State of Illinois
Illinois Department of Transportation

Addendum
MANUAL FOR FABRICATION OF PRECAST PRESTRESSED CONCRETE PRODUCTS
Effective: December 7th, 2012

Section 1.2.3
Replace the 4th step of "Duties of the ACI Grade I Technician shall include, but are not limited to the following:" with the following:

4. Perform temperature, slump, slump flow (self-consolidating concrete (SCC)), flow (CLSM), J-Ring (SCC), L-Box (SCC), **hardened visual stability index (SCC),** and air content tests and compare with specifications. If test results are unsatisfactory or near specification limits, take appropriate action and retest when applicable. Refer to the current "Portland Cement Concrete Level I Technician Course - Manual of Instructions for Concrete Testing" located at http://www.dot.il.gov/materials/pcclevel1.pdf for information and guidance on tests.

Section 1.2.3
Replace the 2nd step of "Duties of the Concrete Tester shall include, but are not limited to the following: " with the following:

2. Perform temperature, slump, slump flow (self-consolidating concrete (SCC)), flow (CLSM), J-Ring (SCC), L-Box (SCC), **hardened visual stability index (SCC),** air content and unit weight tests.

Section 3.2.1
Replace the 1st paragraph with the following:

Placing and consolidating of concrete shall be as specified in Article 503.07 of the Standard Specifications and as stated herein. **In addition for self-consolidating concrete pours, the maximum distance of horizontal flow from the point of deposit shall not exceed 15 ft (4.6 m). The placement operation shall be moved as required to ensure the leading edge of the flowing concrete does not exceed 15 ft (4.6 m). For a bed of beams, a single beam shall be completely filled with concrete before placement of concrete in the next beam. For deck beams with void tubes installed in place prior to the pour, the concrete shall be placed on one side of the void tube until the concrete flows completely under the void tube to the other side. Once this has been completed, the concrete placement operation may be moved to the other side.** The Producer shall take measures to prevent leakage of concrete through openings in the bulkheads. The portions of the reinforcement bars that extend above the surface may be protected by plastic or other suitable wrappers during concrete placement to keep them free of concrete, or they shall be thoroughly cleaned after the concrete has been placed.

Section 3.2.3.1
Replace the 3rd paragraph with the following:

The Inspector is advised that discoloration between lifts of concrete is not always an indication of a cold joint. For example, a discoloration may occur due to a different water/cement ratio. A mix with a relatively higher water/cement ratio will typically be lighter in color. **A discoloration may also be caused by the condition of the forms or amount of form release applied to the forms.**

Section 4.3.1

Replace the 2nd paragraph with the following:

All metal hardware cast into concrete, such as inserts, brackets, cable clamps, metal casings for formed holes, and other miscellaneous items shall conform to the ~~**Bureau of Design and Environment Special Provision**~~ **Supplemental Specification** "Metal Hardware Cast Into Concrete" and as stated herein. This ~~**Special Provision**~~ **Supplemental Specification** requires hot dipped galvanizing according to AASHTO M 111 or M 232, and specifies permitted insert types and proof loads. Ends of items that have been cut, such as metal casings for formed holes, and other metal hardware that has an area or areas for which the galvanizing has been compromised shall be touched up with two coats of zinc dust spray or paint meeting the requirements of ASTM A 780. Typical materials used for formed holes include thin galvanized metal casings and PVC pipe sections. If PVC pipe sections used for formed holes remain in place after fabrication, their inside diameter shall match that specified on the contract plans.

Section 4.4.2
Replace the 3rd paragraph with the following:

One copy of the Final Report shall be forwarded to the Bureau of Materials and Physical Research (BMPR), where it will be archived ~~**on microfilm**~~ for a minimum of ~~**ten**~~ **fifteen** years. The original signed copy of the Final Report Cover Sheet, along with the remaining forms in the Final Report, shall be retained for three years at the plant. With the exception of the original signed copy of the Final Report Cover Sheet, the report may be stored in a digital format at the plant.

Appendix A: Procedure to Remedy an Unacceptable Prestressed Product at the Plant

Replace the 8th step with the following:

Step 8: The Owner will notify the inspecting District Office if they approve or reject the proposed remedy and shall copy BBS. **If a Local Agency conducts its own review to determine approval/rejection of the remedy request, the documentation copied to the BBS (for record keeping purposes only) from the Local Agency shall include any computations or any other documentation/statements supporting the decision from the EOR or a licensed Illinois Structural Engineer not retained by the Producer.**

Appendix A: Procedure to Remedy an Unacceptable Prestressed Product at the Jobsite

Replace the 8th step with the following:

Step 8: The Owner will notify the inspecting District Office if they approve or reject the proposed remedy and shall copy BBS. **If a Local Agency conducts its own review to determine approval/rejection of the remedy request, the documentation copied to the BBS (for record keeping purposes only) from the Local Agency shall include any computations or any other documentation/statements supporting the decision from the EOR or a licensed Illinois Structural Engineer not retained by the Producer.**