



Office of Engineering
Project Development Division
Bridge Design Section
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John Bel Edwards, Governor
Shawn D. Wilson., Ph.D.,
Secretary

MEMORANDUM

TO: ALL CONSULTANTS
ALL BRIDGE DESIGNERS

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

SUBJECT: BRIDGE DESIGN TECHNICAL MEMORANDUM NO. 73 (BDTM.73)
POLICY ON TIMBER BRIDGES

DATE: July 3, 2017

Effective immediately, all new permanent bridges shall be concrete and steel structures. Timber structures shall no longer be used. Some of the reasons that timber is not used as a construction material in Louisiana are as follows:

- The harsh environmental conditions of Louisiana do not make timber, even treated timber, a favorable construction material. Timber is a low strength and inconsistent material. Timber tends to decay and is frequently attacked by marine borers reducing the service life of the material.
- AASHTO and Louisiana DOTD Design requirements for timber structures to meet the load demands of our current truck fleet would require significantly different bridge structure than exist in our inventory today. Engineered timber beams and significantly more or larger piles would be required, making it impractical to economically supply the timber components.
- We have no crash tested bridge timber bridge rails that meet AASHTO MASH (Manual for Assessing Safety Hardware) requirements. Timber decks do not provide the strength requirements necessary to transfer the load from a vehicular impact to the bridge rail to the timber deck.
- The Department does not maintain timber bridge standards. All old timber bridge standards do not meet current design standards and have been retired.
- Timber bridges are high maintenance bridges, resulting in high maintenance cost. The Department is in the process of replacing many of our timber bridges with concrete and steel bridges with a service life meeting the AASHTO Bridge Code requirements of 75 years.
- Timber bridges frequently require load posting, which results in more frequent inspection cycles.

This technical memorandum is posted on the LA DOTD Website under [Inside La DOTD > Divisions - Engineering > Bridge Design > Technical Memoranda – BDTMs.](#)

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

PF/zzf/rm

Cc: Janice Williams (Chief Engineer)
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