SUDAS Revision Submittal Form

Status Date:	As of 5/17/2019	**Topic:**	High performance thin lift overlays
Manual:	Specs & Design	**Manual Location:**	Spec Section 7021, 2.04, C; Design Section 5J-1, C, 1, b

Requested Revision:

Spec Section 7021 (HMA Overlays), 2.04 (Binder Grades)

A. Conventional Overlays: Use the specified binder grade.

B. HMA Interlayer: Use PG 58-34E meeting AASHTO T 321 with minimum 100,000 cycles to failure. Comply with Iowa DOT Materials I.M. 510A. Do not use RAP.

C. High Performance Thin Lift: Use ~~PG 58-34E+~~ PG 64-34E+ complying with requirements of PG 64-34E except that a minimum percent recovery of 90% when tested at 64°C per AASHTO T 350 at 3.2kPa is required. ~~meeting AASHTO T-324 with minimum 90% elastic recovery.~~ Comply with Iowa DOT I.M. 510A. Do not use RAS.

Design Section 5J-1 (Overlays), C (HMA Overlays)

1. HMA Overlays:

b. Thin Lift: Sometimes called thinlays, thin lift overlays generally range from 3/4 inch to 1 1/2 inches thick. With the thin lift overlays, the nominal maximum aggregate size must be no larger than 1/3 the thickness of the overlay. The mix has more asphalt binder (approximately 8%) than a traditional mix in order to cover the surface area. The binder ~~(PG 58-34E)~~ (PG 64-34E+) is formulated to be softer, which helps the mix be more durable and resistant to cracking than traditional mixes.

Reason for Revision: Modified binder grade to ensure adequate crack resistance properties.

Comments: Binder suppliers claimed it was nearly impossible to make PG 58-34E+ binder that would pass the 90% elastic recovery requirement for HP Thin Lift Overlay.

District:	☒ 1 ☒ 2 ☒ 3 ☒ 4 ☒ 5 ☒ 6
Comments:	None.
Action:	☐ Deferred ☐ Not Approved ☒ Approved

Final District Action Summary: All 6 districts approved.

Board of Directors Action: Approved.