

Montana Department of Transportation

Michael T. Tooley, Director Steve Bullock, Governor

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MONTANA DIVISION

April 16, 2018

Kevin L. McLaury, Division Administrator FHWA Montana Division 585 Shepard Way Helena, MT 59601

Subject: Statewide Finding of Public Interest – Pile Testing Load Frame

Pursuant to 23 CFR 635.411 we are requesting the Federal Highways Administration's Finding of Public Interest approval to allow the Montana Department of Transportation (MDT) to continue supplying a load frame to be used in an axial static pile load tests. This request is for all projects statewide where engineering analyses indicates performing a static pile load test is appropriate and in the best interest of the state and public.

Background and Benefits

A static pile load test conducted at a project site decreases some of the uncertainty inherent in geotechnical engineering. Performing the test allows for a higher resistance factor in accordance with AASHTO LRFD design guidelines. The higher resistance factor is allowed since uncertainty is reduced and ultimately this leads to a more economical pile foundation design. A secondary benefit is the ability to use the data obtained from static load tests to improve future designs, again a cost savings.

MDT has performed static load testing on previous projects using this load frame and commercial options for purchase are not available. Prior to use of the MDT load frame projects, MDT required a Contractor to hire a Professional Engineer to design a load frame and submit the design to MDT for review. The Contractor would then furnish the materials, construct the frame, and conduct the test in conjunction with MDT personnel. We specifically heard from contractors this approach was not preferred and they would rather have the frame supplied to them. This saves time and additional costs during construction.

Justification

By continuing to furnish the load frame for future projects we will realize a cost reduction in both performing the test and a cost savings of foundation piling over the estimated lifespan of this

load frame. There is very minimal (if any) maintenance required with the load frame other than periodic "touch up" painting.

Conclusion

A Public Interest Finding is current for this load frame but is set to expire in December of 2018. Based on the information provided herein, MDT requests that a Public Interest Finding (PIF) in accordance with 23 CFR 635.411, for furnishing state owned materials be approved for the use of this load frame, including the necessary appurtenances and accessories required for installation of the frame, and remain in effect until December 1, 2023. Due to all of the factors discussed herein, providing this load frame is in the best interest of the Public.

If you have questions or need additional information, please contact Jeff Jackson at (406) 444-3371.

Lesly Tribe horn, P.E. Highways Engineer (406) 444-6242

FHWA Concurrence

4/17/18

Copies: Chris Riley, FHWA Field Operations Engineer

Dwane Kailey, Chief Engineer

Dustin Rouse, Engineering, Preconstruction Engineer

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Lisa Durbin, Construction Administration Services Engineer

Jeff Jackson, Acting Materials Engineer Stephanie Brandenberger, Bridge Engineer