

Protection And Monitoring Of Existing Structures Checklist For Geotechnical Report

		YES	NO	NA
1	Does the project include bridge construction with pile driving or drilled shaft construction within 120 ft from existing foundations?			
2	Have buildings in which sensitive operations are performed, been identified for this project? Sensitive operations include but are not limited to eye surgery, medical treatments, rehabilitation operations, recording and broadcasting operations, work with precision instruments, places of worship, antique shops, historical buildings or museums.			
3	Is any dewatering needed for deep excavations that may impact existing structures?			
	If answers to all questions 1 through 3 are NO, Stop.			
4	Does the project include bridge widening with foundations installed adjacent to existing bridge foundations or other structures?			
5	In bridge replacement projects, does the project include pile driving or drilled shaft construction within 120 ft of existing structures that will support traffic during construction?			
6	Has the Geotechnical report identified the existing foundation tip elevations?			
7	Are any proposed foundations deeper than the adjacent existing foundations?			
8	Are there existing battered piles?			
9	If answer to 8 is YES, and the existing foundations consist of exposed piles (Pile Bent), has the Geotechnical of Record measured in the field the actual batter to verify it?			
10	Does the Geotechnical report include an evaluation of the potential risk for the existing bridge foundation settlement due to the activities required to install the new foundation?			
11	Does the Geotechnical report include recommendations to minimize settlements and damage of the existing foundations, see 11a-11i:			
11a	Use of non-vibratory methods to install casing in drilled shafts			
11b	Use of non-vibratory methods for sheet pile installation			
11c	Limit the depth of the new foundation elements			
11d	Predrilling or preforming			
11e	Limit or avoid the use of driven piles			

11f	Use of permanent casings, or combination of permanent plus temporary casing			
11g	Avoid unprotected excavations that may affect shallow foundations			
11h	Use of micropiles, ACP			
11i	Other, indicate			
12	Has the Geotechnical Report provided Monitoring of Existing structures recommendations for the following:			
12a	A list identifying FDOT structures that need settlement monitoring			
12b	A list identifying FDOT structures that should be inspected prior to construction (1)			
12c	A list identifying FDOT structures that need Vibration Monitoring (2)			
12d	A list identifying FDOT structures that need Groundwater Monitoring (3)			
13	Has the Geotechnical Report identified non-FDOT structures, including sensitive buildings described in question 2, that could be impacted from construction excavation, vibrations and dewatering?			
14	Does the Geotechnical Report include recommendations for vibration monitoring, settlement monitoring and groundwater monitoring for non FDOT structures including sensitive buildings described in question 2?			
15	Does the Geotechnical Report include special construction methods to minimize the risk of vibrations and settlements on non-FDOT property?			
16	Does the Geotechnical Report include recommended MSPs to address special monitoring and protection requirements for existing FDOT structures?			
17	Does the Geotechnical Report include recommended MSPs to address special monitoring and protection requirements for non-FDOT structures?			

Notes

- (1) The Standard Specifications do not require this unless shown in the Plans. A justification is needed to recommend this in the report.
- (2) According FDM 117 this should not be done typically for FDOT structures. A justification is needed to recommend this in the report.
- (3) Rarely used. Required on proposed deep excavations with dewatering. FDM 117 requires concurrence from the District Geotechnical Engineer.