



MDOT OFFICE MEMORANDUM
Michigan Department of Transportation

DATE: September 26, 2012

TO: Region Engineers
Region Associate Operations Engineers
Region Construction Engineers
TSC Managers
TSC Construction Engineers

FROM: Gregory C. Johnson, P.E.
Chief Operations Officer

Randy R. Van Portfliet, P.E.
Bureau Director of Field Services

SUBJECT: Bureau of Highway Instructional Memorandum 2012-10
Distribution of Geotechnical Data

The traditional Geotechnical Program/Project Management System (P/PMS) task 3530 – Conduct Structure Foundation Investigation consists of subsurface exploration, in-situ and laboratory testing and analysis, and recommendations of the proposed foundation treatment. The product of the task was the Geotechnical Report. There are many milestones built into the single P/PMS task, and as a result, this task has been divided into three new P/PMS tasks:

- P/PMS Task 3325 – Geotechnical Site Characterization-Structures: This task includes defining the site conditions in the vicinity of a new or widened structure, and preparing factual data, including soil borings logs and in-situ and laboratory testing data for inclusion into the plans.
- P/PMS Task 3530 – Geotechnical Foundation Engineering Report: This task includes determination of the most efficient foundation treatment for transmitting loads from the planned structure to the earth. This includes preparing the Geotechnical Engineering Report and transmitting to the Bridge Design Engineer for evaluating information into the Preliminary Plans.
- P/PMS Task 3815 – Geotechnical Design Review: This includes evaluation of geotechnical constructability given the developed construction staging, and verification of foundation design.

Currently designers include the Soil Boring Data and the Soil Test Results in the Preliminary Plans. Per MDOT's *Standard Specifications for Construction 704.03.A*, contractors are

responsible for designing “steel sheet piling and cofferdams in accordance with the AASHTO *Standard Specifications for Highway Bridges*.” The contractors are reliant on the provided soil data in the plans to make bidding, design and construction decisions pertaining to the **Steel Sheet Piling Permanent; Steel Sheet Piling, Temp; Steel Sheet Piling, Temp, Left in Place; Cofferdams, Cofferdams, Left in Place**. It would be beneficial to the contractors and MDOT if geotechnical data from the subsurface investigation were provided to the contractor.

Effective with all new contracts implemented after October 1, 2012, factual data from the Geotechnical Site Characterization will be included in the Reference Information Documentation (RID) section in ProjectWise for any projects involving a new or widened substructure. This includes projects that incorporate steel sheet piling, cofferdams and/or any type of piling. By providing this information early in the process, better decisions can be made regarding substructure construction.

Please provide this information to local agencies and consultants in your area as this applies to all State of Michigan projects incorporating new or widened substructures.

If you have any questions, please contact Corey Rogers, Bridge Construction Engineer, at (517) 322-3320, rogersc5@michigan.gov, Matthew Chynoweth, Engineer of Bridge Field Services, at (517) 322-3322, chynowethm@michigan.gov, or Ryan Snook at (517) 322-5748, snookr@michigan.gov.

Further information about MDOT’s geotechnical requirements and Appendix 5.03.03 A.1.f. Scope of Work Statement for Foundation Structure Investigation (P/PMS TASK 3325, 3530, 3815 can be found at:

<http://mdotwas1.mdot.state.mi.us/public/design/englishbridgemanual/>
http://www.michigan.gov/documents/GeotechnicalInvestigationsAnalysis_116819_7.pdf

Chief Operations Officer

Bureau Director of Field Services

FHWA Approval: 09/25/2012

BOFS:OFSD:MG:MC:CR:ksk

Index: Structures

cc:	K. Steudle	ACEC
	Bureau Directors	APAM
	Division Administrators	CRAM
	K. Zachary, FHWA Michigan Division	MAA
	ACM	MCPA
		MITA