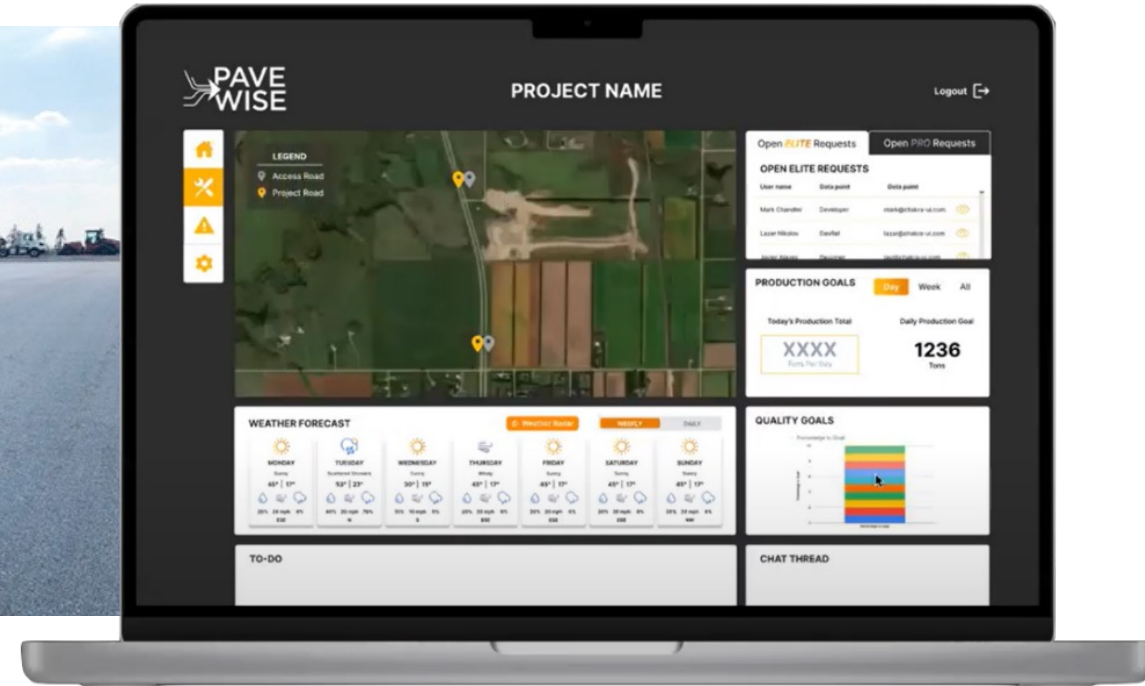
2.71M

Miles



North Dakota Asphalt Conference

Integrating
technology
for quality.



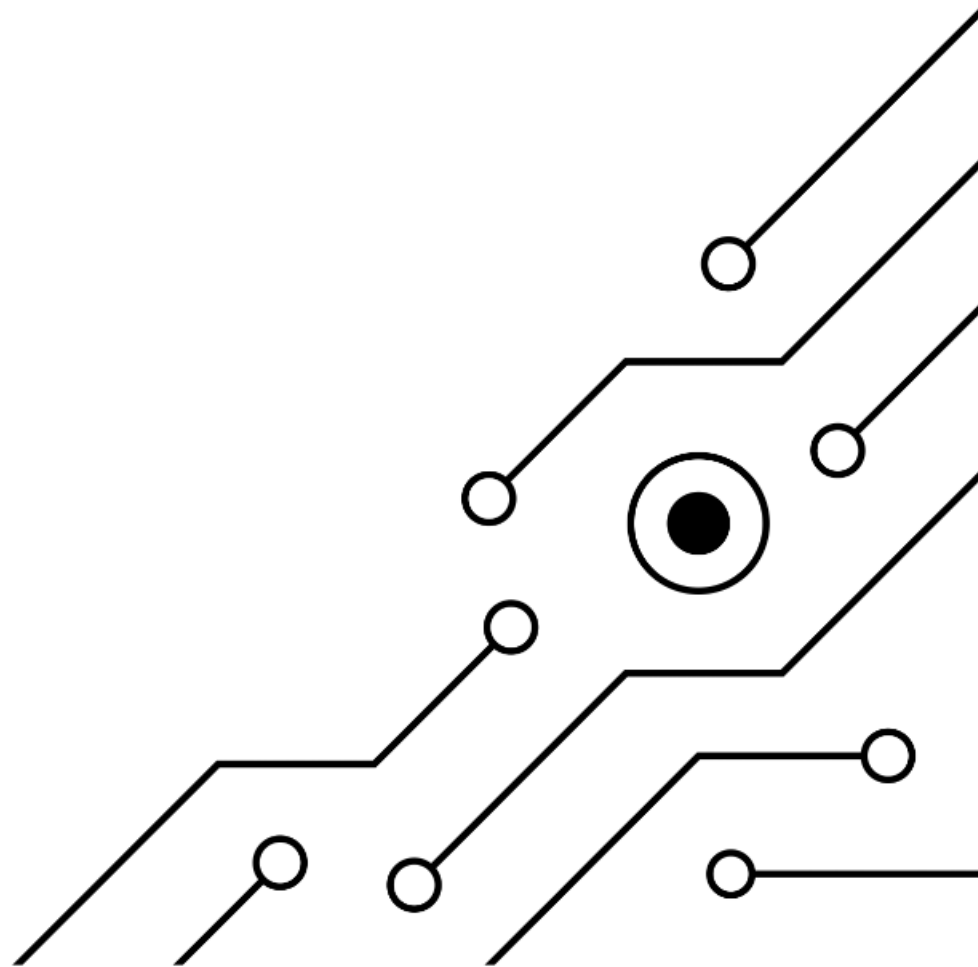
Bryce Wuori CEO, Pavewise

Presentation Topics

- Equipment Innovations
- Hardware Innovations
- Software Innovations
- North Dakota SP393(23) Machine Guidance Milling Project
- 2024 North Dakota Research and Technology Project



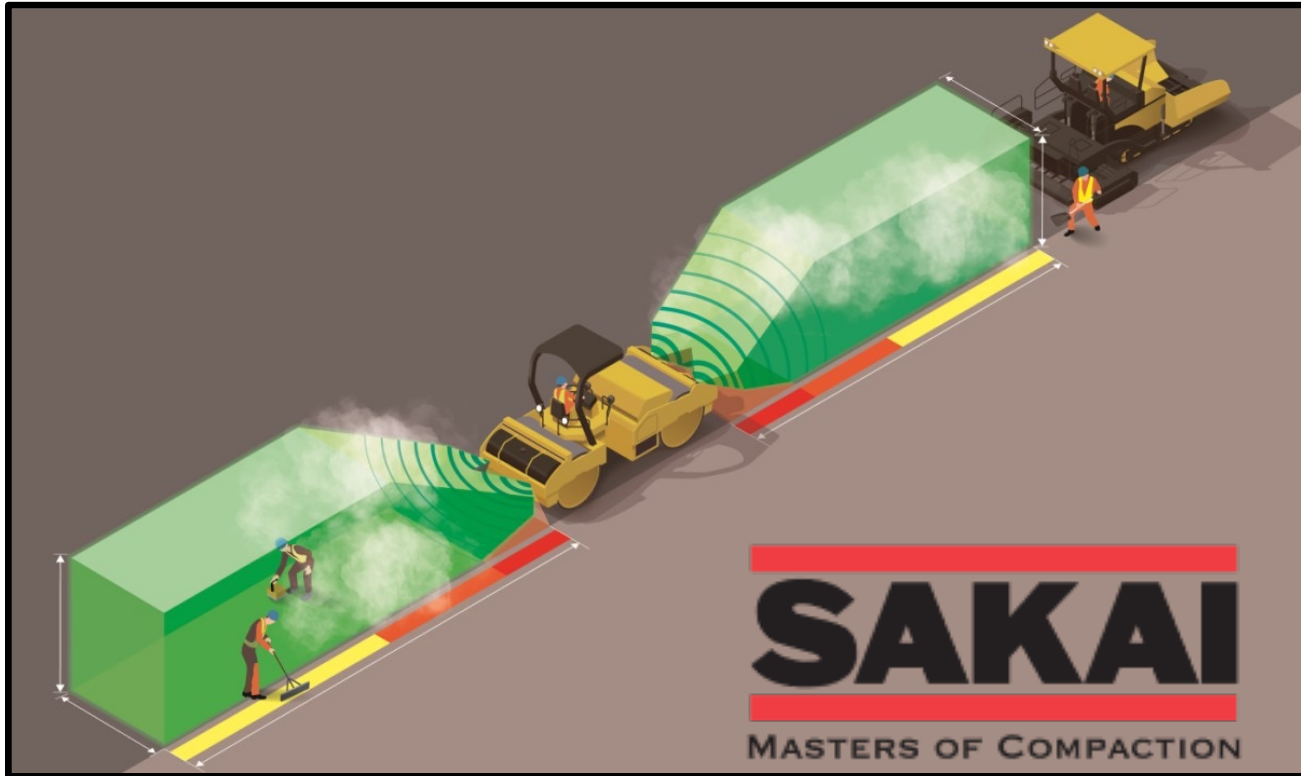
Equipment Innovations



SDX Screed



Safety/Convenience Innovations

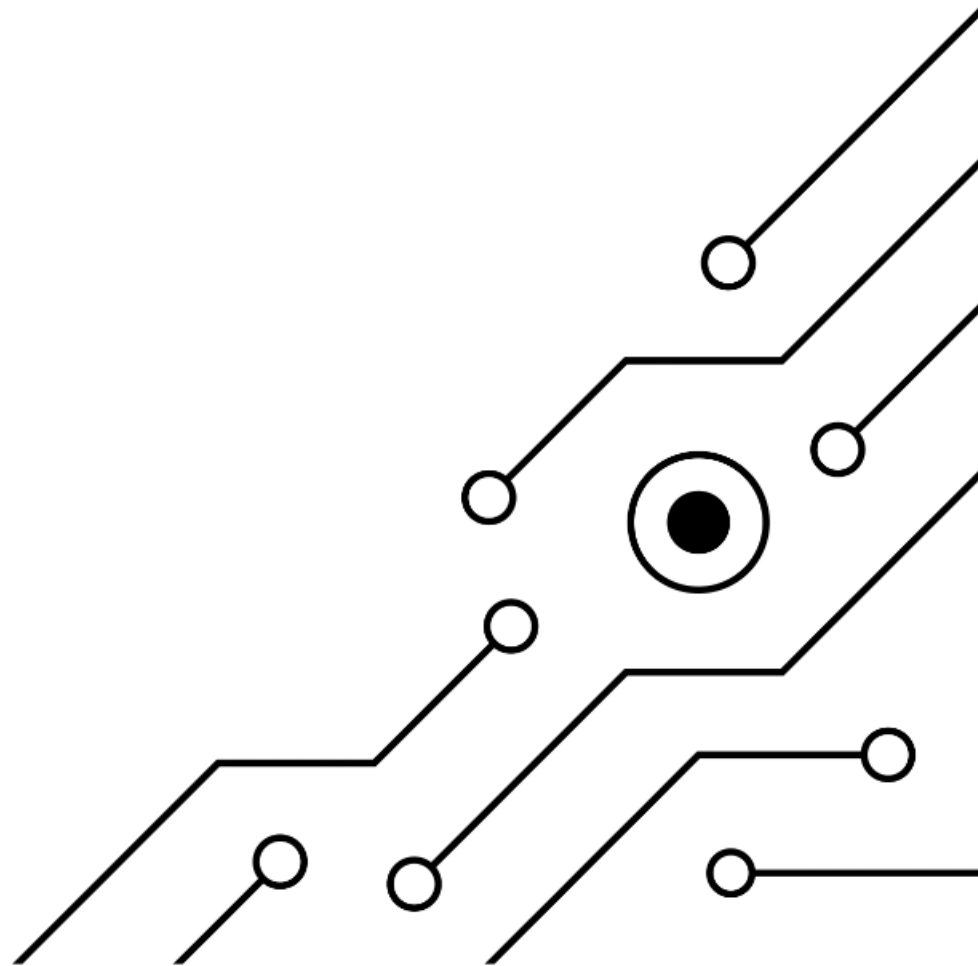


Guardman

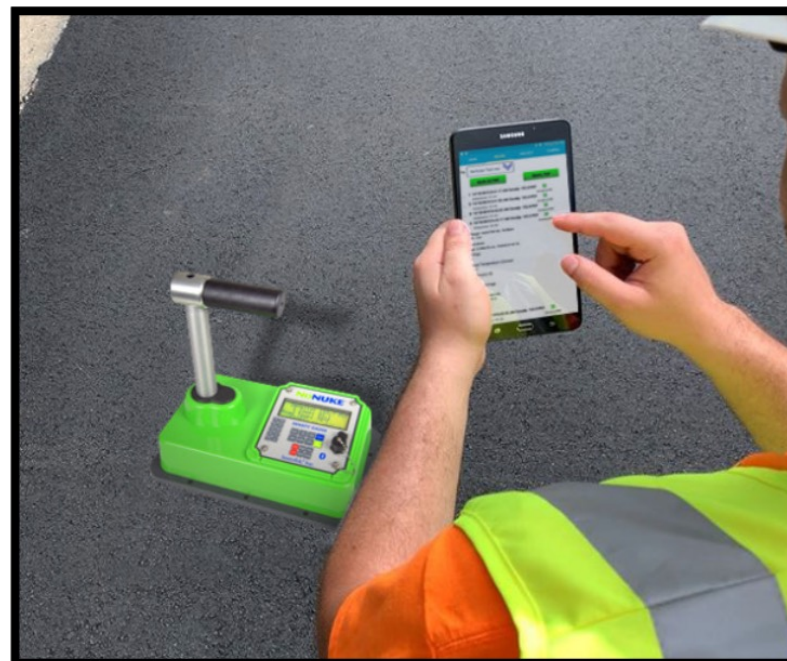


Split Drum

Hardware Innovations



Gauge Integrations

PAVEWISE**Pavewise Notification**

Project W235 has had 4 consecutive low density reading with guage 2A

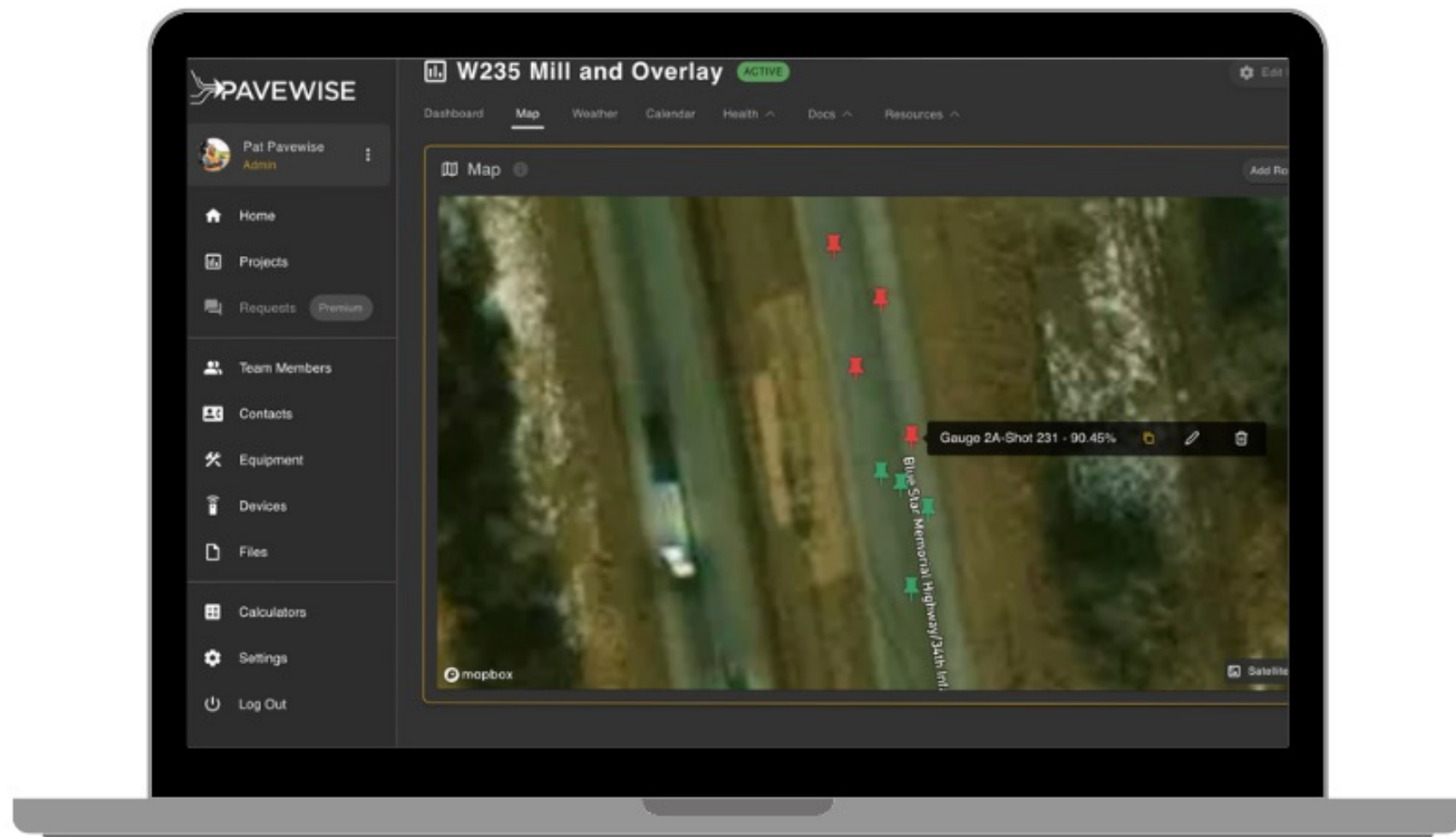
Density Notification

Guage 2A/Project W235

Gauge Shot-231- 90.45%
Gauge Shot-232- 91.33%
Gauge Shot-233- 89.88%
Gauge Shot-234- 90.23%

See the map for all test results on project W235 or text controller now @**guage 2A controller**

Gauge Integrations



RTDensity™



Intelligent Compaction



DPS Innovations



**Single Point
Measurement**



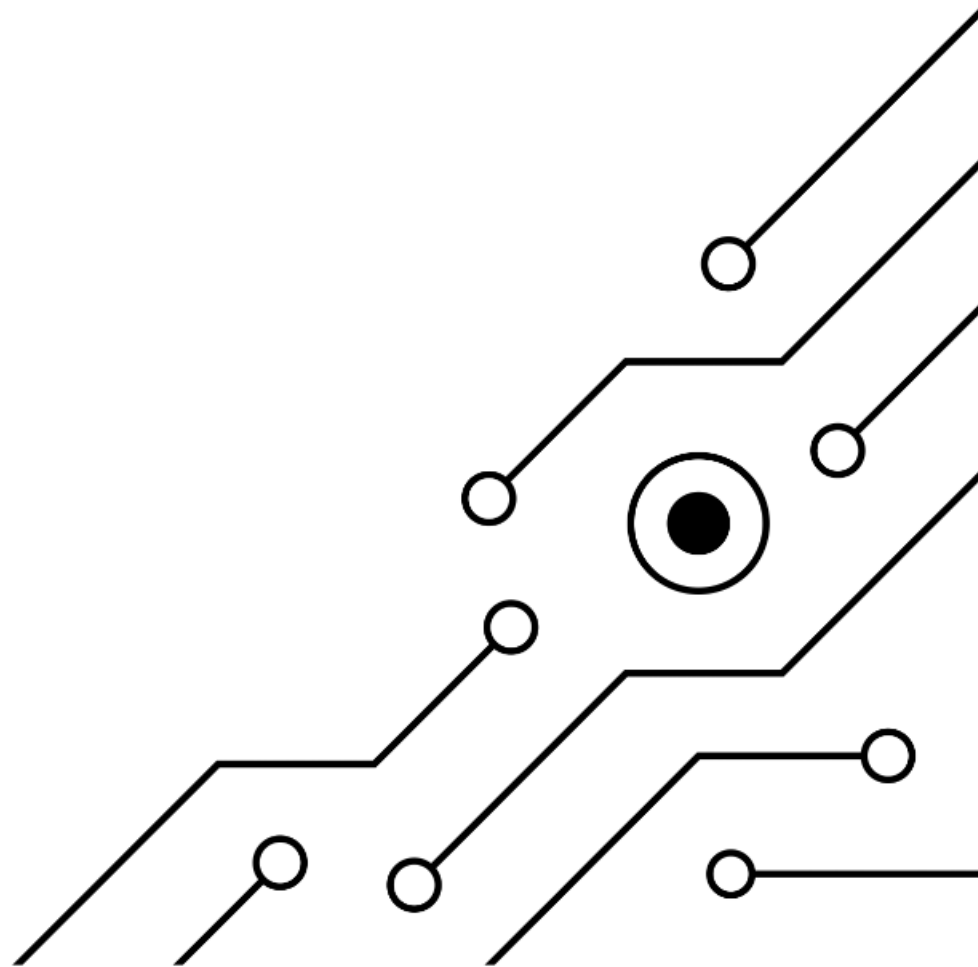
Behind the paver

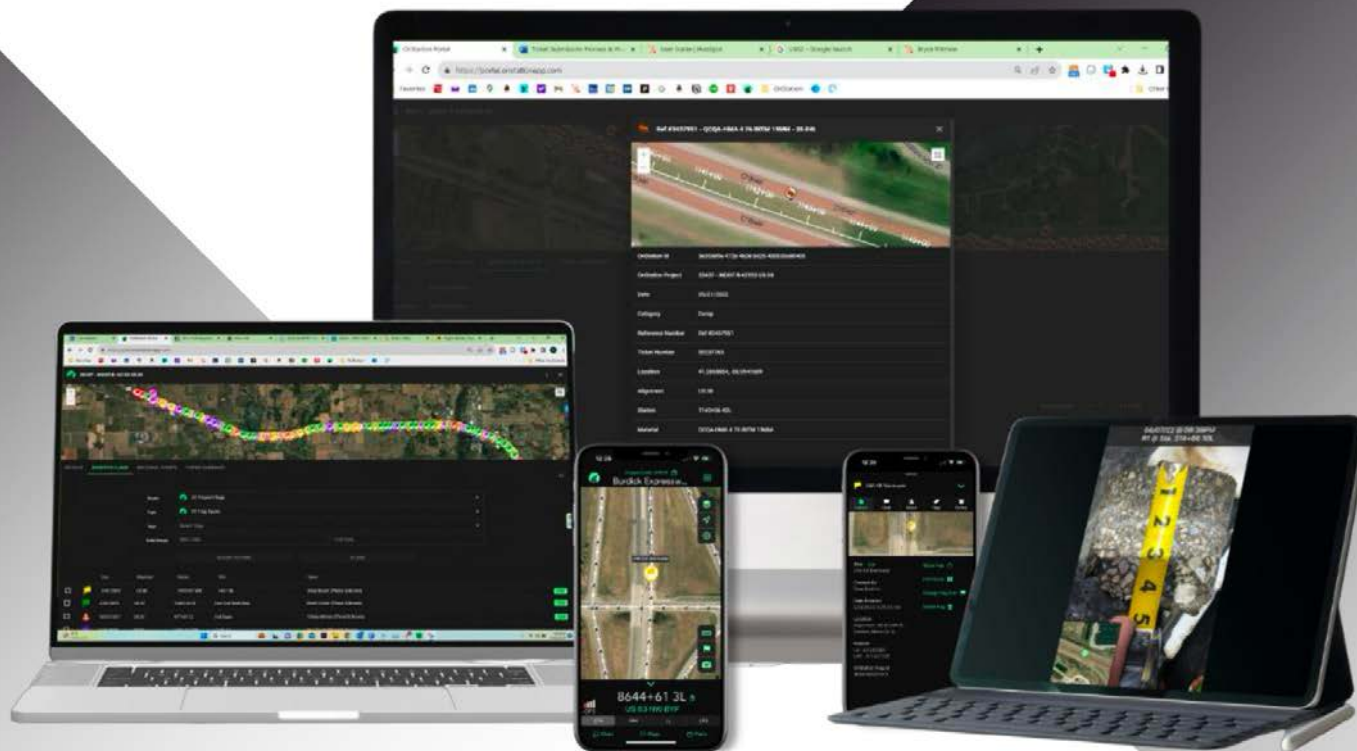


Roller Mounted DPS



Software Innovations






The Leading Digital Stationing Platform

One app to find your stationing.

Station Reading

A station is the horizontal measurement along the Survey Center Line of a project. One hundred feet make up a Highway Station.

+98



Station Finder

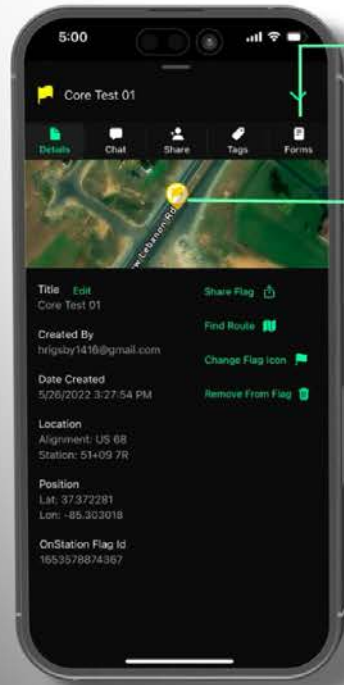
Active GPS tracking allows you to view your current location.

5ft Accuracy

Factors that affect GPS accuracy are categorized into three portions; position of satellites, features of GPS receivers, and the signal effect from surrounding environment.

Documentation

Centralized communication.



Flag & Chat

Connect all your communication in one shared place. Just like texting, chat with individuals and groups across the project seamlessly.



NEW Digital Forms

Generate digital forms that can be imported into your site management system. Say goodbye to copying your handwritten notes into your laptop.



Camera Notes

A picture is worth a thousand words and now you can easily send pictures with the stamped station location and time.

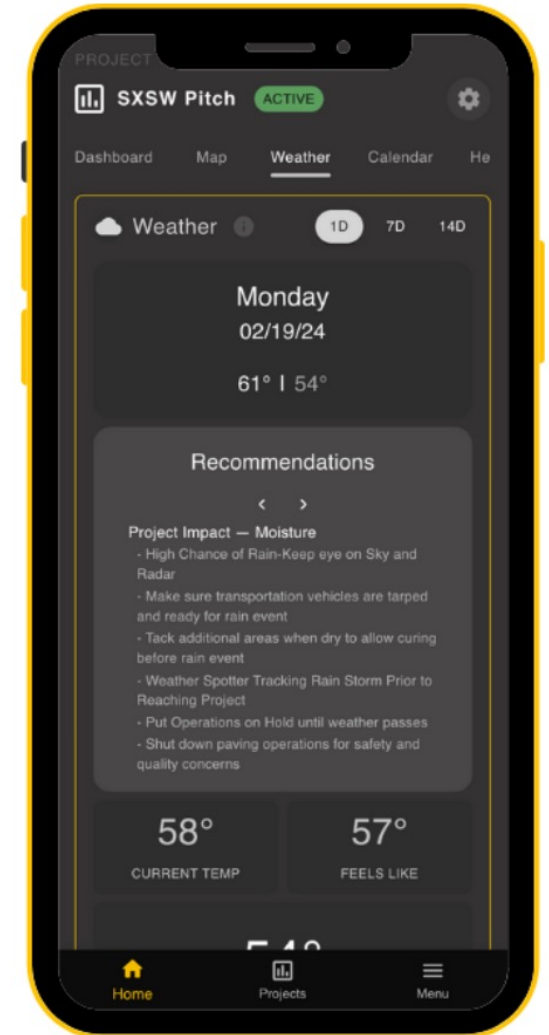
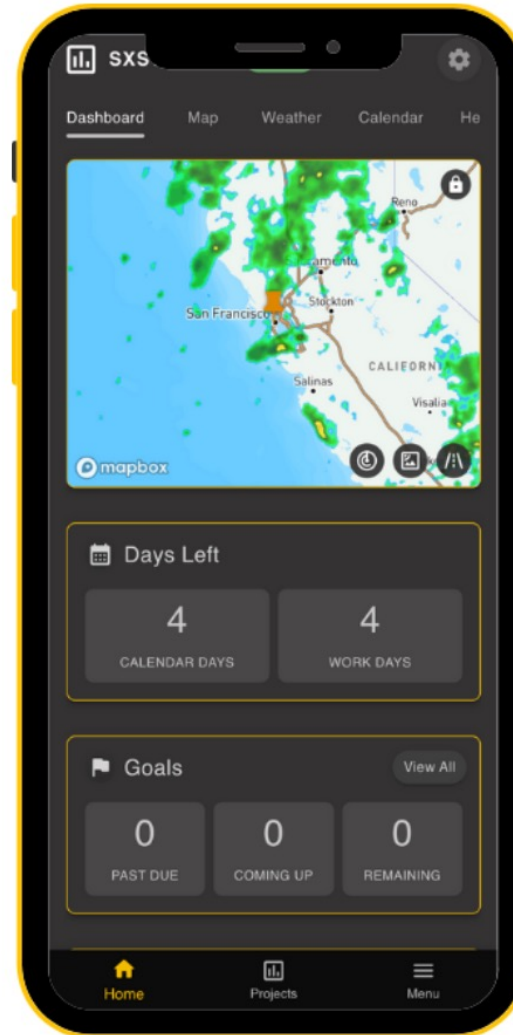
Pavewise Ground Truth Stations



**100% Certified Project
Weather Tracking**

Specification Compliance

Pavewise AI Cameras



DEPARTMENT OF TRANSPORTATION

NH-2-013(071)232

McIntosh County
E Wishek E to JCT 30
Mill / Overlay

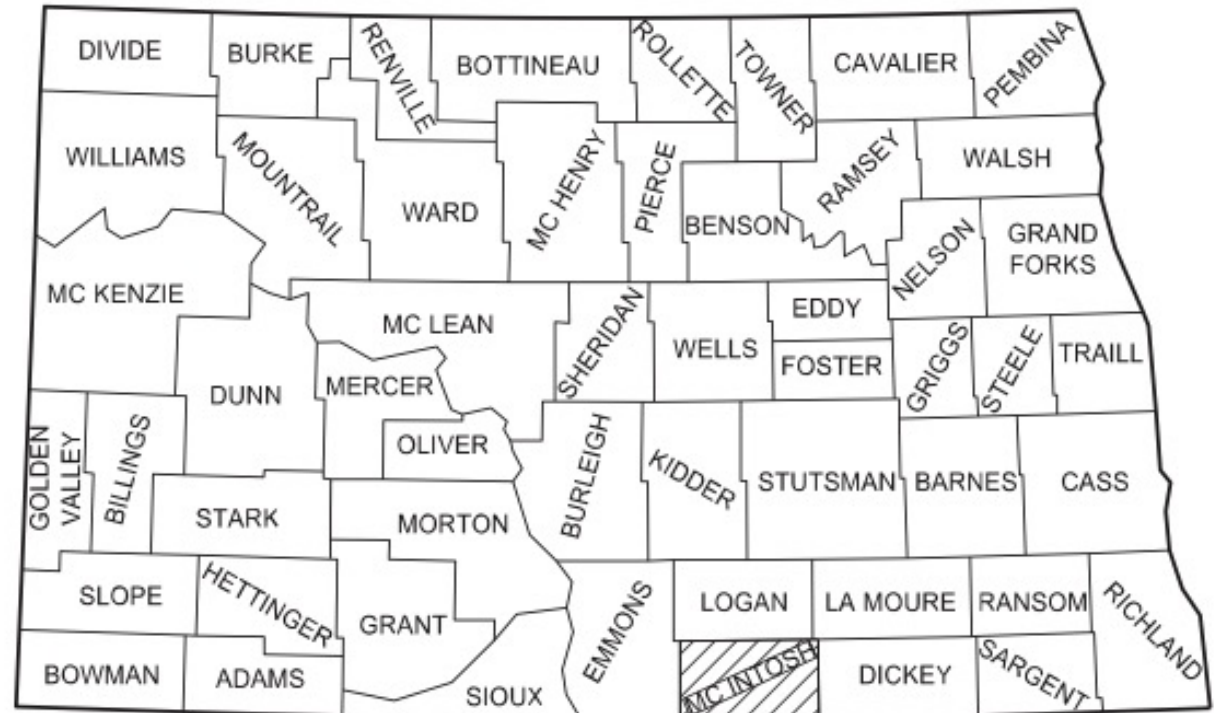
SP 393(23)
Page 1 of 3

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

MACHING GUIDANCE MILLING

PROJECT 2-013(071)232 – PCN 24097



STATE COUNTY MAP



Benefits of
**Machine
Guidance
Milling**

*restore the surface
to a specified profile*

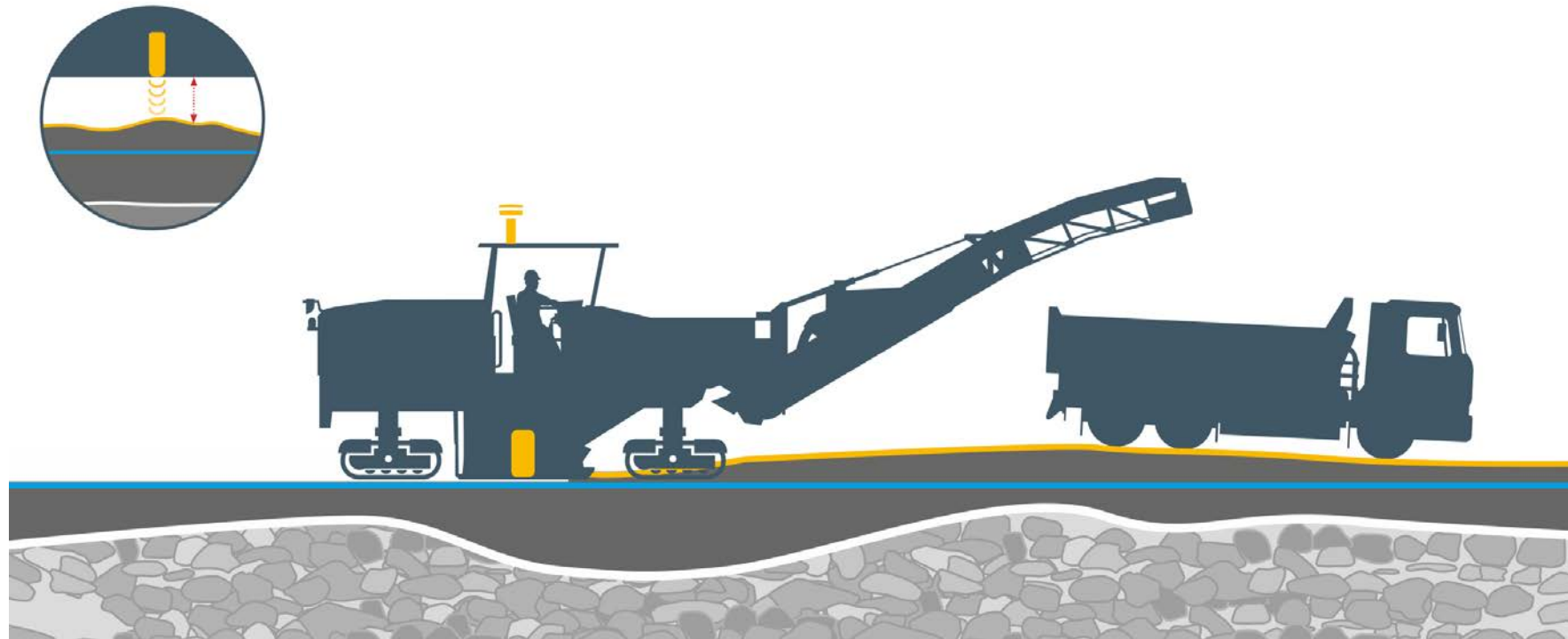
*bumps, ruts and
other irregularities
are removed*

uniformed surface

Current Construction Practices



Machine Guidance Milling

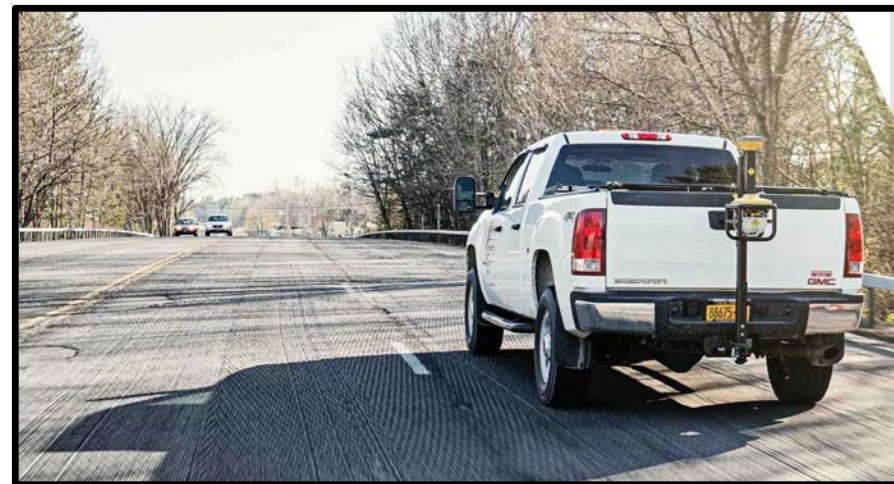


Data Collection Process

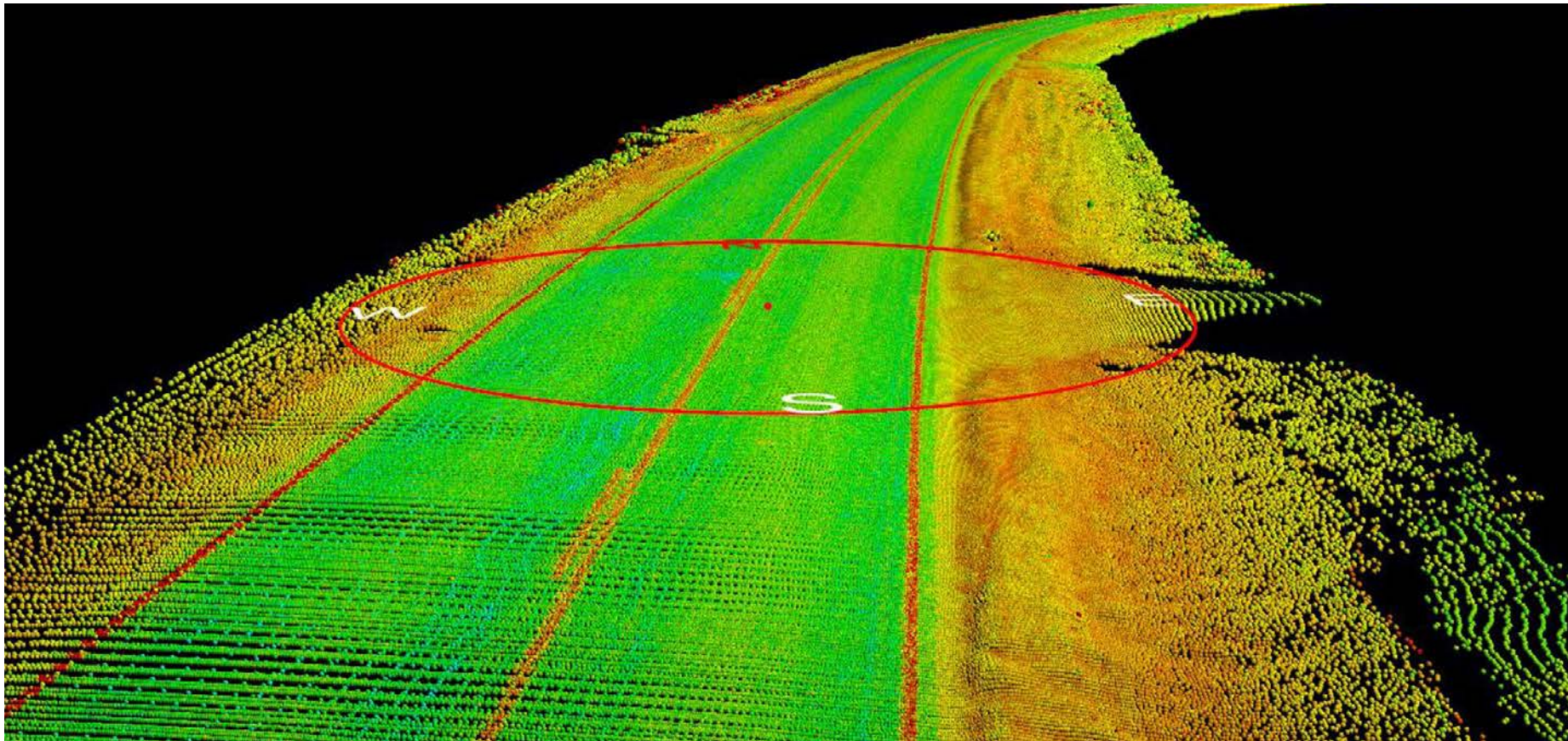


Scanner Technology

- LIDAR scanner
- GNSS receiver
- IMU
- Wheel encoder
- Portable



Field Data Example



DEPARTMENT OF TRANSPORTATION

NH-2-013(071)232

McIntosh County
E Wishek E to JCT 30
Mill / Overlay

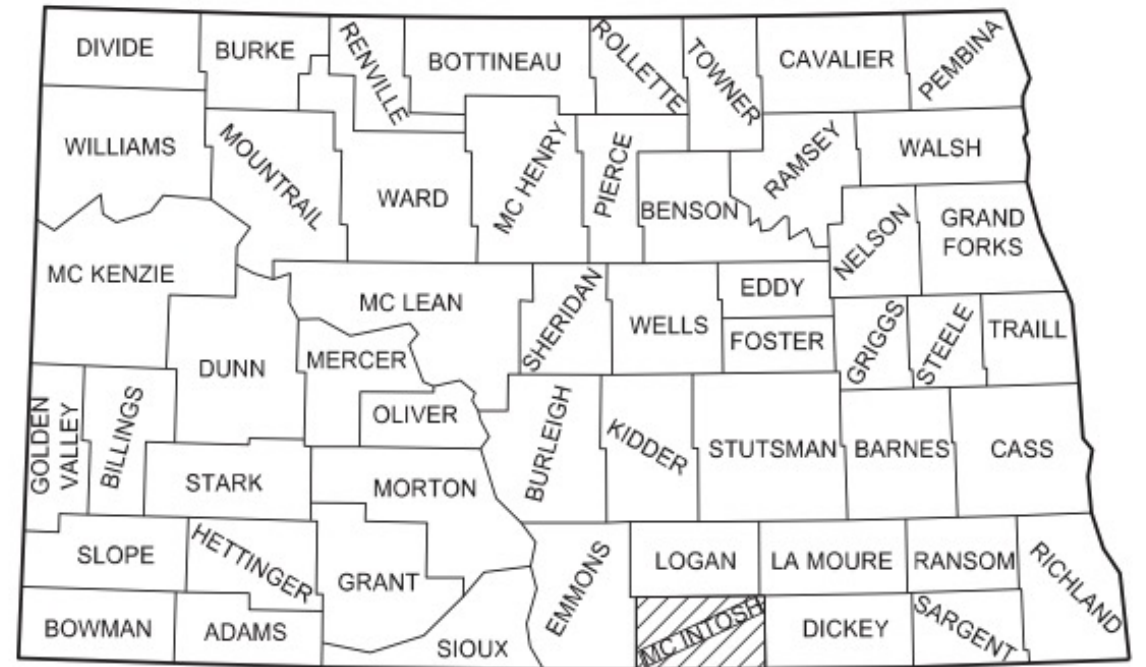
SP 393(23)
Page 1 of 3

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

MACHING GUIDANCE MILLING

PROJECT 2-013(071)232 – PCN 24097



STATE COUNTY MAP

Research and Technology Project

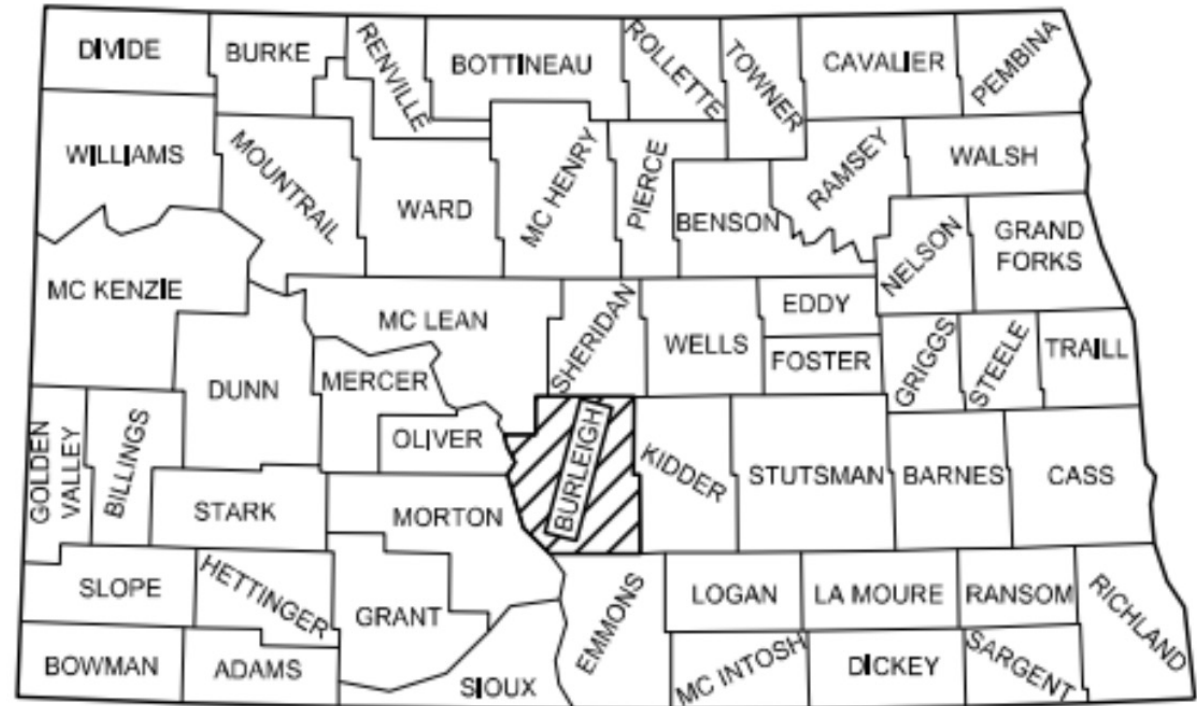


FTF-X-SS-1-014(014)000

Burleigh County

Sterling to Wing

Milling, Widening, Pipe Replacement and Extensions,
HMA, Cement Stabilized Full Depth Reclamation



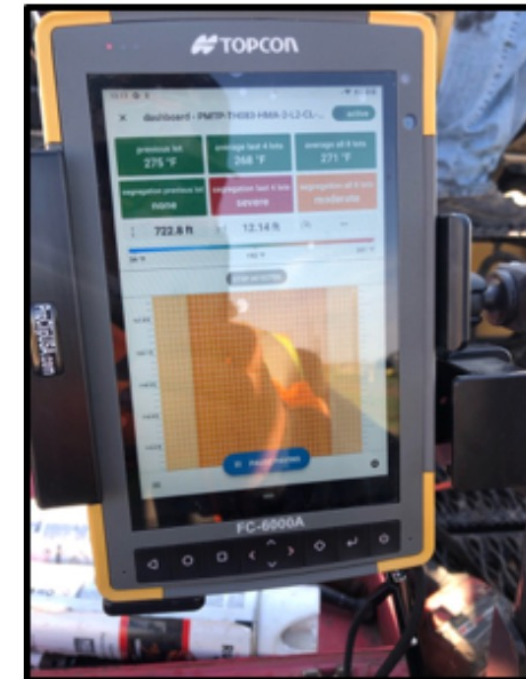
STATE COUNTY MAP

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

PAVER MOUNTED THERMAL PROFILER

PROJECT 1-014(014)000 – PCN 23273



NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

INTELLIGENT COMPACTION FOR HOT MIX ASPHALT (HMA)

PROJECT 1-014(014)000 – PCN 23273



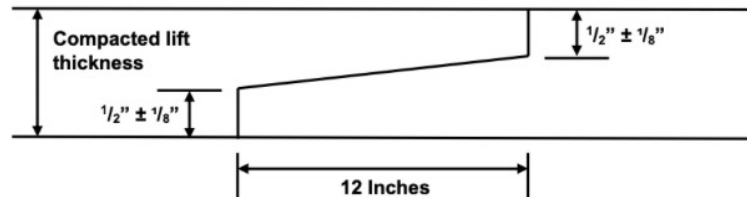
NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

LONGITUDINAL JOINT DENSITY FOR HOT MIX ASPHALT PAVEMENTS

Revised 1/5/2021 SSP 4
Page 3 of 3

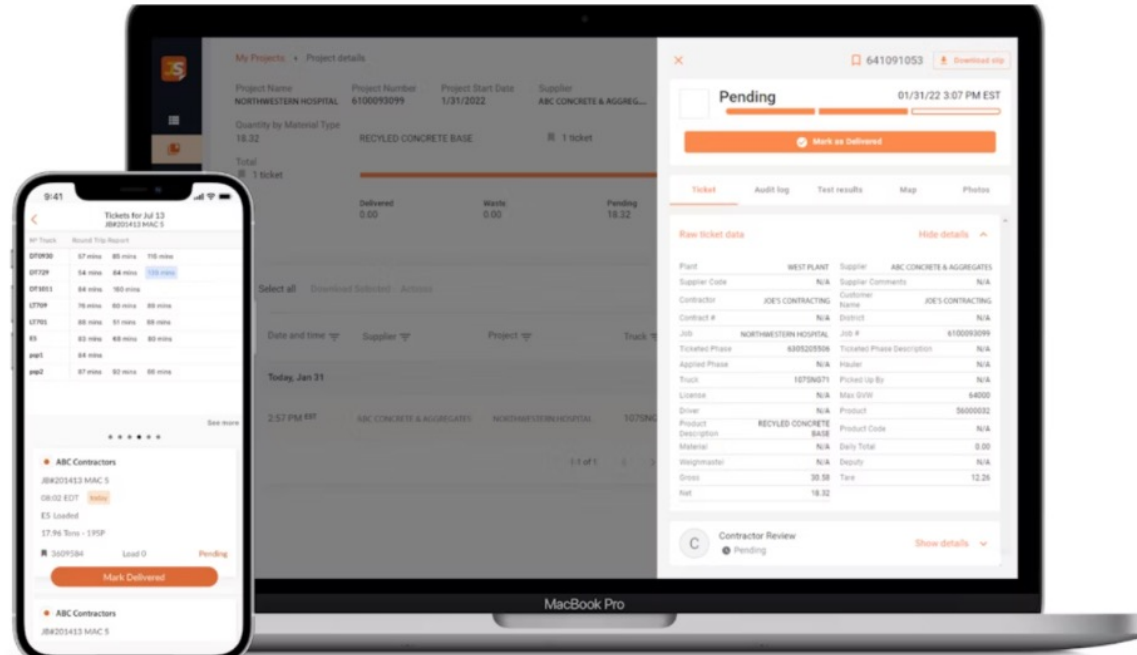
Appendix A Notched Wedge



NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

STANDARD SPECIAL PROVISION

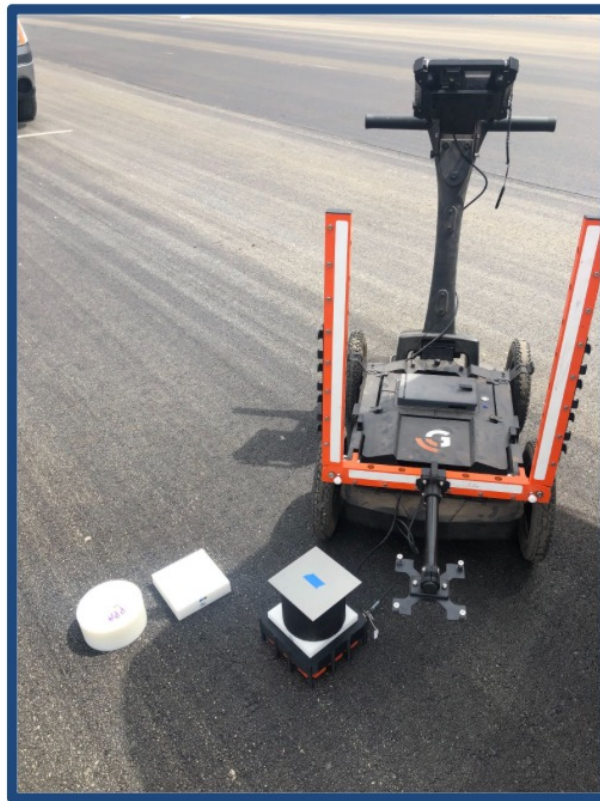
E-Ticketing



DPS Data Collection



NDDOT DPS System

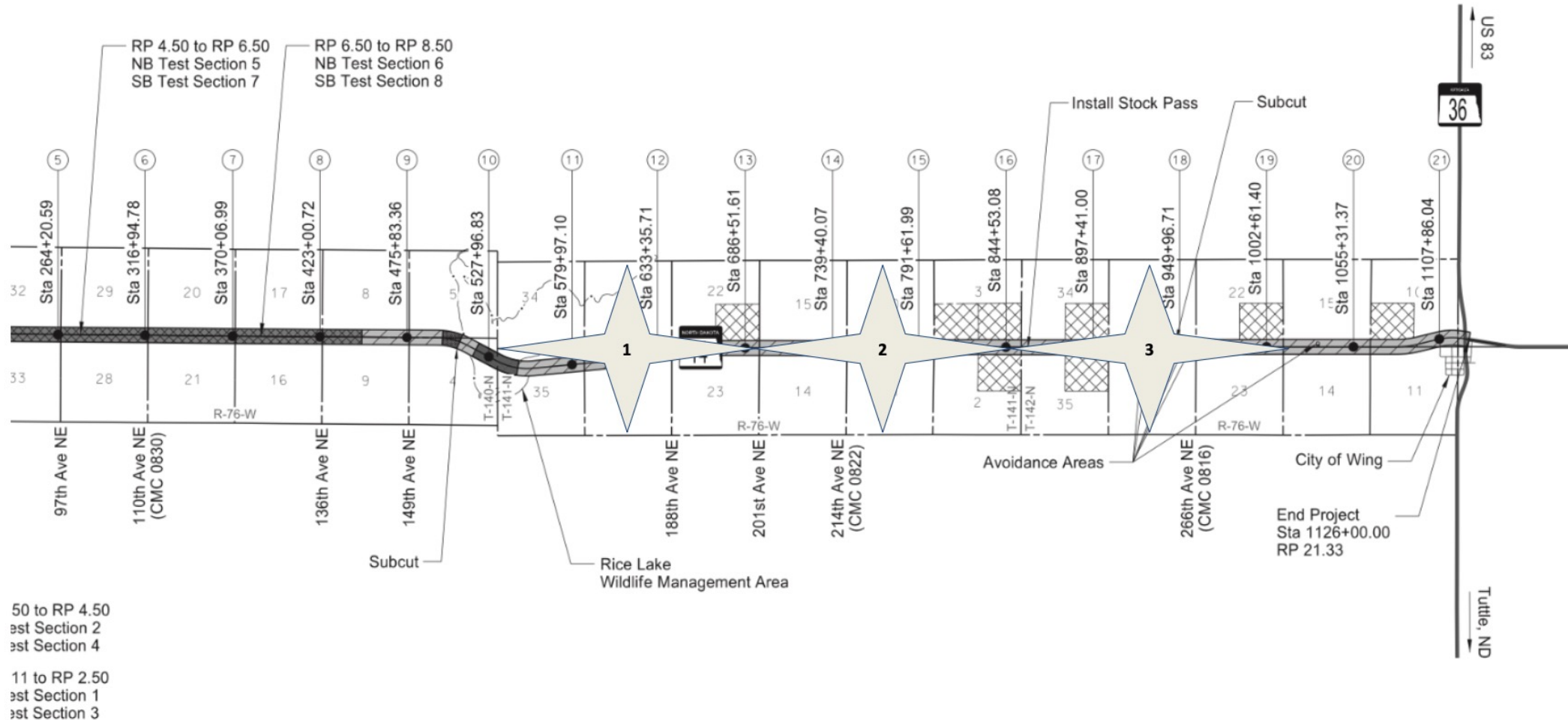


QC/Contractor DPS System



High Speed DPS System

Roller Test Sections



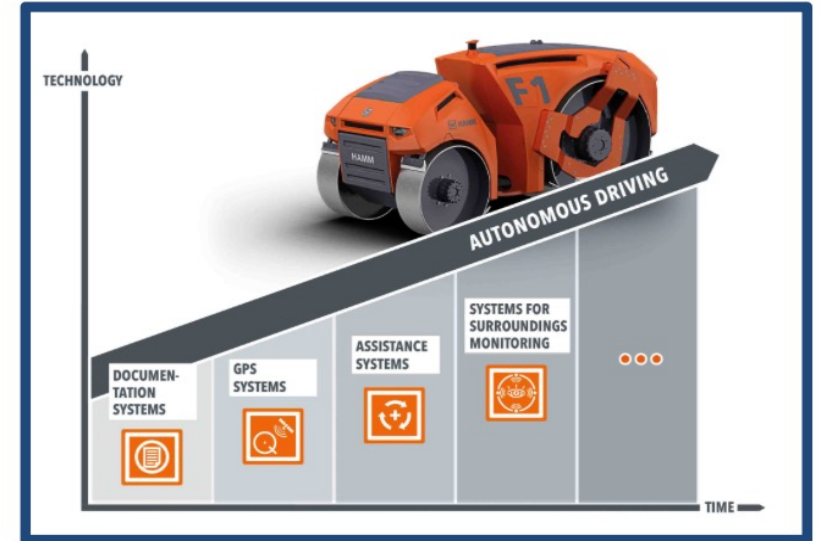
Roller Test Sections



#1 Traditional Operator



#2 Semi-Autonomous



#3 Full-Autonomous

 **PAVEWISE**

North Dakota Asphalt Conference



Questions?

Bryce.Wuori@pavewisepro.com

