Illinois Department of Transportation
Division of Highways / Bureau of Construction
2300 South Dirksen Parkway, Springfield, Illinois 62764

Subject:
Construction Projects Incorporating Experimental Features

CONSTRUCTION MEMORANDUM NO. 02-2

Effective: **May 1, 2002**

Expires: **Indefinite**

This memorandum supersedes Construction Memorandum 95-2, effective January 3, 1995.

The U.S. Department of Transportation, Federal Highway Administration, Federal-aid Policy Guide G 6042.4, Chapter 6, Construction Projects Incorporating Experimental Features dated December 9, 1991, prescribes the objectives and provides guidelines relating to the development, inspection, financing and reporting of Federal-aid highway construction projects which include experimental features.

An experimental feature may be either a material, process, method, equipment item, traffic operational device or other feature that, (1) has not been sufficiently tested under actual service conditions to merit acceptance without reservation in normal highway construction or (2) has been accepted but needs to be compared with alternative acceptable features for determining their relative merits and cost effectiveness.

Experimental features are generally included and approved in a project before the project is advertised for bids. For an experimental feature to be authorized or approved for inclusion in a Federal-aid project, an experimental features workplan must be prepared and submitted to the FHWA for approval. The workplan shall be submitted through the Bureau of Materials and Physical Research, prior to advertising. This workplan shall contain or reflect the following items of significant information:

1. A description of the experimental feature.
2. The objectives of the experiment in terms of the purpose, how the results might be utilized, the economic benefits (savings in time, money and lives) and finally how the results of the experiment may be implemented and applied to other construction projects.
3. Reference to any specific research on the subject which supports the basic concept of the experimental feature being suggested.
4. The plan of the study as well as the evaluation process. This should outline the measurements to be made and the characteristics to be evaluated. This should also include the frequency of inspections (at least one a year) and the reporting anticipated during and after construction.
5. The methods or means of constructing the experimental feature as well as the materials, process, technique and/or equipment necessary to the experiment which are a departure from normal construction procedures.
6. The estimated additional cost of the experimental feature. Higher costs are normally anticipated but the experimental feature should not be excluded for that reason.

7. Details of the control section. A control section shall be provided in all approved experimental projects unless the nature of the experiment is such that a control section would serve no purpose. A sketch showing the location of the experimental section and the control section is to be included with the work plan. Plan drawings and any special provisions pertaining to the experimental feature should also be provided.

8. The estimated time or duration necessary to complete all aspects of the evaluation.

When the work plan has been approved by the FHWA, a copy of this plan should be forwarded to the Resident of the project so that he/she may be apprised of the nature of the experimental feature.

Because even small changes in an experimental feature can jeopardize the research. All changes involving experimental features in a project must have prior approval regardless of whether they are major or minor changes. The request for the change should state clearly what effect the proposed change is expected to have on the research. Requests shall be submitted to the Bureau of Materials and Physical Research.

Existing policy also permits the inclusion of experimental features in construction projects which are already in progress by submitting a change order. In such cases, the preparation of an experimental features work plan as outlined above will be required. Assistance during the preparation of work plans is available from the Bureau of Construction and the Bureau of Materials and Physical Research.

After FHWA approval of the work plan, the originating agency will provide the information required to complete Form 1461, Experimental Project Report (attached). Form 1461 will then be prepared by the Bureau of Materials and Physical Research and forwarded to the FHWA. After initial submittal, the District or Bureau responsible for monitoring the experimental feature shall prepare Form 1461 annually (by September 15 of each year) and submit it to the Engineer of Physical Research for an overall submittal to the FHWA by October 1 of each year. Form 1461 shall also be used periodically to update the status if and when appropriate information of interest on the experimental feature develops.

The Bureau of Materials and Physical Research will prepare the final Form 1461 after receiving the required information from the originating agency. BMPR will then submit it to the FHWA concurrent with the final report, which shall be prepared by the District or Bureau responsible for the project.

Gary Gould
Engineer of Construction

Eric Harm
Engineer of Materials and Physical Research

EXPERIMENTAL PROJECT REPORT

EXPERIMENTAL PROJECT	EXPERIMENTAL PROJECT NO. State Year Number Suf. _____ - _____ ___	CONSTRUCTION PROJ. NO _____	LOCATION _____
	EVALUATION FUNDING 1 ____HP&R 3 ____ DEMONSTRATION 2 ____CONSTRUCTION 4 ____ IMPLEMENTATION	NEEP NO. _____	PROPRIETARY FEATURE? ____ Yes ____ No
SHORT TITLE	TITLE _____		
THIS FORM	DATE MO. YR. _____ _____	REPORTING ____ INITIAL ____ ANNUAL ____ FINAL	
KEY WORDS	KEY WORD 1	KEY WORD 2	
	KEY WORD 3	KEY WORD 4	
	UNIQUE WORD	PROPRIETARY FEATURE NAME	

CHRONOLOGY	Date Work Plan Approved: Mo. Yr. ____ ____	Date Feature Constructed: Mo. Yr. ____ ____	Evaluation Scheduled Until: Mo. Yr. ____ ____	Evaluation Extended Until: Mo. Yr. ____ ____	Date Evaluation Terminated: Mo. Yr. ____ ____

QUANTITY AND COST	QUANTITY OF UNITS (Rounded To Whole Numbers) _____	UNITS 1 ____ LIN. FT. 5 ____ TON 2 ____ S.Y. 6 ____ LBS. 3 ____ S.Y.-IN. 7 ____ EACH 4 ____ C.Y. 8 ____LUMP SUM	UNIT COST (Dollars, Cents) _____
AVAILABLE EVALUATION REPORTS	_____ CONSTRUCTION	_____ PERFORMANCE	_____ FINAL
EVALUATION	CONSTRUCTION PROBLEMS 1 ____ NONE 2 ____ SLIGHT 3 ____ MODERATE 4 ____ SIGNIFICANT 5 ____ SEVERE	PERFORMANCE 1 ____ EXCELLENT 2 ____ GOOD 3 ____ SATISFACTORY 4 ____ MARGINAL 5 ____ UNSATISFACTORY	
APPLICATION	1 ____ ADOPTED AS PRIMARY STD. 2 ____ PERMITTED ALTERNATIVE 3 ____ ADOPTED CONDITIONALLY	4 ____ PENDING 5 ____ REJECTED 6 ____ NOT CONSTRUCTED	*(Explain in Remarks if 3, 4, 5, OR 6 IS CHECKED)*
REMARKS	_____ _____ _____ _____		