



Request for Proposal (RFP) – Guidance for Selection of Proper Asphalt Binder Grade

Re: BINDER SELECTION RFP – AIRPORT ASPHALT PAVEMENT TECHNOLOGY PROGRAM (AAPTP)

I. BACKGROUND

Part 6 of Advisory Circular 150/5370-10H contains Items P-401 and P-403 for Asphalt Mix Pavement. Item P-404 specifies Fuel-Resistant Asphalt Mix Pavement. Asphalt binder requirements are contained in 2.3 of each item. United Facilities Guide Specifications (UFGS) 32 12 15.13 Asphalt Paving for Airfields and 32 12 17.19 Fuel Resistant Asphalt Paving for Airfields also provides guidance for work conducted for the Department of Defense. Asphalt binder grades are selected based on climate, aircraft gross weight, pavement layer (P-404 mixtures and UFGS mixtures), and aircraft speed. Extensive binder modification typically also requires the use of performance grade (PG) plus testing (i.e., elastic recovery). Binder grade selection is critical to ensure asphalt mixtures will perform based on environmental and loading conditions; therefore, additional guidance is needed to ensure that specifiers select the proper grade of asphalt binder during the design process.

II. OBJECTIVE

The outcome of this project will be to develop guidance which can be used to help specifiers select the appropriate binder grade of asphalt for a given project. Additionally, a binder grade selection tool will be developed which can be used by specifiers during the design process. The contract team will also deliver draft language for Federal Aviation Administration (FAA) or UFGS specifications which may need to be clarified.

III. PROJECT SCOPE

The project will develop a guidance, such a decision tree, which aids specifiers in the selection of asphalt binder grade for airfields in the United States, its territories, and Canada based on climate, aircraft speed & loading, and pavement layer. Additionally, the contract team will develop a web-based tool or application which could be used by specifiers to select an appropriate binder grade for different asphalt mixtures in a pavement structure.

IV. PROJECT REQUIREMENTS

The proposal will include a project schedule which identifies completion of all key activities as well as completion of the following project deliverables:

- Project Kick-off Meeting
- Quarterly Progress Reports & Virtual Meetings
- Technical Report
- Binder Grade Selection Tool
- Draft Specification Language
- Webinar

The proposal will provide details of any activities reliant on the FAA or others outside of the project team for completion of the project. The proposal should include an itemized budget and timeline for project completion based on the given contract period. All final deliverables including technical report, tool, and webinar must be 508 compliant.

AVAILABLE FUNDS: \$200,000

CONTRACT PERIOD: 18 Months

V. PROPOSAL SUBMISSION

Submissions should include the project team, budget, and project schedule in the proposal. Proposals should be a maximum of 10 pages (not including the title page, budget, project team CVs, and project schedule), with minimum 11pt font, standard margins, and in Adobe PDF file format. Proposals should be sent via email to Richard Willis, Vice President for Engineering, Research & Technology, at Engineering@asphaltpavement.org by June 2, 2021. Please include the Re: BINDER SELECTION RFP -- AIRPORT ASPHALT PAVEMENT TECHNOLOGY PROGRAM (AAPTP) in the subject line of your email.