

## **INSTRUCTIONS FOR COMPLETION OF PAVEMENT DESIGN REQUEST—LPA PROJECT**

The Pavement Design Request for an LPA project must be submitted on Consultant's or LPA's letterhead.

- (1) For INDOT roads, enter I, US, or SR and number. For an LPA project, enter CR and number or name of road.
- (2) The county or counties in which the project is located.
- (3) The name of the LPA developing the project.
- (4) Lead designation number of project. Enter the RFC date of the project from the SPMS schedule and the anticipated overall construction cost of the project.
- (5) LPA employee in responsible charge and telephone number.
- (6) Give Functional Class as shown on the INDOT SPMS project listing.
- (7) Give the length in miles of the project divided into urban and rural areas.
- (8) Give the Location as shown on the INDOT SPMS project listing.  
Bridge Location is a single RP. Example: RP: 29+14  
Roadway Location is a range. Example: RP: from 29+10 to 31+15
- (9) Briefly explain the context, purpose and need for the project. Give a description of the overall intent of the project as it relates to pavement. What issue is the project addressing? What led to the decision to recommend the given pavement section/treatment? Are there any unique or unusual circumstances that factored into this recommendation?
- (10) The proposed pavement sections should be given for each distinct recommended pavement area. Each layer of the pavement section should be given with its application lay rate and description to be used for a contract pay item. Include, as applicable, milling type and depth of milling, subgrade treatment type, widening, subbase for PCCP, underdrains, etc.

- (11) The proposed shoulder width should be given for an HMA shoulder, or give the type of curb to be used. If HMA, then each layer of the pavement should be specified, similar to the mainline. Driveway approach pavement design must also be discussed. Are typical driveway approach sections being used or is mainline section being perpetuated?
- (12) Specify whether underdrains are recommended for the project. Give the type, size, and location within the mainline or shoulder. If existing ditches are present, give the condition. Does the project address unsatisfactory conditions?
- (13) Enter the calculated cost of the proposed mainline pavement per mile per year over the expected service life of the pavement.
- (14) Descriptive listing of the history of the pavement, including year of original construction and subsequent overlays. If the project is a resurfacing or rehabilitation-type project, then core depth reports, core pictures, FWD report, and color pictures of existing pavement are to be submitted. The type of the existing pavement should be identified, e.g., aggregate, asphalt, PCCP, or composite pavement, with the width of each type provided. A good way to convey this information is to submit a typical cross section of existing pavement.

Describe the current overall condition of the pavement with a more detailed discussion of the type, severity, and extent of the pavement distress conditions the proposed project is going to correct.

- (15) A narrative description of the alternative solutions that were analyzed and why they were not used.
- (16) Information about the existing pavement, if not given in pavement history section, and surrounding conditions should be given. This information may be needed for decisions regarding the binder type or how widened sections of pavement match up with existing pavement.
- (17) Provide information from the Geotechnical Report used in the AASHTOWare Pavement ME Design software in this section.
- (18) Provide traffic information used for the pavement analysis in this section. Enter the growth rate in terms of linear growth.

- (19) Provide area of pavement, in square yards, for the completely reconstructed areas of:
1. mainline pavement
  2. widening
  3. shoulder pavement
- Also provide overlay area, in square yards. Was a life cycle cost analysis performed? If so, the report should be submitted with the request. If the difference in annual costs is less than 10% and alternate bidding is not recommended, provide an explanation.
- (20) Values for Pavement Design Life in years are given in Figure 304-14A for different types of pavement treatments. The design life used as well as the service life of the designed pavement section should be given. The service life is years before the pavement is predicted to reach failure numbers based on program analysis. A table or a few charts showing the different failure point expectations can be incorporated.
- (21) If there are construction issues critical to ensuring that the recommended pavement section performs well, they should be included in this section.
- (22) Maintenance items that must be performed in order to ensure that the recommended pavement section meets its intended design life should be listed in this section. Crack sealing/filling, joint sealing and ditch/underdrain cleaning are common items to address in terms of when they need to be performed.
- (23) The name and contact information for the individual who designed the pavement section. This individual must be a pavement design pre-qualified professional engineer and the individual must sign and stamp the request letter.
- (24) Another professional engineer must initial each page of the submittal after checking for accuracy and concurrence. Provide the typed name of that individual in the space provided.
- (25) The final page of the letter lists the three items that must be attached to each Pavement Design Request, along with a checklist to be completed showing the other items that are being submitted with the request. Give dates of when the submitted items were requested and when they were received. If additional data or test information not mentioned on the sheet is being submitted, identify it under the Additional Items Not Listed section.