



# INDIANA DEPARTMENT OF TRANSPORTATION

## Design Memo No. 24-04

April 11, 2024

TO: All Design Personnel and Consultants

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

SUBJECT: Pavement Design

REVISES: *Indiana Design Manual*  
Chapter 601 sections 601-4.0, Figures 601-4A thru -4F (deleted), 601-5.0, 601-5.01, 601-5.01(01), 601-5.01(02), 601-5.01(03), 601-5.01(04), Figure 601-5A, 601-6.0  
Chapter 602 Figure 602-3EE  
Chapter 604 sections 604-1.01, 604-1.04, 604-1.05, 604-2.01, 604-2.02, 604-2.03, 604-2.08, Figures 604-2A thru -2F (added)  
Editable Document 601-6.0.2, Pavement Design Request form

EFFECTIVE: Immediately

The referenced sections of IDM Chapter [601](#), Chapter [602](#), and Chapter [604](#) have been revised to reflect changes in the pavement design process, pavement sections for rest areas, and minimum thicknesses for thin concrete overlays, and MEPDG input for version 2.6. These changes bring the IDM text in-line with current practice. A summary of revisions is included on the next page.

For questions related to this design memo, please contact the Pavement Engineering Office Kumar Dave at [kdave@indot.in.gov](mailto:kdave@indot.in.gov) or Matt Thomas at [mthomas@indot.in.gov](mailto:mthomas@indot.in.gov).

IDM Section/Figure	Revision	Notes
601-4.0, INDOT Pavement Design Philosophy	<p>Entirely rewritten.</p> <ul style="list-style-type: none"> <li>• General design philosophy</li> <li>• Deleted specific investigation, evaluation, and analysis information (incorporated into 601-5.01(03)).</li> </ul>	Previous title INDOT Pavement Philosophy
Figures 601-4A through 601-4F	<ul style="list-style-type: none"> <li>• Moved to Chapter 604, Pavement Testing and MEPDG, and renumbered.</li> </ul>	
601-5.0, INDOT Pavement Design and Development	<ul style="list-style-type: none"> <li>• Deleted general milestone information</li> </ul>	Responsibilities and timeframes incorporated into 601-5.01(01) and -5.01(03)
601-5.01, INDOT Pavement Design Process	<ul style="list-style-type: none"> <li>• General information on the INDOT pavement design process for Pavement projects and non-Pavement projects</li> </ul>	
601-5.01(01), INDOT Responsibilities and Development Timeframes	<p>Entirely rewritten.</p> <ul style="list-style-type: none"> <li>• Responsibilities of project designer</li> <li>• Responsibilities of pavement designer. Prequalification information.</li> <li>• Pavement design timeframe guidance</li> </ul>	Previous title INDOT Preliminary Pavement Scope
601-5.01(02), INDOT Preliminary Pavement Design (Scoping)	<p>Entirely rewritten.</p> <ul style="list-style-type: none"> <li>• General project development information for Pavement projects and non-Pavement projects</li> </ul>	Previous title INDOT Pavement Design Analysis Assignment
601-5.01(03), INDOT Final Pavement Design	<p>Entirely rewritten.</p> <ul style="list-style-type: none"> <li>• Final pavement design initiated with a pavement design request, except projects eligible for standard sections and consultant-designed projects that include a Pavement Design Services task in the contract.</li> <li>• Pavement designer responsibilities defined</li> </ul>	<p>Previous title INDOT Preliminary Pavement Design.</p> <p>Pavement designer responsibilities are consistent with previous practice.</p>

IDM Section/Figure	Revision	Notes
601-5.01(04), INDOT Final Pavement Design Report	<ul style="list-style-type: none"> <li>• Contents of Final Pavement Design Report</li> </ul>	<p>Previous title INDOT Final Pavement Design. Final Pavement Design Report information is consistent with previous practice.</p>
Figure 601-5A, INDOT Pavement Design Process	<ul style="list-style-type: none"> <li>• Updated flow chart to reflect development of standardized pavement sections, the pavement design request process, and workflow for consultant pavement designs.</li> <li>• Consultant-designed projects that include a Pavement Design Services task as part of the contract will submit completed pavement designs for review and approval.</li> </ul>	
601-6.0	<ul style="list-style-type: none"> <li>• Added guidance for submitting a pavement design request.</li> <li>• Added link to Pavement Design Information matrix</li> </ul>	<p>Pavement design request process applies to INDOT-designed projects and consultant-designed projects that do not include a Pavement Design Services task as part of the contract.</p>
Figure 602-3EE, Parking Lot Pavement Section	<ul style="list-style-type: none"> <li>• Added rest area pavement section</li> <li>• Deleted Parking Lot PCCP section for AADTT &lt; 50</li> </ul>	
604-1.01	<ul style="list-style-type: none"> <li>• Added information on network level FWD testing for Pavement projects</li> </ul>	
604-1.04	<ul style="list-style-type: none"> <li>• Added information on network level data collection.</li> </ul>	
604-1.05	<ul style="list-style-type: none"> <li>• Added information on the timing and responsibility to request pavement cores</li> </ul>	
604-2.01	<ul style="list-style-type: none"> <li>• Added figure references to Minimum Acceptable Design Life and Performance Criteria for Pavement Design.</li> <li>• Updated guidance on INDOT Default Traffic Distribution Input Files - Design Lane Width</li> </ul>	<p>Figure 604-2A previously Figure 601-4A, consolidated into a single page</p> <p>Figure 604-2B previously Figure 601-4B</p>

IDM Section/Figure	Revision	Notes
	<ul style="list-style-type: none"> <li>Updated guidance on Climate inputs</li> </ul>	Figure 604-2C previously Figure 601-4C
604-2.02	<p>Added figure references to Structure.</p> <p>Added figure references to Material Properties</p>	<p>Figures 604-2E previously Figure 601-4E</p> <p>Figure 604-2F previously Figure 601-4F</p> <p>Figure 604-2D previously Figure 601-4D, Air Voids revised from 8% to 7% for all NMA thicknesses.</p>
604-2.03	Added guidance to Design Features – Widened Slab	
604-2.08	Increased overlay thickness for thin bonded concrete overlays	