

# County Route 16/Horseblock Road Reconstruction

*Pre-Construction**Post-Construction*

**Client/Owner:** Suffolk County Dept. of Public Works  
**Project Location:** Town of Brookhaven, NY

GPI was responsible for the preparation of an expanded project proposal (EPP) with preliminary design of 10.2 km (6.4 miles) of CR 16/Horseblock Road, in the Town of Brookhaven, from the vicinity of CR 83/Patchogue-Mount Sinai Road to the vicinity of CR 21/Yaphank Avenue. Based on current levels of congestion, the two-lane minor arterial was not adequate to serve increasing volumes generated by the development of lands adjacent to CR 16/Horseblock Road. The scope of work included completion of the EPP, survey and preliminary highway and bridge design. Work included investigation and general assessment of existing features including roadway section, geometry and drainage. GPI collected traffic data, provided traffic projections, and conducted capacity analysis for 17 signalized and unsignalized intersections. GPI also investigated and evaluated three major intersections including CR 83, LIE and CR 101. For the intersection of CR 83, five major alternatives were evaluated, including single point interchange, diamond interchange, jughandle, and large at-grade and small at-grade intersection scenarios. These alternatives were also simulated using SIMTRAFFIC for evaluation purposes.

The County then selected a segment of the highway studied under the EPP and authorized GPI to prepare final contract documents for that segment. GPI prepared a Design Approval Document (DAD), preliminary design, and final design of drainage and pavement repairs for CR 16 Horseblock Road between Manor Lane and CR 99, Woodside Avenue in the Town of Brookhaven. The final design involved the rehabilitation of approximately two miles of urban minor arterial from Manor Lane to a point approximately 200 ft east of Alexan Boulevard. Construction improvements include the installation of a new positive drainage system with additional isolated leaching structures in area where positive drainage is not available. Miscellaneous curb and sidewalk replacement, isolated roadway milling, and reconstruction, followed by truing and leveling and overlay, was utilized to rehabilitate the existing asphalt roadway. The asphalt overlay was followed by new pavement markings. Extensive coordination with utility companies and evaluation of test pit data provided by the owning utilities was an essential element to utility conflict resolution.

This project was Federally Funded and progressed in accordance with the NYSDOT Procedures for Locally Administered Federal Aid Projects. GPI prepared preliminary plans and estimates, as well as prepared and completed the final Design Approval Document (Design Report) for submittal by Suffolk County to NYSDOT, for project approval. Additionally, GPI was responsible for preparation of final plans, specifications and estimates for NYSDOT approval and County use in bidding this project for construction. GPI provided full-time construction inspection and construction support services.