

# **Pima County Department of Transportation**

## **Thin Asphalt Concrete Overlay Staff Report**



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# **PIMA COUNTY**

## **Draft Specification**

- **PCDOT has completed draft specification. This draft will be shared for input with contractor stakeholders**
- **Estimated Final Specification by December 31, 2019**

# Draft Specification

## Characteristics of Mix

- 3/8" Top Size Gradation which is suitable for 1-1.5" thick overlays
- Higher Fractured Face Requirements for Aggregates (85% two faces, 92% one face)
- 65% Index of Retained Strength Requirement
- 45% Uncompacted Voids Requirement for Fine Aggregate
- Allowance for up to 10% Natural Sand to better utilize available resources and reduce harsh mix compaction tendencies
- 4% Effective Voids Requirement
- Option to use of PG 76-22TR+ binder (tire rubber with polymer – specification available)
- Option to use fiber reinforcement (requires performance specification development)

# Draft Specification

## Conditions for Non-Application of Thin Lift Overlays

- High volume roads or roads with heavy truck traffic
- High severity fatigue cracking
- Rutting greater than ½” in depth (unless milled first)
- Substantial cracks greater than ¼” in width
- Where block cracking has progressed to alligator cracking
- Unrepaired full width thermal cracks
- Where permeability has cause stripping of asphalt within pavement structure
- Delamination or bleeding (unless milled first)

# Draft Specification

## Conditions for Application of Thin Lift Overlays

- Low to moderate traffic and truck volume
- Limited structural fatigue
- Non-structural rutting up to  $\frac{1}{2}$ " in depth
- Crack widths generally less than  $\frac{1}{4}$ " in width
- Raveled or rough asphalt surface



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**QUESTIONS?**