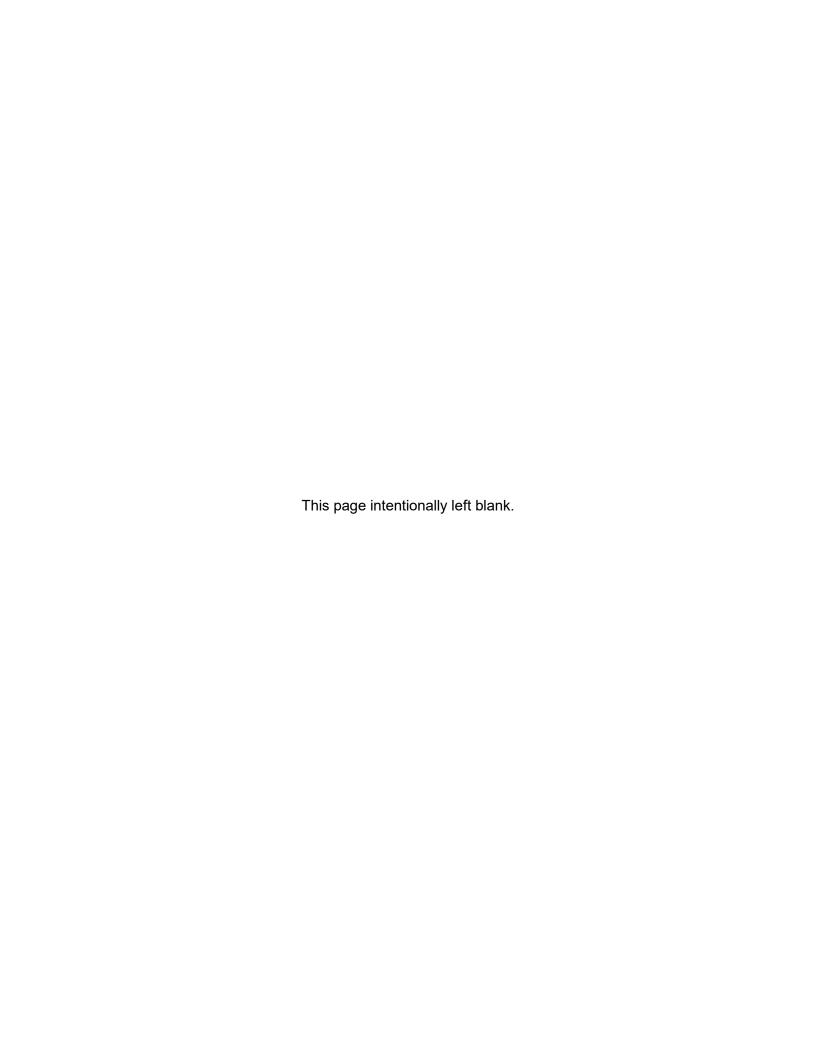


TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

APPENDIX F - RESUMES

NORTHEAST SUPPLY ENHANCEMENT PROJECT

January 2020





SUSAN C. QUACKENBUSH, PWS

Project Manager

Years of Experience: 15

Education

⇒ B.S. Marine Science, Coastal Carolina University, Conway, South Carolina, 2000

Languages Spoken

- ➡ English (Native Speaker)
- ⇒ Spanish (Language Proficiency Index: Advanced-High)

Certifications

- ⇒ Professional Wetland Scientist #2158 (2011)
- Rutgers University Certified Wetland Delineator (2002)

Professional Memberships

- Society of Wetland Scientists
- ⇒ National Peace Corps Association

Training

- ⇒ American Red Cross CPR and First Aid, September 2013;
- ⇒ New Jersey Turnpike Authority Traffic Safety Training, May 2012;
- ⇒ Rutgers University Division of Continuous Education and Outreach, *Improving NEPA: An* FTA Update, Webinar, June 2011;
- American Water Resources
 Association, Delaware Chapter:
 Wetland Delineation Field
 Training for the Atlantic and Gulf
 Coastal Plain Regional Supplement
 (2011);
- ⇒ Amtrak Railroad Safety Training (2010);
- ⇒ U.S. Peace Corps & U.S. Agency for International Development (USAID): Best Management Practices in Biodiversity Monitoring (2009);
- ➡ Mexican National Commission for Natural Protected Areas: VII National Congress of Natural Protected Areas of Mexico (2009);
- ⇒ Autonomous University of San Luis Potosí, Mexico: Agenda 21 & Social Participation for Sustainable Development (2008);
- ⇒ U.S. Peace Corps, Mexican
 Secretariat of the Environment and
 Natural Resources, Mexican
 National Forest Commission,
 Mexican National Commission for
 Natural Protected Areas, & State
 Government of Jalisco, Mexico:
 Best Management Practices in
 Natural Protected Areas (2008);

KEY QUALIFICATIONS

Ms. Quackenbush is experienced in performing environmental and ecological investigations. She is a Professional Wetland Scientist. As an Senior Environmental Scientist at ASGECI she performs wetland delineations, wetland functional assessment vegetation and wildlife surveys, including endangered and threatened species surveys, and performs essential fish habitat analyses. She prepares wetland, flood hazard area and other environmental permit applications in accordance with the NJ Freshwater Wetlands Protection Act and the NJ Flood Hazard Area Control Act. She also prepares US Army Corps of Engineers Section 404/10 wetlands Permit applications. identified sites for and designed wetland mitigation plans. She is also experienced in NJDEP Coastal permitting including CAFRA, Waterfront Development and Coastal Wetlands Permits. She has also prepared Categorical Exclusion Documentation in accordance with FHWA National Environmental Policy Act (NEPA) requirements and Environmental Impact Statements in accordance with NJ Executive Order 215. She has made presentations at public meetings.

RELEVANT EXPERIENCE

PSE&G Southern Reinforcement Project, Various Municipalities, Gloucester and Camden Counties, NJ. Environmental Resource Management/PSE&G. Project Manager responsible for the delineation of freshwater and tidal wetlands, Waters of the U.S., and State Open Water along approximately 23 miles of existing utility right-of-way and electrical substation facilities for proposed upgrades and improvements to the electrical distribution system. Wetlands were identified and delineated utilizing the routine methodology outlined in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989), as required by the NJDEP, and in the 1987 U.S. Army Corps of Engineers (USACE) Manual for Delineating Jurisdictional Wetlands Atlantic Coastal Plain Supplement, as required by the USACE. Wetlands mapped pursuant to the NJ Coastal Wetlands Act of 1970 were identified and located within the project area. The project also included habitat assessment for threatened and endangered species including the Federally endangered plant, swamp pink as well as bald eagle. Two wetland delineation reports were prepared and submitted for the northern and southern portions of the project.

Minotola to Landis Transmission Lin, Buena Vista Township, Buena Borough, Vineland City, and Franklin Township, Atlantic, Cumberland, and Gloucester Counties, NJ. Conectiv Power Deliver Environmental Services. Environmental Scientist responsible for the preparation of a NJDEP Jurisdictional Determination request to determine the applicability of freshwater wetlands and stream encroachment permits pertaining to maintenance of the Minotola to Landis Transmission Line. Participated in the wetland delineation of the 6.42 mile transmission line corridor, and obtained NJDEP Freshwater Wetlands General Permit #1 for maintenance activities.

Susan C. Quackenbush Page 2

- ⇒ Rutgers University, Cook College, College of Continuing Professional Education Seminars:
 - Wetland Construction Design (2005),
 - Endangered and Threatened Species of Northern New Jersey (2005),
 - Coastal Project Review Workshop (2004),
 - Coastal Vegetation Identification (2004),
 - GIS for Environmental Management (2002),
 - NJDEP Stream Encroachment Permitting Seminar (2002);
- ➡ Rutgers University, Cook College, College of Continuing Professional Education Seminars Wetland Delineation Series:
 - Methodology for Delineating Wetlands (2002)
 - Vegetation Identification for Wetland Delineation (2002)
 - Hydric Soils (2002)
- ⇒ Special Pinelands Plants Course, Pinelands Preservation Alliance (2004);
- ⇒ NJ Transit Railroad Safety Training (2004, 2012);
- ⇒ Beginning Microstation Training, Michael Baker Jr., Inc., (2002)

ACUA Plasma Gasification Energy Facility, Block 703; Lots 4&5, Egg Harbor Township, Atlantic County, NJ. NRG, Inc./Atlantic County Utilities Authority/SCS Engineers, PC. Project Manager responsible for routine onsite wetland delineation, threatened and endangered species habitat assessment, and preparation of NJDEP Freshwater Wetlands General Permit #6 (GP#6) and CAFRA applications for Public Development, including Statement of Compliance with the NJ Coastal Zone Management Rules. Permit applications were prepared following an accelerated project schedule. The permits will authorize construction of a plasma gasification facility within the existing ACUA solid waste management complex, including impacts to isolated freshwater wetlands and wetland transition area.

SRVSA Proposed Pipeline Alignment/Outfall, Bridgewater & Franklin Townships, Somerset County, NJ. Somerset Raritan Valley Sewerage Authority/Camp Dresser & McKee. Environmental Scientist responsible for assisting in detailed onsite wetland delineation, and preparing/submitting freshwater mussel habitat assessment to NJDEP.

Route 206 over CSX Railroad Improvements, Montgomery Township, Somerset County, NJ. New Jersey Department of Environmental Scientist Transportation/Vollmer Associates, LLP. responsible for delineating wetlands through field analysis of flora, hydrology and soils. Prepared Wetland Delineation Report for inclusion in NJDEP freshwater wetland permit application. Prepared Technical Environmental Studies for Ecology and Wetlands, Programmatic 4(f)-Recreational Land, Socioeconomic Environmental Justice for inclusion in the Categorical Exclusion Document. Compiled Categorical Exclusion Document in compliance with FHWA NEPA requirements.

Denver Service Center, Natchez Trace Parkway, Hinds and Madison Counties, MS. National Park Service/General Services Administration. Project Manager responsible for the delineation of onsite wetlands along six miles of National Park as part of planning for new multipurpose trail and parking facility. Prepared detailed wetland delineation report, including wetland functional assessments.

Interstate 95 Northbound, M.P 6.76 – M.P. 8.94 Wetland Delineation, Mercer County, NJ. New Jersey Department of Transportation/Michael Baker Jr., Inc. Environmental Scientist responsible for the performance of routine on-site wetland delineation, through field analysis of flora, hydrology, and soils.

Alexandria Airport Proposed New Hangar, Alexandria Township, Hunterdon County, NJ. Alexandria Airpark, LLC/W. Thomas Watkinson III, Engineering & Planning P.C. Environmental Scientist responsible for delineating wetlands through field analysis of flora, hydrology and soils on a 77-acre site, and preparation of an application for NJDEP Letter of Interpretation – Regulatory Line Verification.

Bridge Scour Countermeasures Project, Multiple Bridges in Bergen, Morris, Passaic, and Sussex Counties, NJ. New Jersey Department of Transportation/Arora Associates. Environmental Scientist responsible for communicating with agencies, researching and documenting ecological resources, creating and updating checklists in preparation for field work. Assisted in wetland delineation and survey for threatened and endangered species at the bridge sites. Prepared applications for NJDEP Freshwater Wetlands, Stream Encroachment and Waterfront Development Permit and USACE Section 404 Wetlands Permit. Performed bog turtle Phase I and Phase II assessments, as well as freshwater mussel surveys in compliance with USFWS and NJDEP protocol.



Garden State Parkway Bridge Nos.28.0S &28.5S Replacement, Upper Township, Cape May County, New Jersey and City of Somers Point and Egg Harbor Township, Atlantic County, NJ. NJ Turnpike Authority/Michael Baker Jr., Inc. Project Manager responsible for delineation of wetlands and preparation of a Wetland Delineation Report for the proposed replacement of the southbound bridges over Great Egg Harbor Bay and Drag Channel. Wetlands were identified and delineated utilizing the routine methodology outlined in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989), as required by the NJDEP, and in the 1987 U.S. Army Corps of Engineers (USACE) Manual for Delineating Jurisdictional Wetlands Atlantic Coastal Plain Supplement, as required by the USACE. Performed a Submerged Aquatic Vegetation Survey, Essential Fish Habitat Assessment Report, and Threatened & Endangered Species Habitat Assessment. Prepared applications for a U.S. Army Corps of Engineers Jurisdictional Determination, and NJDEP Coastal General Permit for Geotechnical Borings. Performed Section 7 of the Endangered Species Act Consultation with National Marine Fisheries Service (NMFS) for acoustic effects to Federally listed threatened & endangered sea turtles and Atlantic sturgeon. Identified a nesting pair of the NJ State endangered peregrine falcon on the existing bridge structure, and worked with NJDEP ENSP and Conserve Wildlife Foundation of NJ to design and construct an alternate nesting structure which has been used successfully in the 2013 breeding season. Under subsequent contract for Final Design; obtained all NJDEP and USACE approvals including NJDEP CAFRA, Waterfront Development, Coastal Wetlands, Freshwater Wetlands, Coastal Zone Consistency, Water Quality Certificate, USACE Section 404/10. Prepared No Net Loss Reforestation Plan and riparian compensation plan.

Installation of Variable Message Signs at New & Existing Locations on the Garden State Parkway, Multiple Municipalities, Multiple Counties, NJ. NJ Turnpike Authority/Arora & Associates, P.C. Environmental Scientist performing field investigation / wetland delineation / environmental permitting of numerous locations along the Garden State Parkway. Wetlands were identified and delineated utilizing the routine methodology outlined in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989), as required by the NJDEP. Environmental investigations / permitting were performed under a tight schedule.

Route 33B – Kozloski/Halls Mill Road Interchange Improvements, Freehold Township, Monmouth County, NJ. New Jersey Department of Transportation/Michael Baker Jr., Inc. Environmental Scientist responsible for communicating with agencies, researching and documenting ecological resources. Assisted in wetland delineations and prepared application for NJDEP Freshwater Wetlands Individual Permit. Performed hydrologic and hydraulic analysis for inclusion in NJDEP Flood Hazard Area Permit application.

Hudson Bergen Light Rail Transit System Tri-Channel Box Extension, North Bergen Township, Hudson County, NJ. New Jersey Transit/Parsons Brinckerhoff Quade & Douglas, Inc. Environmental Scientist responsible for the performance of routine on-site wetland delineation, through field analysis of flora, hydrology, and soils.

Bayonne Municipal Utilities Authority Water Main Extension, City of Bayonne, Hudson County, NJ. Bayonne Municipal Utilities Authority/Hatch Mott MacDonald. Project Manager responsible for delineation of onsite wetlands, and preparation of NJDEP Upland Waterfront Development application for new water main installation. Also prepared Environmental Documentation in accordance with NJ Infrastructure Trust Financing requirements and USEPA Environmental Document.

Cramer's Creek Pumping Station Rehabilitation, Clinton Township, Hunterdon County, NJ. Clinton Township Sewerage Authority/Hatch Mott McDonald. Environmental Scientist responsible for delineating wetlands through field analysis of flora, hydrology, and soils. Prepared Wetland Delineation Report and NJDEP General Permit #10, #11, and Transition Area Waiver applications.

Design Services for the Garden State Parkway Southern Interchange Improvements Study Interchange 0 to Interchange 125, Multiple Municipalities, Multiple Counties, NJ. NJ Turnpike Authority/Stantec Consulting Services, Inc. Environmental Scientist performing preliminary field investigations for wetlands and endangered and threatened species habitat at multiple interchange locations along the Garden State Parkway. Environmental constraints and environmental permit requirements were identified to assist with development and evaluation of project alternatives and preparation of feasibility study.







WILLIAM F. MACHOLDT, PWS

Senior Project Manager

Years of Experience: 30

Education

- ➡M.F.A. Visual Art, Bennington College, 2002
- ⇒B.S. Environmental Science, East Stroudsburg University, Stroudsburg, PA, 1984

Professional Affiliations

- ⇒ Society of Wetland Scientists, Certified Professional Wetland Scientist - #2268
- ⇒Rutgers University Certified Wetland Delineator

Training

- ⇒American Red Cross, Adult First Aid/CPR: September, 2012
- ⇒ Wetland Training Institute, Wetland Delineation Certification, 1990;
- ➡ Rutgers University, NJDEP Endangered and Nongame Species Program Landscape Project Training, 2005;
- ⇔ Cook College, College of
 Continuing Professional
 Education Seminars, Rutgers –
 New Jersey Agricultural
 Experiment Station, Office of
 Continuing Professional
 Education:
 - Vegetation Identification for Wetland Delineation – Winter 2012:
 - NJ Wetland Mitigation
 Planning Hydrologic Budget
 Manual Training, NJ Coastal
 Permit Seminar, 1993;
 - Hydric Soils of NJ, 1991;
 - Wetland Identification, 1990;
 - Geology and Hydrogeology of NJ Coastal Plains, 1989;
 - NJ Freshwater Wetlands Permit Seminar, 1989;
 - Geology and Hydrogeology of Northern New Jersey, 1988;
 - New Flood Hazard Area Control Act Rules, November 2008:
 - Vegetation Identification for Wetland Delineation – South, September 2011
- ⇒NJ Wetlands Manual Training Workshop, August 2008,
- ⇒ NJ Transit Operators / Contractors Safety Orientation, 2005;

KEY QUALIFICATIONS

Mr. Macholdt has extensive experience in management and performance of environmental studies including wetland delineation, wetland permitting, wetland mitigation design, hydrologic and soils investigations, wildlife studies, environmentally sensitive areas mapping, endangered and threatened species surveys, habitat restoration and environmental impact assessment. Mr. Macholdt has an excellent working knowledge of the New Jersey Freshwater Wetlands Protection Act as well as the Federal wetlands delineation methodology. He has prepared NEPA documentation in accordance with FTA and FHWA NEPA regulations and has prepared Environmental Impact Assessments in accordance with NJ EO 215 requirements. Mr. Macholdt has extensive experience in preparation of State and Federal environmental permit applications including NJDEP Freshwater and Coastal Wetlands Permits; Wetland Transition Area Waivers; Flood Hazard Area Permits; Waterfront Development Permits; NJ Pinelands Public Development Approval; USACE Section 10/404 wetland permits; and PADEP Section 105 Wetlands Permits. Macholdt is experienced in interaction and consultation with regulatory and resource protection agencies including NJDEP, PADEP, USACE, USFWS, NMFS, NPS, and others. Mr. Macholdt has provided these services on transportation, dam rehabilitation, drainage, wastewater, water supply, recreation and capital improvement projects throughout New Jersey.

RELEVANT EXPERIENCE

River Road Sewer Line Extension, Raritan Township, Hunterdon County, NJ. Hunterdon County Historical Society. Project Manager responsible for performance of field investigation and delineation of wetlands and the preparation of NJDEP applications. Permits obtained include Freshwater Wetlands General Permit #2 for installation of a utility line in wetlands and a NJDEP Flood Hazard Permit for placement of the utility line within a flood hazard area.

Meter Chamber #4 Pump Station Site, Bridgewater Township, Somerset County, NJ. Somerset-Raritan Valley Sewerage Authority. Project Manager responsible for performance of field investigation and delineation of wetlands and the preparation of NJDEP Letter of Interpretation application.

The College of New Jersey Proposed 26 kV Line, Ewing Township, Mercer County, NJ. The College of New Jersey. Project Manager responsible for wetland delineation for proposed construction of the underground kV electric utility line.

Rutgers University Busch Campus 69 kV Substation Expansion, Piscataway Township, Middlesex County, NJ. Rutgers, The State University of New Jersey Utilities Department. Project Manager responsible for wetland delineation and successful preparation of NJDEP Freshwater Wetlands General Permit #6 application.

William F. Macholdt Page 2

Training - continued

- ⇒NJ Turnpike Authority Traffic Safety Training Class, 2012;
- ⇒MTA Metro-North Railroad Roadway Worker Procedures for Conductor Flags/Contract Employees, 2004
- ⇒AMTRAK Contractor Safety Training, March 2016.
- ⇒Wetland Training Institute, Penn State, Advanced Hydric Soils, May 2016

Awards

⇒NJ Historic Preservation Award, Rehabilitation of Somerset County Bridge No. E0801, Raritan Borough and Hillsborough Township, 2007 State Route 20 Safety, Drainage & Resurfacing, City of Paterson, Passaic County, NJ. New Jersey Department of Transportation/Taylor Wiseman & Taylor. Project Manager responsible for the delineation and documentation of wetlands within the project limits. Wetlands were identified and delineated utilizing the routine methodology outlined in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989), as required by the NJDEP. Also responsible for preparation of a Wetlands Delineation Report summarizing the findings and conclusions regarding the wetland delineation performed for the project.

County Route 14 (West Park Avenue) Roadway Improvements, Township of Ocean, Boroughs of Eatontown and Tinton Falls, Monmouth County, NJ. Monmouth County Department of Public Works & Engineering/Stantec Consulting Services, Inc. Project Manager responsible for the identification and delineation of wetlands within the project limits. Wetlands have been identified utilizing the routine methodology outlined in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989), as required by the NJDEP.

Project also includes a full, detailed delineation of wetlands for an alternative yet to be chosen and an application for an NJDEP Letter of Interpretation to verify the location of the delineated wetlands. Also responsible for preparation of and Environmental Screening Report to identify onsite water quality, aquatic ecology, Green Acres encumbrances, and potentially required environmental permits.

Jersey Avenue Vehicular Bridge over Mill Creek, City of Jersey City, Hudson County, NJ. New Jersey Turnpike Authority/Hardesty & Hanover, LLP. Project Manager responsible for the delineation of wetlands within the project limits. Wetlands were identified and delineated utilizing the routine methodology outlined in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989), as required by the NJDEP, and in the 1987 U.S. Army Corps of Engineers (USACE) Manual for Delineation Jurisdictional Wetlands Northcentral and Northeast Region Supplement, as required by the USACE. Also responsible for preparation of an Executive Order 215 Environmental Assessment document and for preparation of applications for NJDEP Freshwater Wetlands General permit #10 and a Waterfront Development Permit, and for a USACE Nationwide Permit #14. The Waterfront Development Permit application also addressed compliance with the NJ Flood Hazard Area Control Act rules.

Interstate Route 295 Resurfacing Project (MP 1.0 to MP 11.6), Pennsville, Carney's Point, and Oldmans Townships, Salem County and Logan Township, Gloucester County, NJ. New Jersey Department of Transportation/Greenman-Pedersen, Inc. Project Manager responsible for wetland delineation and permitting. By coordinating with the NJDEP, Mr. Macholdt was able to reduce the effort for the delineation in areas where only transition area impacts were anticipated, saving time and money. Applications prepared included NJDEP Freshwater Wetlands Statewide General Permits and NJDEP Waterfront Development Permits.

Routes 1 and 9, Sections (25) and (26), City of Jersey City, Hudson County, NJ. New Jersey Department of Transportation/Hardesty and Hanover. Project Manager responsible for the performance of a wetland delineation and preparation of an Ecology Technical Environmental Study document for inclusion in the NEPA Environmental Assessment for the St. Paul's Avenue Bridge Replacement and Interim Improvements to Charlotte and Tonnelle Circles.

Burlington Wetland Site, Burlington Township, Burlington County, NJ. Hudson Environmental Services. Project Manager responsible for field delineation of wetlands on a 92-acre site and the preparation of an application for and receipt of an NJDEP Letter of Interpretation, Regulatory Line Verification.

William F. Macholdt Page 3

Route 130 Crystal Lake Dam Rehabilitation, Bordentown and Mansfield Townships, Burlington County, NJ. New Jersey Department of Transportation/Greenman-Pedersen, Inc. Project Manager responsible for the delineation and documentation of wetlands and State open waters within the Route 130 Crystal Lake Dam Rehabilitation project area. Wetlands were identified and delineated utilizing the routine methodology outlined in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989), as required by the NJDEP, and in the 1987 U.S. Army Corps of Engineers (USACE) Manual for Delineating Jurisdictional Wetlands Atlantic and Gulf Coastal Plain Supplement, as required by the USACE. Also responsible for preparation of applications for NJDEP Coastal Wetlands and Waterfront Development Permits and Freshwater Wetlands General Permit #18 as well as USACE Nationwide Permit #23. The project is under construction.

Garden State Parkway Interchange Improvements/Interchange 141 to 157, Multiple Cities, Townships, and Boroughs; Bergen, Essex, Passaic, and Union Counties, NJ. New Jersey Turnpike Authority/Greenman Pedersen, Inc. Project Manager responsible for field investigations, wetland/open water delineations, evaluation of endangered and threatened species habitat, and environmental permitting for the project. Prepared applications for NJDEP Freshwater Wetlands General Permits and Flood Hazard Area Permits to authorize for Interchange Improvements. Obtained verification from NJDEP regarding the applicability of NJ EO 215. It was determined that several of the projects were exempt from preparation of an EA or EIS under Executive Order 215. Prepared an Environmental Assessment under EO 215 for Interchange 154-155P. Also responsible for coordination of environmental project team performance of Phase 1 Site Assessments for Hazardous Waste, Air Quality and Noise Analyses, Cultural Resources Surveys and public outreach under EO 172.

US Route 22 West of Robin Hood Road to East of Fairway Drive, Kenilworth and Mountainside Boroughs & Springfield and Union Townships, Union County, NJ. New Jersey Department of Transportation. Project Manager responsible for performance and oversight of a wetland delineation within the project limits. Wetlands were identified and delineated utilizing the routine methodology outlined in the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (1989), as required by the NJDEP. Documentation of the wetland delineation was also performed.

Sewer Pumping Station, Washington Township, Morris County, NJ. Washington Township Municipal Utilities Authority. Project Manager responsible for the performance of field investigation and delineation of wetlands and State open waters and the preparation of successful NJDEP Flood Hazard Area, Freshwater Wetlands General Permit #2, and Wetland Transition Area Waiver applications for the proposed pump station site.

Davenport Street Extension, Borough of Somerville, Somerset County, NJ. Somerset County Engineering Department/Keller & Kirkpatrick. Project Manager responsible for performance of field investigation and delineation of wetlands and State open waters and the preparation of environmental sections of a NEPA Categorical Exclusion document (CED).

State Route 34 and County Route 537 Intersection Improvements, Colts Neck Township, Monmouth County, NJ. Monmouth County/Greenman-Pedersen, Inc. Project Manager responsible for the delineation and documentation of wetlands and State open waters within the SR 34 and CR 537 Intersection project area. Wetlands were identified and delineated utilizing the routine methodology outlined in the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989)*, as required by the NJDEP. Also responsible for preparation of applications for NJDEP Freshwater Wetlands General Permit #10A and Individual Flood Hazard Area Permit.

Route 9 Over Waretown Creek Bridge Replacement, Ocean Township, Ocean County, NJ. New Jersey Department of Transportation/Greenman-Pedersen, Inc. Project Manager responsible for performance of field investigation, delineation of wetlands, and identification of required environmental permits for project implementation.

