

BRIAN MOODY, PE, SE

SUMMARY

Mr. Moody is a professional engineer with over 25 years engineering and diving experience involving underwater condition assessment, inspection, structural design and construction inspection services. He has worked on all types of moveable and stationary structures including bridges, marine structures, canal structures, water taxi landings, marinas, piers, wharfs, fender systems, relieving platforms, anchorage systems, bulkheads, dams, and culverts, roadways, buildings, foundations, and numerous retaining walls. As a Team Leader/P.E. Diver his responsibilities include inspection, design and analysis, report preparation, construction inspection and construction support services. He has worked on projects for the NJDOT; NJ Transit; MTA: TBTA, Metro-North, LIRR and NYC Transit; NYCDOT; NYCEDC; NYSDOT; NYSTA; New York Canal Corporation; PANYNJ; NYCEDC; NHDOT; and U.S. Coast Guard. Mr. Moody's has also been involved with the preparation of boring plans, waterfront site investigation, permitting services, and development of conceptual designs, as well as supervising the taking of geotechnical boring samplings.

EDUCATION

Master of Science in Structural and Geotechnical Engineering, Manhattan College, 1999

Bachelor of Science in Structural Engineering, Manhattan College, 1997

REGISTRATIONS & CERTIFICATIONS

Registered Professional Engineer in the following States:

- Georgia #040398
- Georgia #000542 (SE)
- New York #078994
- Tennessee #123864

ADCI Surface-Supplied Air Diver #4727

DAN Nitrox Diver Qualified

Transportation Worker Identification Credentials (TWIC)

CONTINUING EDUCATION

Courses and Certifications completed in the following areas:

- NBIS #FHWA-NHI-130053 Bridge Inspection Refresher Course, 2015
- NYSDOT Methods of Bridge Inspection Course, 2011
- NBIS #FHWA-NHI-130053 Bridge Inspection Refresher Course, 2010
- NBIS #FHWA-NHI-130055 Safety Inspection of In-Service Bridges, 2005
- OSHA Fall Protection, OSHA Confined Space
- Metro-North RR Safety Training Course
- ASTI Certification Courses - CPR/AED, Emergency Oxygen Administration, Bloodborne Pathogens & OPIM and Universal First Aid

CAREER HISTORY

FORCON International – Engineer

Providing Forensic Engineering and Expert Witness Services regarding structural analysis/design of new structures and repair design to existing waterfront structures. Marine construction administration and underwater construction inspection.

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McLaren Engineering Group – Senior Engineer/PE Diver-Inspector

Leads underwater and above water investigations of waterfront structures. Performs structural analysis/design of new structures and repair design to existing waterfront structures. Marine construction administration and underwater construction inspection.

HIGHLIGHTED PROJECTS

NYCEDC; Staten Island Homeport / The New Stapleton Waterfront; Staten Island, NY - Project Engineer for the design and construction support services for the development of the proposed mixed-use site including the design of bulkheads, rip-rap slopes, kayak launches, floatation docks and seawalls at Staten Island Homeport. A full set of construction drawings and technical specifications were prepared, as well as construction cost estimates and assistance with bidding.

PANYNJ; Berths 88-98 and Turntable Inspection; Elizabeth, NJ - As Project Manager, Mr. Moody oversaw the cyclical condition survey of Berths 88, 90, 92, 94, 96, 98, and Turntable at Port Elizabeth. McLaren assessed the condition of the following structures: timber piles, steel piles, concrete pile extensions, concrete edge beam, steel sheet piling, deck underside, topside of pier, king piles and cutoff wall, fender system and timber core samples. Mr. Moody worked with the client, managed the field and office staff, performed inspections, quality checks and prepared a condition assessment report per PANYNJ standards and specifications.

Con Edison; Former Kent Ave. Generating Station and North 1st Street South Platform - Senior Engineer for the inspection of the entire length of the accessible portions of the concrete intake and discharge tunnels as well as the concrete seawall, sheet pile bulkhead, intake screen well, and ash pit wall at the generating station. Mr. Moody is also responsible for the inspection of the timber bulkhead and concrete platform at North 1st Street.

PANYNJ; New York Marine Terminal Inspection of Piers 2, 3, 4, 5, & 11; Brooklyn, NY - Team Leader/Marine Engineer for underwater inspection and assessment of bulkheads (timber piles, steel H-piles, pile cap beams, pile extensions, steel sheet piles) between Piers 2 and 3, Piers 4 and 5 and along Pier 11. A topside inspection of the concrete seawall and wharf was also performed to determine its general condition.

NYCDOT; 2011-2016 Bridge Inspection Program; New York City - Team Leader / Diver for underwater inspection and assessment of various New York City bridges. Mr. Moody inspected bridges throughout the five boroughs, prepared condition reports and provided repair recommendations. Most recently, Mr. Moody worked on the emergency restoration designs for the W. 207th Street Fender System.

RD Management Corp; Waterfront Revitalization – 4th and 5th Street Piers at Kent Avenue; Brooklyn, NY - Team Leader/Marine Engineer during the design phase of this redevelopment project along Williamsburg's waterfront. The 4th and 5th Street Piers were revitalized in two phases: the demolition phase and the construction phase. Services provided included detail design, construction inspection and construction administration for both phases. An investigation of the waterfront structures including existing pile fields and bulkheads, and a hydrographic survey of the project site area was conducted. Mr. Moody was involved with boring plans, waterfront site investigation, permitting services, and developing conceptual designs, as well as supervising the taking of geotechnical boring samplings.

PANYNJ; QAD 2018 Hoboken and Battery Park City Ferry Terminals Condition Surveys; New York, NY / Hoboken, NJ - As a Sr. Engineer / Diver, Mr. Moody performed a cyclical condition survey of the two (2) ferry terminals in NJ and NY. The Hoboken terminal consists of five (5) active ferry slips supported by timber piles. The Battery Park terminal is a permanent floating structure consisting of a mono-hull main terminal, two (2) anchorage towers and pedestrian walkways. Mr. Moody worked with the client to prepare an inspection plan, eHASP and schedule for the project. He also was part of the inspection team performing a 100% visual and 10% hands-on inspection of all elements comprising the Terminals that includes barges (floating terminals), and associated ramps, barge hull exterior & interior and its corrosion protection, anchor towers, dolphin systems, passageways, canopies, gangways and attachments. He assisted with the preparation of a condition survey report per PANYNJ specifications. Data and reports were uploaded into the PANYNJ's Structural Integrity Database (SID).

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NYPA; 2019 and 2014 Barnhart Island Bridge Diving Inspection and Hydrographic Survey - QA/QC Manager for the underwater inspection services of Piers 1 and 2, and a Hydrographic survey of the Barnhart Island Bridge (BIN 5523630). Work included review of available documents including previous dive inspection report, the work history of the bridge, as-built plans, and history of construction including structural alterations, repairs, rehabilitation, and maintenance; Routine Diving Inspection; Hydrographic Survey; Report preparation; Inventory verification and updating.

NYSDOT; 2017-2018 Bridge Diving Inspection & Fathometer Survey Program; West Regions, NY; (171 Bridges / 387 SSUs / 77 Fathometer Surveys) - Mr. Moody is involved with the underwater inspections and reporting per NYSDOT's Bridge Diving Inspection System (BDIS). Mr. Moody assisted with the inspections and report procedures per the NYSDOT BIM.

NYCDOT; Bridge Diving Inspection & Fathometer Survey for 10 bridges; 5 boroughs of New York City - McLaren performed underwater inspections, fathometer surveys and provided condition assessment reports to the NYCDOT for 10 bridges. Mr. Moody worked as a Quality Control Engineer to review, proof and sign off on bridge inspection reports per NYCDOT and NYSDOT BIM specifications.

NYSDOT; 2015-2016 Bridge Diving Inspection & Fathometer Survey Program; East Regions, Upstate NY; (107 Bridges / 243 SSUs / 26 Fathometer Surveys) - Mr. Moody served as Quality Control Manager and Team Leader / PE Diver during the underwater inspection and fathometer survey services for bridges in the NYSDOT's East Regions, 1, 2, 7, 8 & 9. Mr. Moody performed underwater inspections for in service bridges and prepared condition assessment reports for the NYSDOT. All inspection work and reports are performed and prepared in accordance with the NYSDOT Bridge Inspection Manual (BIM).

MNR; Inspection, Load Rating & Underwater Inspection of Undergrade Bridges Located on the Port Jervis Line - Senior Engineer for the inspection of its under-grade railroad bridges, including live load rating analysis of selected bridges as well as underwater inspection of selected bridges, located along Metro-North's Port Jervis Line. A total of 28 bridges were inspected. 15 bridges required load-rating analysis and reporting. The remaining bridges were inspected for updated condition ratings. Three (3) of the 28 bridges required an underwater inspection. Mr. Moody led the inspection teams, prepared load rating and assisted with the preparation of condition reports.

CTDOT; 2009-2012 Above and Below Water Inspection of Statewide Bridges; (691 Bridges / 1,740 SSUs) - Team Leader / Diver responsible for underwater bridge inspections for approximately 270 highway and railroad bridges. Mr. Moody inspected bridges that included steel deck girders, thru girders, concrete slab and steel trusses. His responsibilities included in-depth inspection, photography, permitting, reporting and repair recommendations.

TBTA / HNTB; Marine Parkway Bridge/Cross Bay Boulevard Bridge; Queens and Brooklyn, NY - Team Leader / Diver for underwater inspection and hydrographic survey of the bridge. Mr. Moody conducted a limited fathometer survey and performed emergency diving inspections that included underwater video of Piers 9, 10 and 16 MPB. This was followed by a complete inspection of both bridges and preparation of reports in accordance with NYSDOT requirements.

NJ Transit / HNTB; Railway Bridge #1362-157; Brielle, NJ - As Team Leader / Diver, Mr. Moody provided underwater construction inspection services at this railway bridge. Mr. Moody was responsible for the assessment of construction work, to ensure compliance with design drawings.

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NYCDOT; Bayonne Bridge; Bayonne and Staten Island, NY - As Team Leader / Diver, Mr. Moody performed an underwater inspection of the Bayonne Bridge. His responsibilities included completion of bridge inspection reports, photo documentation, and recommendations of repair options.

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NJDOT; 500+ Underwater Bridge Inspection and Assessment of Bridges; New Jersey - As Team Leader / Diver, Mr. Moody inspected bridges and prepared condition assessment reports for NJDOT and several engineering consultants. Services performed included the completion of bridge inspection forms, photo documentation and recommendations of repair options for inclusion in the final reports.

NJDOT; Underwater Inspection and Assessment of Bridges; Salem County, NJ - Team Leader / Diver for underwater inspection and assessment of 18 bridges in Salem County, NJ. Work included preparation of condition reports, with photo documentation, sketches, and recommendations for repairs and repair quantities. Elevation sketches with riverbed profiles were also provided noting sounding locations.

Poughkeepsie-Highland Railroad Bridge Inspection; Poughkeepsie, NY - Team Leader / Diver for the underwater inspection of the Poughkeepsie-Highland Railroad Bridge (this includes design of the 6,400-foot superstructure). The inspection involved assessment of the four piles of the bridge and the piers above the water line. McLaren converted the Bridge into a park and walkway over the Hudson River for pedestrian traffic and, in addition to the underwater inspection, is responsible for a climbing inspection of the structural steel trusses.

Pine Lake Park Dam; NJ - Team Leader and Marine Engineer for underwater Inspection and assessment for the Town of Manchester/T & M Associates. Services included completion of inspection reports, photo documentation, and recommendations and repair options.

NJWS Round Valley Reservoir Dam - Team Leader for this dam inspection project, which included underwater video of the outlet structures and six (6) sluice gate and shaft mechanisms. Detailed reports with repair recommendations were prepared and repairs were designed on the items including the replacement of several shaft couplings.

Cupsaw Lake Association Dam; Ringwood, NJ - Team Leader and Marine Engineer for inspection of the dam and outlet structure, which included a gate valve. Responsibilities included repair recommendations, a detailed report and the design drawings of a new outlet structure.

UGL Dam - Team Leader/Marine Engineer for inspection of the dam and outlet structure, which included a sluiceway. A report on findings and repair recommendations was also provided.

Yonkers Pier; Yonkers, NY - Team Leader/Marine Engineer for underwater inspection of the timber piles, which support concrete high level relieving platform. Responsibilities included inspection of concrete underdeck and pile cap faces, as well as construction administration and report preparation.

25th Street Wharf Structural Rehabilitation; Brooklyn, NY; for Lafarge North America - Project Engineer for the inspection and design rehabilitation of the 25th Street Wharf, located along the Gowanus Canal in Brooklyn. Responsible for the above water and underwater inspection and assessment of the wharf, which comprises a low-level relieving platform, provision of preliminary and final design services with construction cost estimates for rehabilitation and life cycle cost analysis.

Pier 78 Platform Assessment and Improvement; New York, NY - Project Manager for the design and construction management of a ramp and platform leading into the Hudson River at 38th Street in the Hudson River Park. Responsibilities included dive inspections, design, and construction oversight.

NYCDOT; Pier 1 and Pier 2 Condition Assessment; Staten Island, NY - Team Leader/Marine Engineer for the design and construction support services necessary to repair two pile supported concrete deck piers (Piers 1 and 2) as well as the adjacent waterfront structures used as wet storage and repair berthing for the Staten Island Ferryboats. Repairs encompass the timber fender system surrounding each pier. Responsibilities included performing the necessary inspections and designing the required repairs.

Subaqueous Rehabilitation of Slip 4; St. George Ferry Terminal; Staten Island, NY; for New York City Department of Transportation - Team Leader/Marine Engineer for this contract. Responsibilities included design

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and resident engineering services for the underwater inspection and rehabilitation of the supporting structure of the transfer bridge and terminal wing at Slip 4.

Green Street Pier Inspection; Brooklyn, NY; for Park Tower Group - Assistant Project Manager for the inspection of the existing Greet Street Pier. Responsible for marine engineering services, including a condition survey of the existing pier and adjacent bulkhead, a condition report of the pier and bulkhead, an alternatives study of at least three repair options for the pier, designs for the pier and for the new bulkhead, design of a water taxi landing and marina, and construction support services.

NYSTA; Below Water Inspection of Canal Structures; Albany, Syracuse and Buffalo, NY - Team Leader / Diver for the underwater inspection of approximately 100 canal structures along the New York Waterway Canal System. Mr. Moody performed underwater condition assessments, which included locks, guard gates, fixed crest dams, moveable dams, taintor gates, spillways, terminals, docks, guide structures and culverts. Prepared comprehensive reports, which included drawings and photo documentation.

Inspection of the East Park Relieving Platform; Manhattan, NY; for Con Edison - Dive Team Leader/Design Engineer for Underwater Assessment and Construction Inspection of the East Park Relieving Platform. Responsible for assessment of structural capacity, repair recommendations and inspection of construction work to ensure compliance with design drawings.