

NOTE TO REVIEWER: Underlines and strikethroughs indicate REVISIONS to the version of the NJTA 2004 Standard Supplementary Specifications which existed prior to the issuance of this DCA.

SECTION 434 - HIGH PERFORMANCE CONCRETE (HPC)

NOTE FOR THE DESIGNER: Designers shall consider the following when High Performance Concrete (HPC) is placed under staged construction with live load:

~~Where feasible, lane closures adjacent to the HPC bridge deck placement should~~ shall be scheduled for the duration of the HPC placement and curing until early age strength is attained shall remain in place for a minimum of 3 hours after the concrete placement is completed. Specific constraints shall be reviewed and confirmed by the NJTA Structures Design Section.

~~Lane closures should be 12 hours minimum plus duration of the HPC pour. If this time frame is not available, permit HPC pours a maximum of 4 hours prior to installation of lane closings based on initial set time of HPC.~~

The submission and durations required for the mix designs and verification testing requirements shall be accounted for in the Contract Schedule.

~~Use of Variable Message signs should be used~~ implemented as part of the MPT to direct trucks away from lanes adjacent to where HPC is being placed.

~~Use State Police to check for overweight vehicles and enforce via fines. Consider placing installation of portable load sensors on bridge during design phase should be considered to confirm presence of overweight vehicles. Discuss with NJTA Project Engineer on a case by case basis.~~

~~Use State Police and/or other means to identify overweight vehicles and enforce via fines. Discuss with NJTA Project Engineer on a case by case basis.~~

434.01 DESCRIPTION.

This work shall consist of the construction of portland cement concrete deck slabs, headblocks, bridge sidewalks, unsurfaced bridge approach slabs, integral abutment relief and sleeper slabs and cast-in-place parapets with the use of High Performance Concrete (HPC). HPC is defined as concrete that meets special performance and uniformity requirements that cannot always be obtained by using conventional ingredients, normal mixing procedures and typical curing practices. Construction shall be as specified in Sections 304 and 401 except as modified herein.

This work shall also consist of furnishing and installing methacrylate crack sealer for the sealing of cold joints and the interface between new concrete and metal such as scuppers or deck joints as shown on the Plans.