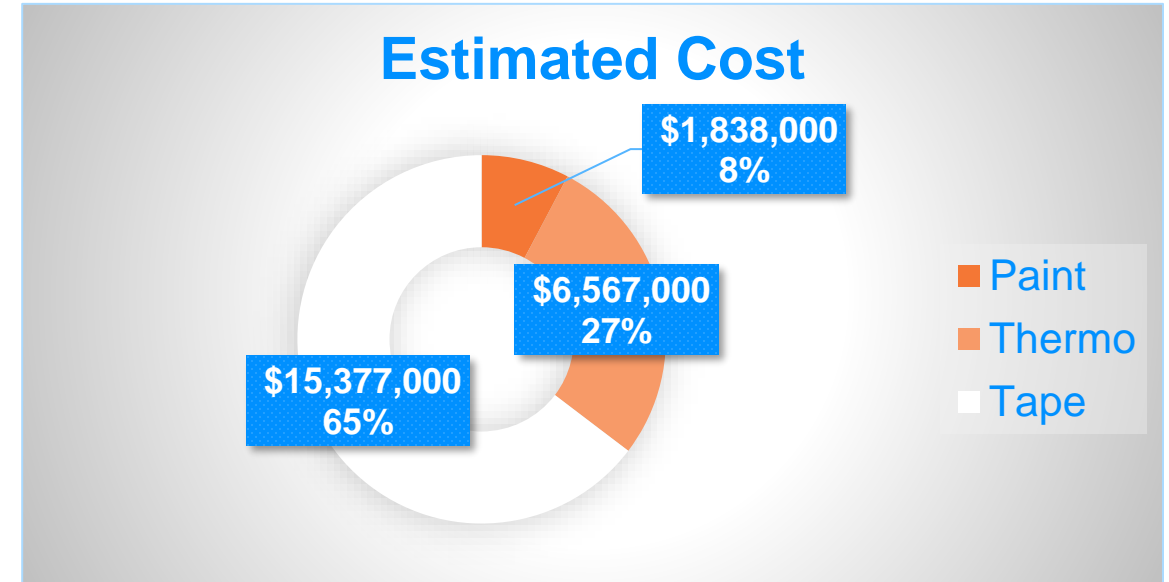
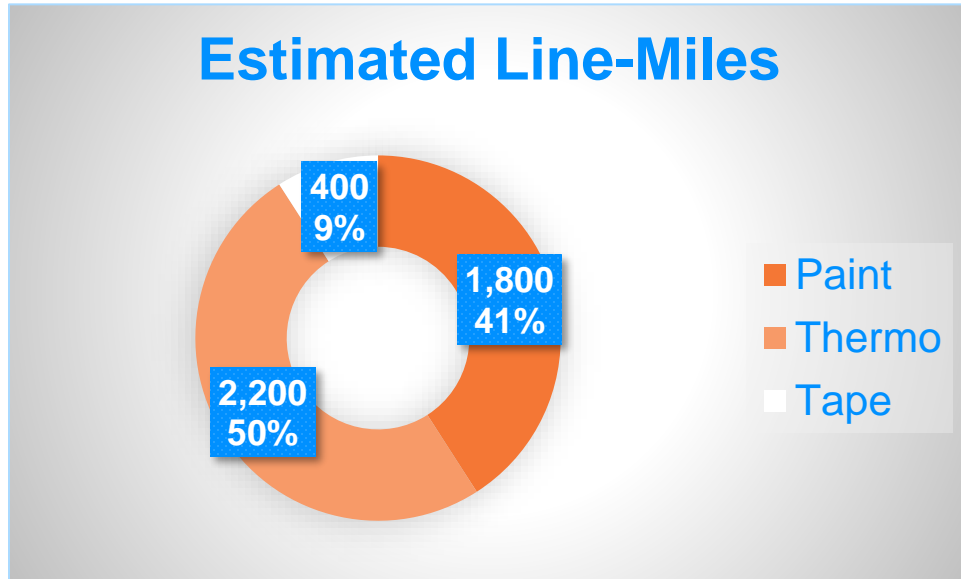


# PAVING SCHEDULES – TRAFFIC ENGINEERING UPDATE

VDOT/VAA Asphalt ~~Webinars~~ Seminars | March 10, 2022 (Roanoke) & March 24, 2022 (Fredericksburg)

| Marc Lipschultz, P.E., PTOE | VDOT Traffic Engineering Division

# 2021 Paving Schedule By The Numbers (Estimated)



- **≈ 72,000 PIMs**
- **≈ 4,400 line-miles of markings (≈ \$23.8M)**
  - **Approximate estimate**
  - **Analysis includes just paving schedules**
  - **Does not include symbols or messages**

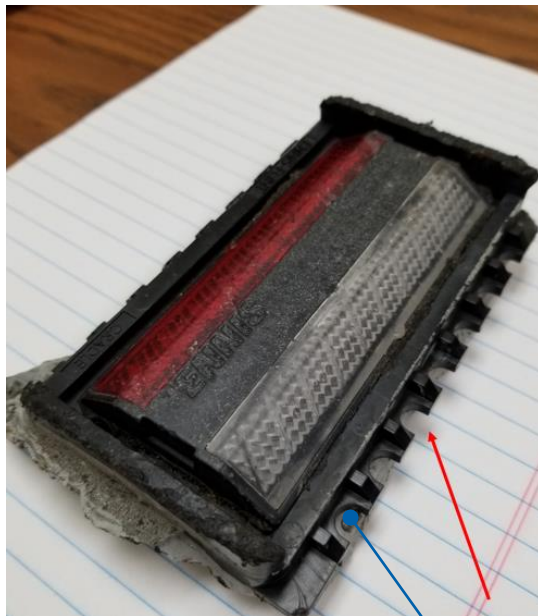
# PIM Installation Reminders (new pavement)

- **Edge of groove shall be at least 2” from joints or cracks**
  - Stated both in PIM Special Provision & Std. Dwg. PM-8
  - Note: PIM groove = 5.25” wide
- **Epoxy needs to completely cover the PIM “teeth”**
- **Do not cut approach groove too deep**
- **Bottom of groove must be thoroughly cleaned**



Fill the plunge cut until the PIM holder's "teeth" are fully covered

# PIM Installation Reminders



Not enough epoxy  
– teeth weren't  
covered



Debris on bottom of  
epoxy – indicates  
bottom was not cleaned

# PIM Installation Reminders (installation in ex. Pavement)

Note: VDOT policy (IIM-TE-394) requires approval of DME or designee before planning PIM installation in existing pavement

PIM popped out within 1 year of installation

PIM groove is right in line with joint/crack

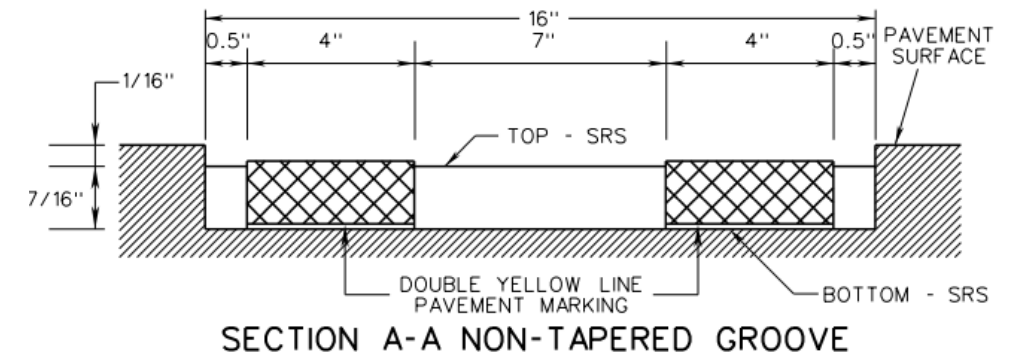
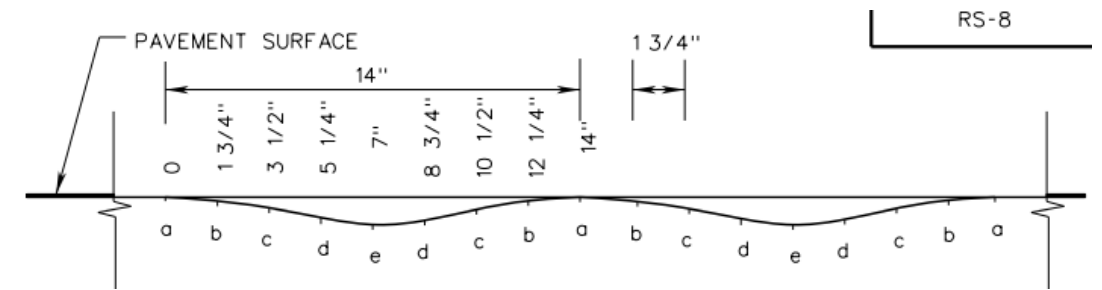
Source: Google

# 2022 Specification Changes - PIMs

- **Clarified that requirement for placement of edge of PIM groove applies to distance from final surface joint**
  - On LM/SS/ST projects where existing pavement joint is exactly aligned with road centerline, edge of PIM groove may overlap with existing pavement joint as long as it is 2” from new LM/SS/ST joint
- **Placement in NEW asphalt or LM/SS/ST treatment:**
  - Edge of PIM groove should be 2” from final surface joint, BUT alignment of PIMs with the line it supplements and straightness of the line of PIMs takes precedence over distance from joint
- **Placement in EXISTING asphalt or in HCC surfaces:**
  - Edge of PIM groove shall be 2” from all cracks/joints/seams, and distance from joint takes precedence over alignment with marking

# New RS-Series Standard Drawings

- **RS- Series updates issued December 2021**
- **Key changes:**
  - **New sinusoidal rumble strip standards**
  - **Revised to address migration from SRPMs to PIMs**



# Recessed Markings | *Background*

- **What:**
  - Installation of markings in a recess such that the marking's surface is just below the pavement surface, protecting it from snow plows
  - Commonly used in several other states
- **Why – benefits of greater marking longevity:**
  - Traffic safety: markings stay reflective longer
  - Potential life-cycle cost savings
  - Reduced number of retrace-related work zones
- **When:**
  - VDOT has done limited experience to date
  - No recessing in 2022 schedules; future implementation TBD

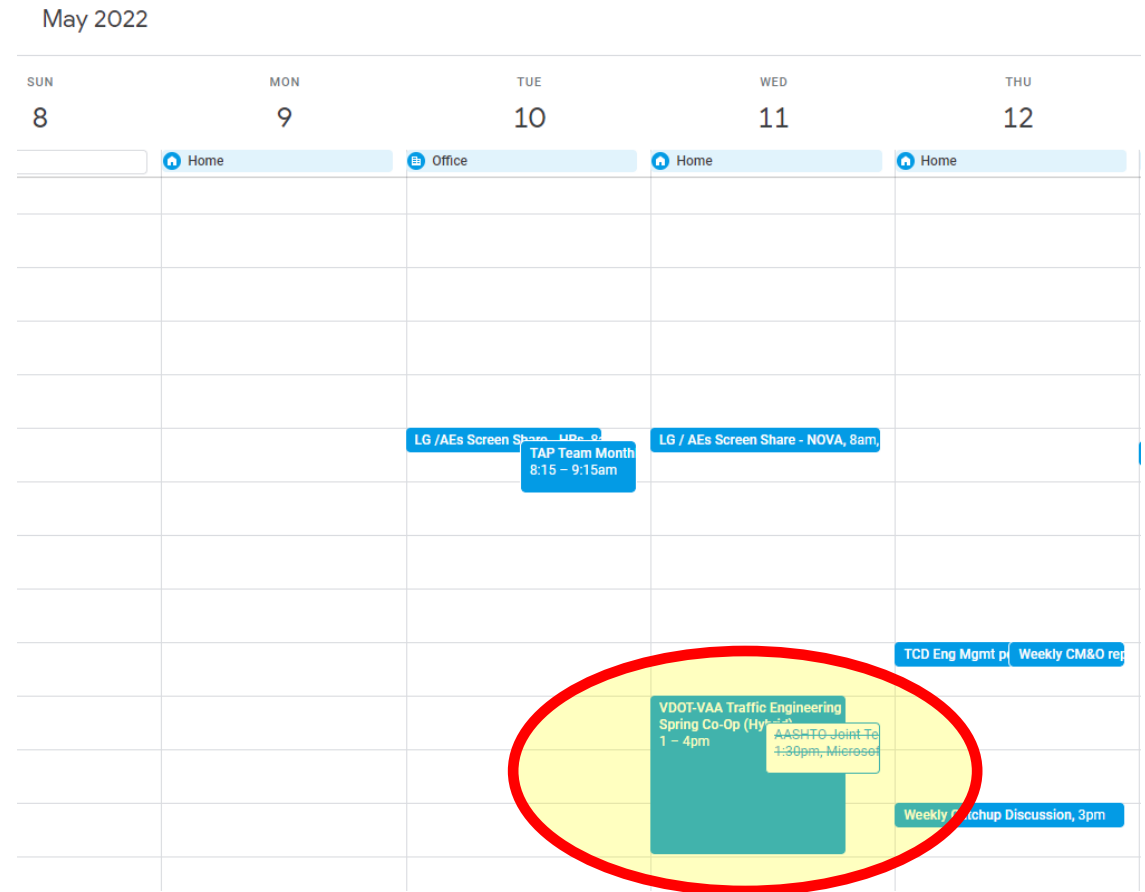


# Recessed Markings | *Background (cont.)*

- **How:**
  - **Width:** typically 1” wider than the line
  - **Depth:** varies based on marking thickness
  - **Equipment:**
    - similar to what’s used for PIM groove installation
    - Requires truck installation with blades capable of uniform depth with corduroy finish
- **We want to hear from you!**
  - **Can you do this with your current equipment?**
  - **Experience in other states?**

# Save the Date | VDOT-VAA Traffic Engineering Co-op

- **Next VDOT/VAA TE Co-op is May 11 @ 1pm at VTRC in Charlottesville**
  - Tentatively planning to also offer hybrid option
- **Anticipated meeting focus:**
  - Proposed spec/standard changes for 2023 schedules
  - Potential pilots for 2023 & beyond





**THANKS!**

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