



INDIANA DEPARTMENT OF TRANSPORTATION

Design Memo No. 25-11

April 16, 2025

TO: All Design Personnel and Consultants

FROM: /s/ Kumar Dave
Kumar Dave
Manager, Pavement Engineering Office
Highway Engineering Division

SUBJECT: Lean Concrete Base

REVISES: *Indiana Design Manual*/Sections 17-5.09(02), 603-3.01, and 604-2.03

EFFECTIVE: Lettings on or after June 1, 2025

The Standards Committee approved RSP 309-R-793, Lean Concrete Base, at the [January 2025](#) meeting. The provision creates a new *Standard Specifications* section 309 and incorporates requirements for lean concrete base (LCB) previously included in contracts as a unique special provision. The RSP is available on the February RSP Menu and should be incorporated as directed.

LCB has been utilized successfully in several recent INDOT contracts as a replacement for Subbase for PCCP in concrete patching operations and reinforced concrete bridge approach (RCBA) replacements without new terminal joints. While Subbase for PCCP provides stable support for the concrete slabs, its efficiency can decrease over time once saturated with water. LCB is similar to Portland cement concrete (PCC) but contains less cement paste than a typical PCC mix, allowing the pavement above to retain the ability to move due to environmental changes. It also provides greater long-term support than an aggregate subbase to prevent the formation of any noticeable settlement.

Pay Items

- **New.** Effective June 1, 2025, the following pay item should be used as noted in this memo.

Pay Item	Description	Unit	Notes
309-12695	Lean Concrete Base, 9 in.	SYS	LCB will be identified in the approved pavement design. When LCB is utilized a subgrade treatment below the LCB is not required.

Approved Pavement Designs

Previously approved pavement designs, including full-depth PCCP patching, should not be resubmitted. Projects selected to include LCB with full-depth PCCP patching have already been identified, and the LCB pay item has been included in the approved pavement design. For a project with the LCB pay item, a copy of this memo should be appended to the Final Pavement Design file submitted with the Final Tracings package. For contracts whose Final Tracings due date has passed, please work with your project manager to ensure the Final Pavement Design file in ERMS is updated.

Contract Revisions

For contracts that include lean concrete base, delete any previously submitted USPs and include RSP 309-R793, Lean Concrete Base. Ensure plans, quantity calculations, and the estimate are updated accordingly.

Projects selected to include Full Depth PCCP Patching with LCB have already been identified.

Additional coordination is not required for projects that include an RCBA. District Bridge Asset Engineers will communicate the need for LCB on a project-by-project basis.

IDM Revisions

The referenced sections in IDM Chapters [17](#), [603](#), and [604](#) have been revised to reflect these changes.

Questions regarding this design memo should be directed to the Office of Pavement Engineering, Nick Cosenza, at ncosenza@indot.in.gov.