SECTION 551 - PILES AND PILE DRIVING EQUIPMENT

Construction personnel involved in pile driving must pay close attention to the applicable sections of the Plans, Specifications, and the New York State Steel Construction Manual (NYS SCM). Construction Supervisors and Engineers-In-Charge (EIC's) must assure that Inspection Staff are trained and knowledgeable regarding their assignment and that good supervision oversight practices are employed for these particularly critical structural items.

To insure that piles are installed in accordance with all contractual and procedural requirements, the following discussion of key requirements is provided:

! Submittal of Form BD 138M, Pile And Driving Equipment Data.

The Contractor must submit to the Deputy Chief Engineer (Structures), D.C.E.S., Form BD 138M for approval. The form shown as Exhibit 551-A&B (reverse side) can be obtained from the Regional Office. All information listed on Form BD 138M shall be submitted as applicable to the D.C.E.S. Each separate combination of pile and pile driving equipment proposed by the Contractor shall require the submission of a corresponding Form BD 138M. Refer to Section 551-1.03 of the Standard Specification and Notes on the Contract Plans.

! Pile Points.

Piles shall be furnished with prefabricated or commercial shoes, as detailed on the Contract Plans, or as approved by the D.C.E.S. Refer to Section 551-3.01.C.1.a&b. of the Standard Specifications and details on the Contract Plans. A Welding Procedure Specification (WPS) is required to be submitted to the D.C.E.S.

! Pile Splices.

Full length piles shall always be used where practicable. When unavoidable, piles shall be spliced as detailed on the Contract Plans. The number, locations, and actual details shall be subject to the approval of the D.C.E.S. Refer to Section 551-3.01.C.2.a&b. and details on the Contract Plans.

! Welding.

Pile welding shall be in accordance with the provisions of the New York State Steel Construction Manual (SCM). All procedural directives discussed in Section 564, Structural Steel for "Structural Welding-Field" of this Manual are applicable to welding of piles on site. If the Contractor chooses to subassemble any portion of the pile by welding off site, the Contractor should be directed to notify the Structures Division, Metals Engineering Unit (MEU) (518) 457-4525 of the type and location of work so that the appropriate Quality Control approvals are obtained and In-Process Quality Assurance (QA) inspection by the State can be arranged, when necessary.

Department personnel involved in QA inspection of welding in the field may use the "Punch List" at the end of the above-referenced Section in this Manual as a quick reference for approvals and inspection.

Refer to Section 551-3.01.C.2.a of the Standard Specifications; Subsections 302, 306, 704, and 811 of the SCM; and Section 564 of this Manual.

! Material Deliveries.

Deliveries of all pile material are to be recorded on the Inspector's Daily Report and Material Acceptance Record. Material Certifications must be referenced by the Manufacturer or Supplier to special project shipments. Payment quantities cannot exceed the quantity of acceptable material in the documented deliveries..
SECTION 551 - PILES AND PILE DRIVING EQUIPMENT

! Pile Driving Records.
Copies of Pile Driving Records (Form BD-25M and Form BD-26M) should be transmitted to the Regional Office, the Geotechnical Engineering Bureau, and D.C.E.S. at the end of each driving day. Refer to Exhibits 551-C & D for samples of these forms.

When driving piles in or adjacent to a stream crossing, and the estimated length or minimum tip is not achieved, call D.C.E.S. at (518) 457-7677.

If a conflict occurs with existing piles or other conflicts arise, call D.C.E.S. at (518) 457-7677.

References
NYS STEEL CONSTRUCTION MANUAL §302, §306, §704 & §811
STANDARD SPECIFICATION §564
CONSTRUCTION INSPECTION MANUAL §564-00, STRUCTURAL WELDING - FIELD
PILE DRIVING INSPECTION MANUAL
STATIC PILE LOAD TEST MANUAL, GCP-18