

Design Services for GSP Bridge Repairs and Resurfacing

Contract Nos. P100.187, P100.203, P100.204, P100.230, P100.231, P100.266, P100.318, P100.342, P100.377, P100.409,
P100.413, P100.472, P100.520, P100.562, P100.602, P100.654 & P100.662

GSP Mileposts 0 to 126, and 126 to 172



Van Cleef has served as the Design Engineer for 16 consecutive years to advance 17 NJTA Contracts for the bridge repairs, deck panel replacement parapet improvements, and detailed maintenance and protection of traffic (MPT) along the northern and southern halves of the Garden State Parkway between mileposts 0 to 126, and 126 to 172.

Work included in-depth field inspections of over 475 structures, summary of all defects and prioritization of repairs within a comprehensive 400+ page Phase A report, development of preliminary and final MPT, resurfacing, bridge repair plans, construction consultation, post design services, and unanticipated services.

Work involved complex MPT plans for all selected bridges following NJTA MPT standards, staging plans and sections of all proposed work, High Intensity Construction Cycles to complete the work under very tight time frames, development of Lane Occupancy Charges, extensive local coordination for MPT and detours, Traffic Impact Analysis using VisSim, development of a Pavement Evaluation Program (including Ground Penetrating Radar), Constructability Review Report, Engineer's Estimate and Supplementary Specifications. Repair work includes deck overlays, deck joint repairs/replacements, localized deck panel and parapet replacements, bearing replacement, structural steel repairs, superstructure/substructure repairs, pier cap rehabilitation, steel/PS Beam replacements, drainage improvements, and other miscellaneous and unanticipated repair work.

Each contract required the design of MPT plans for each stage of work, many of which included site-specific MPT plans, advanced along the GSP, as well as various NJDOT, County, and Local roadways, and included various ramp/local road detours, traffic shifts, weekend HIC lane drops, complicated interchanges, and ADA accommodations.

CLIENT CONTACT

New Jersey Turnpike Authority
Woodbridge, NJ

PROJECT HIGHLIGHTS

- ↪ Bridge Inspections & Repairs
- ↪ Repair Prioritization
- ↪ Bearing & Deck Panel Replacement
- ↪ Parapet Replacements
- ↪ Steel Beam & Parapet Replacement
- ↪ Complex MPT/Staging
- ↪ Constructability Report
- ↪ Railroad Coordination
- ↪ NJDOT/County/Local Coordination
- ↪ Utility Orders
- ↪ Special Testing (GPR, NDT)
- ↪ LRRF Load Ratings