



**DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS AIR MOBILITY COMMAND (AMC)**

MEMORANDUM FOR ALL AMC SPTG/CE

29 JUL 1998

FROM: HQ AMC/CEO  
507 A Street  
Scott AFB IL 62225-5022

SUBJECT: Technical Review of Major Airfield Pavement Project Designs

1. All MAJCOM pavement engineers, including AMC, have a concern about the lack of technical review on O&M projects designed in-house or by contract. AFCESA, which provided technical reviews in the past, no longer performs this service. The base and MAJCOM pavement engineers do not have time to adequately perform these reviews. The bottom line is they are not being reviewed for technical adequacy. The need to do reviews was highlighted by design deficiencies in recent projects, such as, using the wrong concrete specification on a runway project and having a bonded overlay on a concrete apron project delaminate because of a lack of understanding by the designer of thermal expansion/contraction characteristics of concrete. These design deficiencies would have been easily discovered during a technical review. They occurred in both in-house and contract designs.
2. The Corps of Engineers Transportation Center (TSMCX) provides a technical review on all pavement projects designed by the Corps. They are available to review our O&M projects for a fee (see atch 1). We feel the use of TSCMX to review major projects (over \$1M) would improve the construction quality, reduce cost of construction by limiting contract modifications, and decrease the cost of future maintenance. By catching design errors prior to contract award, the dollar savings would more than offset the TSMCX fees. Therefore, we are requesting you have a technical review by TSCMX for all future major airfield pavement projects (see atch 1 for TSCMX point of contact). Please include this design cost for these reviews in the appropriate programming and budget documents.
3. The TSCMX has listed the scope of their reviews in attachment 2. We feel this listing is the minimum requirement for a thorough review. Please feel free to add to this list if you have a particular need not covered. We highly recommend you budget for at least one site visit by the TSMCX reviewers for each project.

4. If the members of your staff have any questions, please have them call our point of contact, Mr. Ken Hevner, HQ AMC/CEOX, DSN 576-3067 ext. 406, commercial 618-256-3067 ext. 406 e-mail hevnerke@hqamc.scott.af.mil.



GERARD A. BRANGENBERG, Colonel, USAF  
Chief, Operations and Readiness Division  
Directorate of Civil Engineering

Attachments:

1. TSMCX Review Fees
2. Project Review Scope

cc: HQ AFCESA/CESC  
CENWO-ED-TX  
15 AF/DS and 21 AF/DS

## AVERAGE FEES FOR TSMCX REVIEW

<u>Programmed Amount</u>	<u>Review Fee</u>
Less than \$1M	\$3,500
\$1M to \$2.5M	\$4,500
\$2.5M to \$5M	\$6,000
\$5M to \$7.5M	\$7,000
\$7.5M to \$10M	\$8,000
\$10M to \$20M	\$10,000
over \$20M	contact TSMCX

### Notes:

Design-build: Design-build projects will require approximately 100% higher review fees depending on the size, scope, and complexity of the project.

Lighting/NAVAIDS: Airfield projects, which include both pavements and lighting/NAVAIDS, will require higher review fees depending on the scope of the airfield lighting/NAVAIDS portion of the project. Projects with major rehabilitation or new airfield lighting and electronic NAVAIDS (ILS, PAR, etc) will require approximately 75% higher review fees.

Additional Reviews: Review fees are based on two reviews, preliminary design (30%) and final design. Additional reviews (60%, etc) will require approximately 35% higher review fees.

Conferences/Site Visits: Additional funding for labor and travel will be required for review conferences and site visits when requested by the design district or customer.

Design Budget: The above fees should be used as a guide for the preparation of a design budget. Actual fees for design reviews should be negotiated between the design district and the TSMCX.

For reviews, send two copies of all design documents (requirements document, DD 1391, plans, specs, and design analysis) to the following:

U.S. Army Corps of Engineers  
Transportation Systems Center (TSMCX)  
215 North 17<sup>th</sup> Street  
Omaha NE 68102-4978

point of contact at TSMCX:

Mr. Terry Sherman  
Phone: 402-221-7260  
FAX: 402-221-7261  
e-mail: terry.w.sherman@usace.army.mil

Atch 1

## **AIRFIELD PAVEMENT PROJECT REVIEWS**

### **1. Review for compliance to criteria**

- a. **Airfield/air space criteria along with land use**
- b. **Airfield geometrics to include clearances and grading**
- c. **Geotechnical/materials/pavement design**
- d. **Airfield marking, lighting and NAVAIDS**
- e. **Use of current guide specifications properly edited**
- f. **Identify waiver requirements**

### **2. Review for constructability**

- a. **Proper phasing**
- b. **Contractor access and needed utilities**
- c. **Look for drawing conflicts**
- d. **Check spec/drawing conflicts**
- e. **Section cuts are properly shown and detailed**
- f. **Incorporate lesson's learned**
- g. **Check specifications for constructability issues (submittal timing, etc)**

### **3. Site visit**

- a. **A site visit during early stages of design would greatly impact direction of design and determine if project is adequately scoped.**
- b. **A site visit during final review would be beneficial in providing complete and accurate drawings.**
- c. **Timing of the site visit should be at the discretion of the MAJCOM pavements engineer.**