



Office of Engineering  
Project Development Division  
Bridge Design Section  
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Bobby Jindal, Governor  
Sherri H. LeBas, P.E., Secretary

## MEMORANDUM

TO: ALL CONSULTANTS  
ALL BRIDGE DESIGNERS

FROM: PAUL FOSSIER, P.E.  
BRIDGE DESIGN ENGINEER ADMINISTRATOR

SUBJECT: BRIDGE DESIGN TECHNICAL MEMORANDUM NO. 54 REV. NO. 1  
(BDTM.54.1)  
PATENTED AND PROPRIETARY PRODUCTS

DATE: June 18, 2015

### Rev. 1 Summary:

FHWA and DOTD have recently published a new version of the “Stewardship and Oversight Agreement on Project Assumption and Program Oversight.” In regards to the use of proprietary products on NHS and non-NHS projects, the FHWA has delegated the approval responsibilities to DOTD. Revisions to this BDTM have been made to reflect this change. Other minor revisions have also been made for general clarity.

### BDTM 54.1

Construction plans and specifications should provide product requirements and, if necessary, generic descriptions that allow for the selection of as many products as possible, both proprietary and non-proprietary. Generic descriptions should only include statements that are pertinent to product use and that convey quality and performance requirements. They should not be narrowly written such that only one product meets the specification. EDSM V.4.1.2 establishes DOTD policy for the use of proprietary and sole source products on construction and maintenance projects, where specification of such products is necessitated by project requirements. This BDTM is intended to provide supplemental guidance to ensure compliance with federal regulations on highway construction projects, when applicable.

Effective immediately, the following procedures governing the specification of patented or proprietary products shall be followed on projects in which federal participation is anticipated. The FHWA will participate in the cost of a patented or proprietary product in accordance with 23 CFR 635.411, which provides regulatory authority for them to do so. The FHWA Louisiana Division office has identified four methods that can be utilized to ensure federal participation in the cost of these items. These methods and directives for each are as follows:

#### 1. Competitive Bidding:

Patented or proprietary items may be specified in the plans if a reasonable number of equally suitable products (proprietary or non-proprietary) are also listed, along with the phrase “or equally acceptable as determined by the Engineer of Record”, to ensure the bidder has the broadest range of choices possible. While all available products meeting the requirements should be listed, the FHWA

Louisiana Division has defined a “reasonable number” as two or more available products. If only two suitable products exist in total, pre-coordination with the DOTD Chief Engineer is required. If only one suitable product exists, an alternate method (certification or experimentation) is required.

## 2. Certification:

Patented or proprietary items necessary for synchronization with existing facilities, or those that are uniquely suited to meet the project performance requirements, may be singularly specified. For each such item, a written and signed statement from the DOTD Chief Engineer, certifying that the specification of the item is in accordance with the requirements of the CFR, must be provided to the FHWA. The certification must state that specification of the item is in accordance with the requirements of the CFR , and must contain the following:

- 1) A description of why the proprietary product is needed (e.g. unique product performance)
- 2) A summary of the evaluation of the pool of seemingly suitable products (if any) and why they are unable to meet the performance requirements
- 3) An estimate of additional costs incurred (if any) as a result of this product requirement
- 4) Duration of the certification (one year, three years, etc.)
- 5) Extent of the certification (project specific, multiple projects, districtwide, statewide, programmatic, etc.).

The engineer of record and/or the task manager should work with the project manager to draft the certification for the Chief Engineer’s approval and signature. The final, signed certification shall be submitted to FHWA for their records.

### Synchronization:

A certification based on synchronization must establish that the specified item matches a specific current or desired characteristic based on function, aesthetics, and logic. Replacement costs (actual and lifecycle) for the existing system necessitating the synchronization should be evaluated relative to the cost premium of the proprietary item. The certification must also include the following statement: “I, (name of the DOTD Chief Engineer), Chief Engineer of the Louisiana Department of Transportation and Development, do hereby certify that, in accordance with the requirements of 23 CFR 635.411(a)(2), this patented or proprietary item is essential for synchronization with existing highway facilities.”

### Uniqueness:

A certification based on uniqueness must establish that the specified item is the only available product that meets the performance requirements for the item. The certification must also include the following statement:

“I, (name of the DOTD Chief Engineer), Chief Engineer of the Louisiana Department of Transportation and Development, do hereby certify that, in accordance with the requirements of 23 CFR 635.411(a)(2), no equally suitable alternative exists for this patented or proprietary item.”

## 3. Experimentation:

Patented or proprietary items associated with materials, processes, methods, equipment, etc. that have not been sufficiently tested under actual service conditions to merit acceptance without reservation

(in normal highway construction), or have been accepted but have not been evaluated in comparison with other acceptable alternates (for relative merit and cost effectiveness), may be singularly specified. For each such item, a written work plan of action must be documented, and must contain the following:

- 1) A description of the experimental feature objective
- 2) Measurements to be made
- 3) Characteristics to be evaluated
- 4) Time schedules
- 5) Reporting requirements
- 6) Cost estimates
- 7) Construction and post-construction schedules
- 8) Control sections
- 9) Evaluation to be conducted.

A draft copy of the work plan should be submitted to FHWA for their review and comments. The final work plan must be submitted to the Chief Engineer for approval, and a copy of the approved work plan must be submitted to FHWA for their records. Note that products that are approved under special FHWA funding / evaluation programs do not need additional certification or approval under 23 CFR 635.411.

#### 4. Public Interest Finding:

Patented or proprietary items for which equally suitable proprietary or non-proprietary products exist may be singularly specified. For each such item, a request stating that it is in the public interest to allow the use of a specific item, even though other equally suitable items are available, must be submitted for review and approval by the DOTD Chief Engineer. The request for approval must contain the following:

- 1) A description of how the proprietary product will benefit the public (e.g. unique needs or safety conditions that warrant a higher standard)
- 2) An evaluation of the pool of other seemingly acceptable products and why they are undesirable for the situation
- 3) An estimate of additional costs incurred (if any) as a result of this product requirement
- 4) A description of the need (including limitations and conditions)
- 5) An engineering/economic analysis supporting the action
- 6) Duration of the approval (one year, three years, etc.)
- 7) Extent of the approval (project specific, multiple projects, districtwide, statewide, programmatic, etc.).

A copy of the final approval letter must be submitted to FHWA for their records.

Public Interest Findings, Experimentations, and Certifications that were initiated by the Bridge Design Section are posted on the Bridge Design Section website under the heading *Proprietary Product Approvals*.

This technical memorandum is posted on the Bridge Design Website under Technical Memoranda.  
[http://www.dotd.la.gov/highways/project\\_devel/design/home.asp?ID=BRIDGE](http://www.dotd.la.gov/highways/project_devel/design/home.asp?ID=BRIDGE)

Please contact Ms. Zhengzheng “Jenny” Fu (225-379-1321, [zhengzheng.fu@la.gov](mailto:zhengzheng.fu@la.gov)) if you have questions or comments.

PF/zzf/pv/abl

Cc: Janice Williams (Chief Engineer)  
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District Administrators (02, 03, 04, 05, 07, 08, 58, 61, 62)