

Pile Driving Dynamic Monitoring Checklist

Scheduling

- Notify the Geotechnical Section at least 14 days before the scheduled date of driving piles to be monitored. Confirm at least 3 days before dynamic monitoring (804.10.9).
- Testing will generally consist of the following dynamic monitoring events:
 - Test Piles: Initial drive, 1-day restrike, 14-day static load test, after-load restrike;
 - Indicator Piles: Initial drive, 1-day restrike, and 14-day restrike; and
 - Monitor Piles: Initial drive and 1-day restrike.

Equipment & Piles

Please confirm each of the following items prior to each dynamic monitoring event:

- District personnel have verified that crane, leads, hammer, and all appurtenances are on site, assembled, tested, and operational at least 24 hours prior to the test event (804.10.9);
- Driving equipment and template match the accepted Pile Installation Plan (804.03.1);
- Hammer cushion and striker plates are properly inspected (804.05.2.1);
- Pile is on site, laying on the ground, and properly supported with safe access for personnel to drill holes on opposites sides of the pile;
- Pile pick-up points have been removed (CS-216) and the entire pile length has been painted with visible 1-foot increments;
- Pile cushion is in the helmet and additional dry assembled pile cushions (804.05.2.3) are available on site; and
- Contractor has a used pile cushion and a means to warm up the hammer on a different pile/surface for restrikes (804.07.8).

Test & Indicator Piles

In addition, please confirm each of the following prior to dynamic monitoring of Test Piles and Indicator Piles:

- Overburden material has been excavated and can be maintained at the elevation shown in the plans throughout driving and loading (804.10.6). If casing is used, confirm that excavation depth has stabilized using a tape at least 24 hours prior to driving;
- Contractor has a means to prevent the casing from pulling down during driving; and
- Casings and reaction piles have not been driven using vibratory means (804.05.1).

Other Documentation Needed

Please obtain Pile Driving Logs for every pile driven (804.03.3). Note that the information required includes, but is not limited to:

- Project number, bent number, pile number, and hammer name;
- Blow count, stroke height, and fuel setting for every foot of pile driving, not just the last 10 feet;
- Reference elevations, such as template, ground surface, mudline, etc. be provided to PDA personnel for initial drive;
- The signature of the Contractor's assigned supervisor of the pile driving work; and
- Predrill diameter, depths, methods, etc.