

INSPECTOR CHECKLIST: 502 - DRIVEN PILES

Inspection Item	Yes	No	N/A	Remarks
PRE-CONSTRUCTION				
1				Safety Critical Plan submitted and approved?
2				Pile Driving Equipment (pile driving hammer, hammer cushion, helmet, pile cushion, etc.) submitted and approved per 502.05?
3				Wave equation analysis submitted?
4				Certified Welding Inspector (CWI) certifications submitted?
5				Reviewed and familiar with pile type, shape, length, locations, orientations, driving depth, refusal, bearing capacity, cut-off elevation, splicing, etc.?
6				Have existing utilities been located? Marked? Deenergized? Protected? Conflicts resolved? Have equipment offsets from utilities been discussed?
7				If needed, has excavation been completed or has fill been placed and accepted prior to driving?
8				Has layout, location, and orientation of piles been staked and checked?
9				Have hammer settings been checked and verified to match specifications?
10				Is pre-drilling required?
11				Are test piles required?
12				Is Staff Bridge needed for use of Pile Driving Analyzer (PDA)?
CONSTRUCTION				
13				Does inspector have proper PPE for operation? Vest, eye protection, hearing protection, etc.?
14				Have the piles been made in the USA? Do the heat numbers on the piling match the Mill Test Reports?
15				Does the inspector have the necessary pile driving forms to track and log all necessary data during driving operations?
16				Have pile types, lengths, sizes, heat numbers, conditions, certifications, and Mill Test Reports been documented?
17				Does equipment on site match what was submitted and approved?
18				Are driving leads adequate?
19				If using steel pipe piles, are they free of water or debris prior to filling with concrete?
20				Has the pile been driven to minimum specified tip elevation?
21				Has the pile been driven to Practical or Absolute Refusal?

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22	During driving, have conditions of equipment and piles been monitored for damage?				
23	During driving, have any of the following been observed: Push-up? Sudden changes in depth? Pile springing? Hammer bouncing?				
POST-CONSTRUCTION					
24	Have splices been performed by CWI?				
25	Have splices been inspected, approved, and recorded?				
26	Have pile cut-offs been measured and recorded?				
27	Are driven piles within tolerances outlined in 502.06?				
28	Has CDOT Piling Form for payment been completed?				
29	Have any and all pile deficiencies been corrected?				
<p>PLEASE NOTE THAT THE INTENT OF THESE CONSTRUCTION QUALITY ASSURANCE OBSERVATION CHECKLISTS ARE TO ASK QUESTIONS REGARDING OBSERVATION DUTIES THAT WILL PROMPT THE CONSTRUCTION OBSERVERS TO RESEARCH SOURCE DOCUMENTS TO DETERMINE ANSWERS. THEY DO NOT SERVE AS A REPLACEMENT TO REVIEWING AND KNOWING ALL SPECIFICATIONS AND SOURCE DOCUMENTS. SOURCE DOCUMENTS INCLUDE, BUT ARE NOT LIMITED TO: ATSSA QUALITY STANDARDS FOR WORK ZONE TRAFFIC CONTROL DEVICES; M&S STANDARDS; CONSTRUCTION BULLETINS; CONSTRUCTION MANUAL; SURVEY MANUAL; EROSION CONTROL MANUAL; HMA PAVING HANDBOOK; MUTCD; MATERIALS MANUAL; MATERIALS BULLETINS; PROJECT PLANS; STANDARD SPECIFICATIONS; PROJECT SPECIAL PROVISIONS; PROJECT STAND SPECIAL PROVISIONS; ETC. THE OBSERVER SHOULD ALSO CONSULT WITH THE CONSTRUCTION QUALITY ASSURANCE MANAGER AND OTHER EXPERIENCED PERSONNEL IF FURTHER CLARIFICATION IS REQUIRED.</p>					