Appendix 4.2

Information on Principal Consultants to the Redington Wind Farm Project

### Visual Impact: Terrence J. De Wan & Associates

#### www.tjda.net

Terrence J. DeWan & Associates is a landscape architectural and planning firm in Yarmouth, Maine, with a specialty in visual impact assessment, design guidelines, and integration of large-scale projects into sensitive environments. The staff of eight is composed of professionals with backgrounds in landscape architecture, planning, visual resource assessment, recreation planning, graphic design, and model making.

Representative clients include:

Terrence J. DeWan & Associates' work has been recognized with awards from the American Society of Landscape Architects, Maine Association of Planners and the Northern New England Chapter of the American Planning Association for the following projects:

Kancamagus Scenic Byway, Facilities and Interpretive Plan, White Mountain National Forest. Twin Echo Co-housing, Brunswick, Maine. Spring Point Shoreway, South Portland, Maine. Portland Waterfront Walk: urban design and improvements Portland Shoreway Access Plan: a visionary plan for linking the City's waterfronts and open spaces that led to the creation of Portland Trails Falmouth Route One Plan: design guidelines for the transformation of a typical highway commercial strip Scenic Inventory of Penobscot Bay: Critical Areas Program of the Maine State Planning Office Brunswick Revitalization Plan: planning and re-design of the widest Maine Street in the state Re-Use Plan for Regional Waste System's Balefill Facility: plan for a four season recreation facility, commercial development, and community nursery surrounding a capped landfill Eastern Prom Trail Corridor Concept Plan, Portland, Maine Los Angeles River Study

TJD&A was one of five firms invited to the 1995 ASLA Annual Meeting in Cleveland to participate in Redesigning Cleveland Digitally, which resulted in a cover story in Landscape Architecture magazine (January 1996). The office was invited to participate in the 1996 Annual meeting in Los Angeles, this time illustrating aesthetic improvements to the Los Angeles River. The resulting CD-ROM was used in a public relations campaign that let to the passage of a \$300 million bond issue for the restoration of the river. TJD&A participated in a third computer design charrette on the Chattahoochie River in Atlanta that was presented in November of 1997 and reported in Landscape Architecture in February 1998.

# TERRENCE J. DEWAN, ASLA Principal

Terry DeWan has over 30 years of professional experience in landscape architecture, visual resource assessment, site planning, design guidelines, and community development. His experience includes work with state agencies, private developers, utility companies, and the forest products industry in New England. He has written and/or directed the publication of numerous studies on community planning, visual impacts, recreation planning, water access, and highway corridor redevelopment.

Maine Licensed Landscape Architect #6

## **EDUCATION**

State University of New York, School of Environmental Sciences and Forestry, cum laude

## SPECIAL TRAINING

VISTA Training, University of Colorado

Visual Assessment Procedures, University of Southern Maine

## PROFESSIONAL EMPLOYMENT

- 1988-Present TJD&A, Yarmouth, ME Principal 1977-1988 Mitchell-DeWan Associates Portland, Maine Partner 1976-1977 Center for Natural Areas. South Gardiner. Maine Landscape Architect 1973-1976 Moriece and Gary of Maine, Portland, Maine Landscape Architect 1971-1973 The Architects Workshop Philadelphia, PA VISTA/Landscape Architect 1969-1970 **Rocky Mountain Development** Council, Helena, Montana **VISTA Volunteer** Peter G. Rolland and Associates 1968-1969
- 1970-1971 Rye, NY Landscape Architects

### **PROFESSIONAL AFFILIATIONS**

Maine State Board for Licensure of Architects, Landscape Architects, and Interior Designers, 1986-present, Secretary Public Art Committee, Maine Arts Commission Maine Olmsted Alliance Board of Directors Eco-Eco Smart Growth Forum American Society of Landscape Architects Boston Society of Landscape Architects; 2002 juror for annual awards competition American Planning Association Maine Association of Planners Yarmouth Affordable Housing Alliance CLARB: Council of Landscape Architects **Registration Boards: Landscape Architect** Registration Exam writer and grader; Strategic Planning Committee; Cut Score Committee LAAB: Landscape Architectural Accreditation Board Congress for the New Urbanism Instructor, Nat'l Council of State Garden Clubs Instructor, MeSPO Smart Growth Institute

## SELECTED PROJECT EXPERIENCE

**St. Lawrence Cement Co., Hudson, NY** Evaluation of visual impacts of proposed cement plan in a historic Hudson Valley community for opposition groups: Scenic Hudson, The Olana Partnership, and Hudson Valley Preservation Coalition.

**Dunstan Great American Neighborhood, Scarborough, Maine.** A new community of 300 housing units and a neighborhood commercial center on 150 acres.

**Kennebec-Chaudiere Heritage Corridor.** Interpretive and facilities master plan for heritage trail between Popham Beach and Solon, Maine. MDOT

**Scenic Byways Interpretive Sign Parameters** Mountain Counties Heritage, Inc. A design manual for producing high quality interpretive signs for Maine's Scenic Byways.

Route 27 Scenic Byway Corridor Management Plan. MDOT. Long-term plan for 45 miles of Route 27 between Kingfield and Canada.

**South End Urban Design Plan. Bath, Maine** A long-term improvement plan for the historic community adjacent to BIW.

Preliminary Facilities and Interpretive Media Plan, Kancamagus Scenic Byway. White **Mountain National Forest.** Demonstration forest, hiking trails, interpretive exhibits, overlooks, outdoor amphitheater.

**Route One Improvements Plan, Lincolnville.** Maine DOT. Incorporating road improvements, bicycles, and pedestrian facilities along a highly scenic roadway.

**Design Guidelines.** Falmouth (Exit 10, Route One, and Village Center); Brunswick (Cook's Corner); Skowhegan; Freeport (Route One South); Yarmouth; Kittery; Scarborough; NH Route 101A.

**Brighton Avenue Study, Portland and Westbrook.** A detailed look at ways to improve the visual environment and traffic safety along a major arterial.

**Bethel Pathway, Bethel, Maine.** A multi-use pathway along the Androscoggin River.

**Beth Condon Memorial Pathway, Yarmouth, Maine.** A multi-use pathway parallel to Rt. One. A memorial to a high school student killed while walking Rte. 1.

A Revitalization Plan for Maine Street, Brunswick, Maine.

Visual Impact Assessment, New England Wind Energy Station, Boundary Mountains of Western Maine. Kenetech Windpower, Livermore, California.

**Shoreway Access Plan, Portland, Maine.** Thirty miles of trails linking Portland's waterfronts and neighborhoods.

Interpretive, Access and Facilities Plan, Wells National Estuarine Research Reserve

**Cook's Corner Master Plan, Brunswick, Maine.** Town of Brunswick.

**Open Space Plan, Falmouth, Maine.** Strategies for dealing with change and protecting open space in a rapidly developing community.

**Open Space Plan, Scarborough, Maine.** A long term plan to preserve open space in Maine's fastest growing community.

Bath Iron Works, Land Level Transfer Facility, Bath, Maine. Visual Impact Assessment of BIW's \$250 million modernization plan. **Sprague Family Subdivision, Cape Elizabeth, Maine.** Long-term plan for up to 40 new homes on 1,500 acres of oceanfront property.

**Spring Point Shoreway, South Portland, Maine.** A mile-long oceanfront park.

**Conway Route 16 Bypass Project.** Visual Assessment, NH Dept of Transportation, Conway/North Conway, NH

Recreation Plan, Visual Assessment, and Relocation Study for Golden Road, 'Big A' Hydroelectric Facility, Great Northern Paper, Millinocket.

Recreation, Land Use, and Visual components for Relicensing of Ripogenus Dam and Penobscot Mills, Great Northern Paper, Millinocket.

**AES-Harriman Cove Co-generation Project**, **Bucksport, Maine**. Visual assessment of a coalfired power plant on Penobscot River.

**Visual Mitigation Plan, Hinckley Park Substation**. Central Maine Power Company, South Portland.

**Basin Mills.** Model building and recreation planning for Bangor Hydroelectric's proposed dam on the Penobscot River.

#### SELECTED PUBLICATIONS

**Kittery Design Handbook**. Kittery Planning Board, with Planning Decision. 2005.

DeWan, Terrence J., and John Balicki. **Maine Pedestrian Guide**. Maine Department of Transportation. 2005.

DeWan, Terrence J., and Brian Kent. **The Great American Neighborhood, A Guide to Livable Design**. Maine State Planning Office. 2004.

Council of Landscape Architectural Registration Boards. **The Road to Licensure and Beyond**. 1997. Contributor.

DeWan, Terrence, J. **Scenic Inventory, Islesboro, North Haven, Vinalhaven**. ME State Planning Office Critical Areas Program. 1992.

DeWan, Terrence, J., and Don Naetzker. Scenic Inventory, Mainland Sites of Penobscot Bay. State Planning Office. 1990.

#### The Environmental Planning Guide, A

Layperson's Guide to the USDA's Environmental Quality Handbook. Chapter on Land Use Planning.

#### SELECTED PRESENTATIONS

*Healthy Maine Walks, Powerpoint shows of the MDOT.* ProBike-ProWalk Conference, Victoria, BC. 2004.

Art into Landscape/Landscape into Art. Landscape and Art: Reflections on Places and Spaces. Maine Olmsted Alliance. Bowdoin College. 2004.

*Great Garden Designs for Maine.* Coastal Maine Botanic Gardens. Boothbay Harbor. 2004.

*Graphic Presentation Techniques, Development Density.* Smart Growth Institute, Bethel, ME. 2001.

*Great American Neighborhood.* Smart Growth Workshop, Maine State Planning Office, Brunswick, ME. 2001.

*Controlling Strip Development.* NH State Planning Office. Concord, NH. 1999.

*Photoshop as a Design Tool.* American Society of Landscape Architects Annual Meeting. Portland, OR. 1998.

*Controlling Strip Development.* American Planning Association Annual Meeting. Boston. 1998.

*Chattahoochee Riverway Plan.* American Society of Landscape Architects Annual Meeting. Atlanta. 1997.

Los Angeles River Plan. American Society of Landscape Architects Annual Meeting. Los Angeles. 1996.

*Cleveland Computer Design Charrette.* American Society of Landscape Architects Annual Meeting. Cleveland. 1995.

Scenic Assessments Methods along the Maine Coast. 20th Annual Natural Areas Conference, Orono, Maine. 1993. Moderator for Aesthetic/Scenic Areas Conservation in Working Landscapes Symposium.

*Visual Assessment Standards and Technology Conference:* Case Studies in Visual Assessment Techniques. SUNY, Syracuse, New York. 1992. *Design, Landscape and Maintenance*. Northeast Regional Scenic Byways Conference, Alexandria Bay, NY. 1990.

*Scenic Inventories.* Maine Coast Scenic Workshop, Maine State Planning Office, Bar Harbor. 1990.

Guest Lecturer to Dr. Richard Smardon's graduate seminar in Visual Assessment Methodology, SUNY, Syracuse, NY. 1990.

Subdivision Design and Review. Training Seminar and Video, Maine Department of Economic and Community Development. 1988.

#### AWARDS AND DISTINCTIONS

Council of Landscape Architects Registration Boards Presidents Award.

Boston Society of Landscape Architects Excellence Award for outstanding professional practitioner.

North American / United Kingdom Stewardship Exchange, Exmoor National Park, North Devon, England.

Maine Association of Planners Awards A Guide to Livable Design Spring Point Shoreway TV Mini-Series for Planning Boards Portland Waterfront Walk Portland Shoreway Access Plan Falmouth Route One Plan Scenic Inventory of Penobscot Bay Brunswick Revitalization Plan

American Planning Association, NNE Chapter: Outstanding project of the year award: Kancamagus Scenic Byway Facilities and Interpretive Plan (with White Mountain National Forest). Knightville-Mill Creek Vision Plan, South Portland.

American Society of Landscape Architects Merit Award for Communications. Los Angeles River Project. Chattahoochee River Greenway, Atlanta.

> T. DeWan 3

## tjd&a

#### AMY BELL SEGAL, ASLA, RLA Associate

Landscape Architect

Amy's thirteen years of experience include visual impact assessments, computer-generated photosimulations, recreation and trail planning, site planning for residential, commercial, and industrial properties, and permitting and construction management.

Maine Registered Landscape Architect #2265

## **EDUCATION**

BSLA Cornell University Denmark International Study Program

## SPECIAL TRAINING

Low Impact Development Stormwater BMP training

#### PROFESSIONAL EMPLOYMENT

- 1992-Present TJD&A, Yarmouth, ME Landscape Architect Associate/Project Manager
- 1990-Summer Roger Trancik, FASLA, Ithaca, NY Landscape Design, Graphics
- 1988-1992 Bell & Spina Architects, Camillus, NY Landscape Design

#### SELECTED PROJECT EXPERIENCE Terrence J. DeWan & Associates

#### Little Andy Park, New Auburn, ME. A

neighborhood park with access to the Little Androscoggin River.

Androscoggin Riverwalk, Auburn, ME. A multipurpose pathway along the Androscoggin River.

Hallowell Interpretive Turnout, MeDOT. Lead design team in production of construction documents for the first turnout to be installed along the Kennebec River. Site includes interpretive panels, railing, seating and paving, and landscaping.

## Kennebec Chaudiere International Corridor, Skowhegan to Popham, ME. MeDOT

Site plans for 10 interpretive turnouts along the lower 75 miles of the corridor.

Redington Windfarm, Endless Energy, Redington Township, ME. Photosimulations of proposed wind turbines as seen from various viewpoints.

# Commercial St. Extension Improvement Plan Bath, Maine

Master plan for multimodal development along the Kennebec River including a 1/2 acre riverfront park.

**Bypass Visualizations, Wiscasset, ME. MeDOT**. Photosimulations of proposed Route One bypass options.

Bath Iron Works, Naval Security Planning, Bath, ME. New security access, fencing and parking lot improvements.

#### **Dragon Products, Thomaston, ME**

A landscape enhancement plan for a one-mile stretch of coastal Route One adjacent to a large open pit mine.

**South End Urban Design Plan, Bath, ME.** Urban design plan to guide long term improvements in the South End neighborhood adjacent to BIW.

**South End Waterfront Park, Bath, ME.** Preliminary plans for a 10-acre park on the Kennebec River, developed as mitigation for BIW's Land Level Transfer Facility.

Washington Street Plantings, Bath, ME. Bath Iron Works was required for LLTF permitting with City and State to develop site specific buffer and enhancement plan for Washington Street.

**Skyline Farm, North Yarmouth, ME**. A master plan for a 54-acre farm, trails, a Carriage Museum, and facilities for equestrian events.

North Yarmouth Town Hall and Municipal Green, ME. Site planning, detailing, and permitting for a new Town Hall and green.

Bath Iron Works, Land Level Transfer Facility, Bath, ME. Visual impact assessment and photosimulations for BIW's new shipbuilding facility on the Kennebec River.

Richmond Compressor Station, Maritimes and Northeast Pipeline, Richmond, ME.

Photosimulations and buffer plan for the Pitts Center Road compressor station.

**Sprague Family Subdivision, Cape Elizabeth, ME.** Long-term plan that provides sites for 40 new homes on 1,500 acres of oceanfront property. Cross Hill Subdivision, Cape Elizabeth, ME.

A 96-lot cluster subdivision on 207 acres with over 100 acres of dedicated open space.

Saddleback Mountain, Rangeley, ME. National Park Service. Photosimulations of ski area expansion plans to test impact on Appalachian Trail.

#### New England Wind Energy Station, Boundary Mountains, ME. Kennetech Windpower,

**Livermore, CA.** Visual impact assessment and photo-simulations of 639 wind turbines planned for 250,000 acres in western ME.

Sawyer Environmental Landfill, Hampden, ME.

Photosimulations of landscape treatment and landform adjustments for the expansion of a highly visible landfill adjacent to the ME Turnpike.

**Liquefied Natural Gas Facility, Wells, ME**. Visual impact assessment and photosimulations of a proposed LNG tank in rural Wells.

**Twin Echo Cohousing Community, Brunswick, ME.** Site analysis and design for a community of 24 homes on 100 rural acres.

Kancamagus Scenic Byway, White Mountain National Forest, Conway to Lincoln, NH. Preliminary Facilities and Interpretive Media Plan.

Wiley Park, Scarborough, ME. A 20-acre community park with ball fields and a mile-long trail linking residential areas and the Rachel Carson National Wildlife Refuge.

Visitor Information Center, Evans Notch Ranger District, White Mountain National Forest, Bethel, ME. Landscape design and informational kiosk for a new visitor information center.

Visual Resource Assessment, Rt. 27

**Carrabassett Valley, ME, MeDOT.** Visual resource assessment and improvements to one of Maine's Scenic Byways.

**Stiles Road Quarry Expansion, O&G Industries, Woodbury, CT.** Photosimulations showing the visual impact of a major quarry expansion adjacent to an historic New England village.

**Redesigning Cleveland Digitally, Cleveland, OH.** Site planning and computer illustrations for a former mill site in Cleveland. Presented at the 1995 Annual Meeting of ASLA.

Los Angeles River Study, Los Angeles, CA.

A study of aesthetic treatments for the 50- mile concrete channel lining the Los Angeles River. Illustrations of murals, parks, walkways, and gardens. Presented at the Computer Design Charrette at the 1996 ASLA Annual Meeting.

## Chattahoochee Riverway, Atlanta, GA.

A Landscape Architecture Foundation-sponsored project to improve public access along a 12-mile river corridor and reclaim adjacent industrial sites for recreation and open space.

New Hampshire Watershed Model, Twin Mountain Interpretive Center, NH. Great Bay National Estuarine Research Reserve, Sandy Point, NH. Basin Mills Hydroelectric Project, Orono, ME. Mack Point Model, Searsport, ME.

## AWARDS AND DISTINCTIONS

American Society of Landscape Architects Merit Award for Communications Los Angeles River Study.

American Society of Landscape Architects Merit Award for Communications Chattahoochee River Greenway, Atlanta, GA.

National Association for Interpretation Interpretive Media Award Great Bay National Estuarine Research Reserve, Sandy Point, NH.

## PROFESSIONAL ORGANIZATIONS

Chairperson for the Maine Section of the Boston Society of Landscape Architect, 2002- present

Architalx Board Member 2003-04, Advisory Board Member – present

Consultant to Portland Trails Land Trust for the Schoolyard Greening Initiative, 1999-present.

## PRESENTATIONS

Co-Presenter, *Using Photoshop as a Design Tool*, ASLA, Portland, OR 1998

Co-presenter at LABASH, *Creating Visualizations* with Computers, Univ.of West Virginia, 1998

Co-Presenter, *Creating Visualizations with Computers*, AEC Conference, Philadelphia, 1997

Guest lecturer, *Using Photoshop for Visualizations*, Cornell University, 1997

## Environmental Assessment and Analysis: Woodlot Alternatives, Inc.

#### www.woodlotalt.com

Woodlot Alternatives, Inc. is a private consulting firm that specializes in problem solving, providing natural resource identification in terrestrial, aquatic and marine environments, ecological restoration, wetland analyses and mitigation, eco-risk assessment and ecological surveys, mapping and GIS services, permitting, and land use consulting. For over 17 years, Woodlot has provided services to clients across the United States and Canada. Woodlot is comprised of professional field scientists and engineers with extensive backgrounds in state and federal environmental regulations, wildlife management, aquatic and marine ecology, restoration engineering, wetland and soil science, hydrology, forestry, botany, geology, natural resource management, and land-use planning. Clients include:

ABB Environmental Services, Inc. Acadia National Park ACOE. Air Force Army National Guard Belfast, Maine -Bigelow Laboratory. Bowdoin College. Burns & Levinson. Canadian Wildlife Service. Central Maine Power Co. City of Portland, Maine. City of Rockland, Maine . City of Westbrook. Corps of Engineers Diamond Occidental Forest Inc. EPA Forest Management and Forest Certification Foster Wheeler, Inc. Freeport Economic Development Corporation (FEDC). Friends of Acadia, HAZWRAP Inland Seafoods. International Paper Company and Otis Hydroelectric Company. James River Corporation. Kennebec Council of Governments Loring Air Force Base MA Executive Office of Environmental Affairs, MADEP, Madison Paper Company. Maine Army National Guard. Maine AT Club. Maine Coast Heritage Trust, Maine Cranberry

Maine Department of Environmental Protection. Maine Department of Inland Fisheries and Wildlife (MDIFW). Maine Department of Transportation (MDOT). Maine DOT Maine Forest Service and the Natural Areas Program. Maine State Planning Office. Massachusetts Department of Environmental Protection. MBNA America. MBNA New England. Mead Paper Corp. Nahmakanta Management Unit -Nancy Brook Research Natural Area, National Park Service Navy New England Telephone (NYNEX), New York Power Authority, NOAA NYNEX. Pierce Atwood.. R. F. Weston, Inc. South Portland Stone & Webster Engineering (SWE). TechLaw, Inc. /USEPA. Tetra Tech. Town of Brunswick. Town of Cumberland. Town of Harpswell. Town of Richmond. Town of Scarborough. Town of Vinalhaven. Town of Wells, ME. Town of Windham. . Town of York, Maine.

U.S. Air Force. U.S. Environmental Protection Agency U.S. Fish & Wildlife Service Union Water Power Company. US Fish and Wildlife Service, USEPA. VHB. Vinalhaven Land Trust Wetlands Analyses and Restoration Services Woodard & Curran Engineers. York Water District.



**PROFESSIONAL PROFILE** 

# Steven K. Pelletier, Vice President

## Capabilities

#### **Natural Resource Evaluations:**

- Wildlife Impact Assessments, including avian studies
- Endangered and Threatened Plant and Animal Species (Federal- and State-listed) and Natural Communities
- Unusual Natural Areas
- Critical or Significant Wildlife and Fish Habitats
- Habitat mapping
- Ecological characterization
- Aquatic studies, including dive surveys
- Detailed vernal pool studies
- Mammal, raptor, amphibian and mussel surveys
- Intertidal and Subtidal Marine Communities
- Avian Radar Surveys

#### Wetland Science:

- Expert testimony
- Wetland restoration and mitigation design and monitoring
- Wetland delineations and function value assessments
- Regional watershed assessment and planning
- State and Federal permitting and regulatory advising
- Customized wetland and regulatory training courses

#### **Forest Assessments:**

- Forest Management Planning
- Timber Inventories and Assessments
- Forest Certification

#### **Permitting Expertise:**

- NRPA Secs. 401 / 404 and 404(b)(1) Analyses
- River and Harbors Act, Sec. 10
- FERC Hydroelectric Licensing (Exhibit E and EAs)
- Support for FERC Natural Gas Pipeline Projects
- Support for Wind Power Projects
- Impact Avoidance and Minimization Support
- Support for CERCLA/Superfund Projects
- NEPA Compliance and Documentation
- Section 7 Biological Assessments
- Federal, State, and Local Wetland Alteration Permitting
- Shoreland and Coastal Zone Management Permitting
- Dredging Project Permitting
- Natural Resources Sections of Maine DEP Site Location Permits

## Principal Scientist Certified Wildlife Biologist Professional Wetland Scientist Certified/Licensed Professional Forester

Mr. Pelletier is a certified wildlife biologist, professional wetland scientist, and certified and licensed professional forester with over 20 years of experience. As co-founder and vicepresident of Woodlot Alternatives, he specializes in wildlife management planning, wetland science, forest management, and permitting. He is one of the top wildlife and habitat experts in the northeast, and offers particular expertise in evaluating wildlife impacts and developing avoidance and mitigation measures for projects ranging from wind power developments to commuter rail lines.

Steve is responsible for designing field studies and coordinating data collection and report preparation, and has designed many compensatory mitigation projects. Steve teaches various wetland courses, including a course for certifying municipal Code Enforcement Officers, and has taught refresher courses for the Maine Department of Environmental Protection staff. He is also a certified SCUBA diver.

## Experience

**Woodlot Alternatives, Inc., Vice President** 1989-Present. Certified Wildlife Biologist, Professional Wetland Scientist, Certified and Maine Licensed Forester

Maine Dept. of Environmental Protection, Portland, Maine. 1984-1989. Environmental Specialist

Maine Dept. of Inland Fisheries and Wildlife, Gray, Maine 1980-1985. Seasonal Biological Assistant

**U.S. Forest Service, Platina, California** 1982-1983. Wildlife Biologist

**U.S. Forest Service, Cordova, Alaska** 1981. Wildlife Biologist Assistant

Maine Cooperative Wildlife Research Unit, Orono, Maine 1977-1980. Wildlife Research Field Technician

U.S. Navy, USS America (CV-66), Norfolk, Virginia 1974-1976.

## Education

A.S. Forest Management Technology with Distinction, 1978, University of Maine at Orono.

B.S. Wildlife Management & Forestry, 1980, University of Maine.

## Training

40-Hour Safety Training for Hazardous Waste Operations in Compliance with OSHA 29 CFR1910.120. 1993.

## **Recent Publications and Presentations**

Pelletier, S.K., D.G. Nein, and R.D. Roy, 2004. Railroad Crossing Structures for Spotted Turtles. *In* Proceedings of the International Society of Wetland Scientists 25<sup>th</sup> Anniversary Conference, Charting the Future: A Quarter Century of Lessons Learned, Seattle, WA, 2004.

Pelletier, S.K., D.G. Nein, and R.D. Roy, 2003. Railroad Crossing Structures for Spotted Turtles. *In* Proceedings of the Association of State Wetland Managers (ASWM) National Symposium, Wetlands 2003: Landscape Scale Wetland Assessment and Management, Nashua, New Hampshire, 2003.

Pelletier, S.K. and F.J. DiBello, 2003. A Survey of Potential Vernal Pool Habitats in the Town of Falmouth, Maine. *In* Proceedings of the Association of State Wetland Managers (ASWM) National Symposium, Wetlands 2003: Landscape Scale Wetland Assessment and Management, Nashua, New Hampshire, 2003.

Pelletier, S.K., 2001. Wildlife and critical habitat concerns associated with windpower facilities. *In* Proceedings of New England Wind Power Siting Workshop, Boston 2001. National Wind Coordinating Committee, October 2001.

Pelletier, S.K. and E. Hertz, 2000. A GIS-based Wetland Characterization of the Casco Bay Watershed – A Pilot Study. *In* Proceedings of the Society of Wetland Scientists (SWS) Quebec 2000: Millennium Wetland Event, 2000.

Flatebo, G., C.R. Foss and S.K. Pelletier, 1999. Biodiversity in the Forests of Maine: Guidelines for Land Management UMCE Bulletin #7147, University of Maine Cooperative Extension.

Pelletier, S.K., 1996. An analysis of forest sustainability issues in Maine. Maine Forest Service and Maine Natural Areas Program, September 1996.

Lortie, J.P. and S.K. Pelletier, 1987. Distribution and abundance of breeding birds and small mammals in the high salt marsh and adjacent upland critical edge in southern Maine. *In* Proceedings of the Maine Biological and Medical Science Symposium, Bowdoin College, Brunswick, Maine, 1986.

## Certifications

- Certified Wildlife Biologist (TWS)
- Licensed Professional Forester (Maine license #866)
- Certified Professional Forester (SAF #)
- Professional Wetland Scientist (SWS #899)
- NH Certified Wetland Scientist (NH license #136)
- HEP Certified: U.S. Fish and Wildlife Service
- NAUI Certified SCUBA Diver
- Certified SCUBA Diver CPROX Administrator
- CPR1st Certification

## Affiliations

- Society of Wetland Scientists
- Maine Oil Spill Advisory Committee, appointed by Maine Governor
- ME Wetland Task Force (former) Chair, Wetland Mitigation Banking Group
- Maine Association of Wetland Scientists, co-founder, chairman, past President
- Friends of Merrymeeting Bay
- Maine Vernal Pools Work Group
- Maine DEP Cumulative Impact Work Group
- Society of American Foresters
- The Wildlife Society

#### Contact: <u>spelletier@woodlotalt.com</u> (207) 729-1199

#### Civil Engineering, Road Design: DeLuca-Hoffman Associates, Inc.

#### www.delucahoffman.com

DeLuca-Hoffman Associates, Inc. is a civil engineering firm located in South Portland, Maine providing broad based civil and environmental engineering services throughout Maine and northern New England since 1986. DeLuca-Hoffman Associates, Inc. has established an excellent working relationship with various State and Federal agencies: the Maine Department of Environmental Protection, the Soil and Water Conservation District (SCS), the Maine Department of Transportation (MDOT), the U.S. Army Corps of Engineers, and the U.S. Environmental Protection Agency. DeLuca-Hoffman Associates, Inc. received two awards from the Cumberland County SCS. The firm has been recognized by the MeDEP as one of the most environmentally responsible design firms working in the State. DeLuca-Hoffman Associates, Inc. serves a diverse base of municipal and private clients, including:

City of Portland	Portland International Jetport
City of Saco	Dead River Properties, Portland, Maine
City of Westbrook	Berman Associates, Portland, Maine
Town of Arundel	S.R. Weiner, Chestnut Hill,
Town of Falmouth	Massachusetts
Town of Gorham	Hannaford Bros. Co., Scarborough,
Town of Kennebunk	Maine.
Town of Scarborough	

DeLuca-Hoffman Associates, Inc. was founded in 1986 by Mike DeLuca and Bill Hoffman, who remain active in the firm practice today. Mike and Bill have in excess of 50 years combined civil engineering related experience, including design and construction management. All projects are performed under the direction of a principal or senior engineer of the firm.

## DeLuca-Hoffman Associates, Inc. Since 1997

#### Spring Street Trunk Storm Drain Project, Saco, Maine:

Design, permitting and construction administration services for the construction of a 2,400 linear foot trunk storm drain along Spring Street, to convey the upper reaches of the 350-acre Sawyer Brook watershed directly to the Saco River. The trunk storm drain is comprised of 185 linear feet of 5-foot by 10-foot precast concrete box storm drain, 665 linear feet of twin 72-inch diameter reinforced concrete pipe, 1,210 linear feet of 96-inch diameter reinforced concrete pipe and 340 linear feet of 84-inch diameter reinforced concrete pipe. The project also included reconstruction of the majority of the 45-foot-wide Spring Street roadway, water main relocation and sewer main relocation. Permitting efforts for the project involved the Saco River Corridor Commission, the Maine Department of Environmental Protection, the US Army Corps of Engineers and several other resource agencys. The \$2.6 million project was part of a joint effort by the City of Saco and the Federal Emergency Management Agency.

#### MSAD #51 Greely Middle School, Cumberland, Maine:

Participation in the design, permitting and construction administration services for construction of a 750-student middle school on a 52-acre parcel. The project includes water quantity and quality ponds, athletic fields, infrastructure upgrades and parking for over 180 vehicles. The stormwater quantity analysis for this project was complicated due to poor drainage conditions in a residential neighborhood downgradient from the school site.

#### Athletic Field Upgrades and Playground Improvements Buxton/Hollis/ Limington and Standish, Maine:

Participation in the design, permitting (local, state and federal) and construction administration services for upgrades and improvements to playgrounds and athletic fields throughout the MSAD #6 school district. Design considerations included ADA accessibility, irrigation for athletic fields, water supply source and modern playground equipment arrangements. The overall funding for this project, which impacts nine different school sites is \$2.4 million.

#### Advance Auto Parts, Biddeford and Windham, Maine:

Design and permitting services for construction of 7,000 square foot auto parts retail stores in Biddeford and Windham, Maine. Both sites required formal stormwater control systems and attention to local requirements to achieve Planning Board approvals.

#### UNUM Provident's Centralized Mechanical Project, Portland, Maine:

Design and construction of a centralized mechanical piping connection between Home Office 1 and Home Office 2 to provide heating between the buildings. The site required extensive geophysical utility survey and test pitting to determine rock elevations and utility locations to be considered in planning the route between the buildings. The project cost was on the order of \$750,000.

#### Oak Ridge Subdivision, Portland, Maine.

Design and permitting services for an eighteen-lot subdivision off Plymouth Street in Portland, Maine. The project design included formal stormwater controls for both water quantity and quality including hydrologic modeling, sanitary sewer design, water system design and street design. This project required special consideration to minimize impacts to abutting neighbors to the front of the site and railroad tracks to the back of the site.

## Dwight D. Anderson, P.E.

## **Senior Engineer**

Mr. Anderson is a Senior Engineer with DeLuca-Hoffman Associates, Inc.'s Land Design and Engineering Services Group, and Environmental and Water Resources Group. He preparation performs the of preliminary and final design as well as permit applications for a variety of civil/site engineering and projects. environmental Mr. Anderson's expertise includes civil/site design, hydrologic and hydraulic analysis, and construction administration.



Spring Street Trunk Storm Drain in Saco, Maine



Athletic Field Upgrades for MSAD #6

#### Senior Engineer

#### MBNA Operations Facility Phase III Expansion, Belfast, Maine:

Performed surface water quantity and quality analyses in order to prepare the Stormwater Management Report for MBNA's Phase III Operations Facility Expansion including development of an additional 30 acres on MBNA's 334-acre parcel. Development of the stormwater management plan included analysis for a 111-acre watershed within the parcel, review of the water quality impacts to Belfast Reservoir No. 2 as well as streams conveying stormwater from the site, and the design of four water quality retention facilities for phosphorus removal and stormwater detention.

# Lower Route 1 Infrastructure Improvements, Whitney Road, Falmouth, Maine:

Design and construction phase services for the replacement of sanitary sewer main and service leads along Whitney Road in Falmouth. The project also included the installation of a new storm drain system designed with service leads to receive illicit inflows from residential home foundation drains and sump pumps. The primary purpose of the project was to reduce the amount of infiltration and ground water inflow into the sanitary sewer system. The total cost of construction for the project was \$250,000.

#### Wayside Road and Woodfield Road Sewer Separation Project,

#### Portland, Maine:

Design of infrastructure improvements which included 3,500 feet of roadway and sidewalk reconstruction, approximately 2,400 linear feet of sanitary sewer and separate storm drains. This project included the hydrologic evaluation of a 13-acre urban watershed and hydraulic analysis of proposed sanitary sewers and storm sewers within the watershed. The Rational Method was used for analyzing stormwater runoff volumes and Manning's Equation was used for analyzing minor losses in the formal drainage systems. The total construction cost for the project was \$1.3 million.

#### Boy Scouts of America Headquarters Building, Portland, Maine:

Design and permitting for the construction of an 11,800 square foot Headquarters building and associated site improvements located in existing wetlands between airport and MTA property on the border between the City of Portland and South Portland. The project includes sewer force main and effluent pump analysis and stormwater analysis. The overall project included disturbance of nearly one acre of wetland to construct the 11,800 square foot building, paved access drive and 50-space parking area.

Education:	BSCE - University of Maine, Orono, Maine
Registration:	Registered Professional Engineer, Maine
Experience in Field:	In Private Practice Since 1994

## Soils Evaluation and Subsurface Wastewater Disposal: Albert Frick Associates

Albert Frick is a certified Soil Scientist and licensed Site Evaluator with over 25 years experience in soil science and subsurface wastewater disposal system design. Albert Frick Associates has designed over 20,000 subsurface wastewater disposal systems in the State of Maine, from pit privies to large community systems, including residential, commercial and industrial uses, for private and public clients. Albert Frick Associates has provided numerous subsurface wastewater disposal designs for the Maine Department of Inland Fisheries and Wildlife warden facilities; and provided soils information for the Department of Environmental Protection Site Location and Development Application for the State of Maine Complex expansion in Augusta and President George Bush. Albert Frick Associates, Inc. has soil mapped thousands of acres in Maine for various clients including:

Passamaquoddy Indian Tribe Colby Colleg St. Joseph's College Southern Maine Vocational Technical Institute Lewiston High School Brunswick Hospital Proposed Mid-Coast Regional Hospital (Brunswick) Augusta Mental Health Institution Complex (Maine Department of Environmental Protection) Inland Fisheries and Wildlife Club Sebago

# **Albert Frick**

EDUCATION:	Master of Science 1978 University of Maine at Orono, Orono, Maine Program: Soil Science (Resource Utilization)
	Bachelor of Science 1972 Bates College, Lewiston, Maine Program: Geology
WORK EXPERIEN	CE:
Apr.1985-Present	<b>Consulting Soil Scientist.</b> Albert Frick Associates, Inc. Gorham, Maine
	President and Senior Consulting Soil Scientist of small consulting firm which produces high intensity soil maps, subsurface wastewater disposal system designs, environmental studies, and subdivision planning with regard to soil utilization.
Oct.1978-Apr.1985	Soil Scientist. Division of Health Engineering, State of Maine
	Responsible for administering the Site Evaluation program for the State of Maine. Duties included licensing of Site Evaluators, review of soils, and administration of the State of Maine Subsurface Wastewater Disposal Rules.
May 1978-Oct.1978	Consulting Soil Scientist. Self-employed
	Site evaluations, land use consultation, site selection.
Jan.1976-May 1978	<b>Consulting Soil Scientist. University of Maine, Orono,</b> <b>Maine</b>
	Examined soil potential for land use planning in communities of Maine to develop soil potential ratings for Maine soils that are utilized as a planning tool to guide towns in land use decisions.
	Research Assistant. University of Maine, Orono, Maine
	Examined land application of potato wastes. Investigated nutrient movement through soil and associated ground water quality in adjacent monitoring wells. Nutrient budgets were calculated and acceptable loading rates were identified.

Albert Frick

## Jan.1974-Jan.1976 Engineer Technician. Thomas Griffin Associates

Duties included assisting in selection and design of sanitary landfill sites, report preparation, drafting, surveying, field investigations.

## June 1971-Sept.1971 Assistant Geologist. National Science Foundation

Member of a research team examining pollution of Lake Lillinonah, Milford, Ct. Investigated stream turbidity and sediment loading, nutrient levels in recharge water and eutrophication process.

# June 1970-Sept.1970 Assistant Geologist. Wesleyan University, Middletown, Ct.

Investigation of aeromagnetic anomalies in western Connecticut. Correlated strike, dip, overburden, and concentration of magnetite veins with computer modeling.

### **PUBLICATIONS:** Site Evaluation of Subsurface Wastewater Disposal in Maine (August 1983) Maine Department of Human Services, Division of Health Engineering.

Soil Potential for Land Use Planning at a Local Level in Maine (December 1977) Bulletin 747, University of Maine.

#### Life Expectancy, Systems Design and Land Use of Subsurface Wastewater Disposal Systems in Maine (December 1984)

On-site Sewage Treatment- the Fourth National Symposium on Individual and Small Community Sewer Systems.

Maine Environmental Planning Guide (1990) Cumberland County Soil and Water Conservation District Chairman of the Soil Advisory Committee which developed the Soil Information Chapter 2 of the Manual.

### AWARDS: Fred Griffee Award 1997 Outstanding graduate student in Life Science and Agriculture College, University of Maine at Orono

## **PROFESSIONAL AFFILIATIONS AN ORGANIZATIONS:**

Maine Certified Soil Scientist #66
Maine Licensed Site Evaluator #163
Maine Association of Professional Soil Scientists
Maine Association of Site Evaluators (Charter Director) (Past President)
National Society of Consulting Soil Scientists (Charter Member)
Maine Association of Landscape Architects (Associate Member)
Maine Board Certification of Geologists and Soil Scientists (Consulting Soil Scientist Board Member) Governor McKernon appointee

## Structural Engineering, Bridge Assessment and Design: Gagnon Engineering

Gagnon Engineering, Inc, founded in 1984 by Roger G. Gagnon, specializes in structural engineering services, including design and analysis, condition surveys, load capacity evaluations, forensic studies, troubleshooting, construction monitoring, and permit applications. Clients include contractors, design professionals, energy plants, fabricators, forest product concerns, insurance companies, municipalities, owners, and paper mills.

GAGNON ENGINEERING, INC.

Structural Consultants

## CURRICULUM VITAE: ROGER R. GAGNON, P.E. 10 Solomon Drive, Gorham, Maine 04038

## **PROFESSION: Structural Engineer**

## **EDUCATION:**

- Master of Business Administration, University of Maine at Orono, 1982
- Master of Science/Structural Engineering, University of Connecticut at Storrs, 1976
- Bachelor of Science/Civil Engineering, University of Maine at Orono, 1969

## **EXPERIENCE:**

- 1984 present: Principal and President, Gagnon Engineering, Inc. Structural Consultants, Bangor and Gorham Maine. (Scitus Engineering, Inc. 1993 2000)
- 1979 to 1984: Chief of Engineering Design Section, Cianbro Corporation, Pittsfield, Maine
- 1977 to 1978: Project Engineer & Engineering Specialist; Cianbro Corporation, Pittsfield, Maine
- 1976 to 1977: Instructor, Department of Civil Engineering, University of Maine, Orono, Maine
- 1969 to 1976: Structural Engineer & Senior Structural Engineer, General Dynamics/Electric Boat Division, Groton, Connecticuí. (exclusive of military service)
- 1971 to 1973: Civil Engineering Officer, United States Air Force, Kincheloe Air Force Base, Upper Peninsula, Michigan

1

PROFESSIONAL REGISTRATIONS: Maine, New Hampshire, Massachusetts, Vermont

## **AFFILIATIONS:**

- Member, American Society of Civil Engineers
- Member, Structural Engineers of Maine

## Electrical Transmission Consultation and Design: E-PRO Engineering and Environmental Consulting

## www.eproconsulting.com

E PRO is an engineering and environmental consulting firm whose services cover a wide range of engineering, licensing, and permitting issues. Comprised of many former utility engineers, E-PRO's project teams plan, design, and install facilities to meet clients' financial, technical, and scheduling goals. E-PRO offers a range of services for substations and switchyard relay and protection, transmission and distribution EPC Projects, commissioning and testing, power system studies, environmental permitting and licensing, generation, and civil engineering.



## QUALIFICATIONS

- Twenty-nine years of experience in the electric utility industry with five years devoted to customer service activities in the area of Energy Management/Demand Side Management (DSM); eight years devoted to rate and regulatory activities; and 16 years devoted to electrical engineering and engineering consulting
- Thirteen years of experience as an effective leader of technical staff
- Fifteen years of Project Management experience
- Excellent oral and written communication skills
- Proficient with PSLF, SKM and EDSA power system models
- Solid understanding of Power and Control Systems, Demand Side Management (DSM), renewable energy resources and electric service rates and issues
- Registered Professional Engineer

## PROFESSIONAL EXPERIENCE & ACCOMPLISHMENTS

## TECHNICAL

- Designed wind farm collector system and transmission interconnection for proposed wind farms in Maine and Massachusetts.
- Designed multiple 2.5 MVA medium voltage service additions for Procter & Gamble's Tambrands Facility in Auburn, Maine.
- Designed 1.7 MW Emergency Power System with automatic transfer for waste water treatment facilities at International Paper's Bucksport mill.
- Conducted an independent review of Bangor Hydro Electric Company's service quality for the State of Maine on behalf of the Public Advocate's Office.
- Performed plant-wide electrical distribution system evaluation for Perrier's Poland Spring Bottling facility in Poland Spring, Maine.
- Performed short circuit and protection coordination analysis of plant-wide electrical systems at Procter & Gamble's Tambrands Auburn facility and Groveton Paper Board's Groveton facility
- Performed comprehensive EMF surveys and calculations for proposed power plants in Dighton Massachusetts; Johnston, Rhode Island; and Tiverton, Rhode Island; Middletown Connecticut; Yarmouth, Massachusetts; Meriden, Connecticut; Norwalk, Connecticut and testified before both the Connecticut and Massachusetts Facility Siting Council on the issue.
- Performed comprehensive EMF analyses for proposed HV transmission projects in Rochester, Southampton and Smithtown, New York and submitted testimony before the New York State Public Service Commission on the issue.
- Performed EMF surveys on over 50 residential households, municipal buildings, commercial and industrial facilities.
- Served as owner's representative for the Commissioning of Jamaica Private Power Company's (JPPC) 60 Mw diesel power plant in Kingston, Jamaica.
- Performed detailed surge protection analysis for transmission facilities at International Paper Company, AES Londonderry, Public Service of New Hampshire and Meriden.



# David P. Estey, P.E.

**Principal Electrical Engineer** 

- Conducted embedded and marginal cost of service studies and sundry rate design analyses for retail and wholesale rate cases. Developed rate tariffs, rules and regulations and applications for Maine PUC and FERC submissions.
- Testified before the Maine PUC on matters relating to retail cost of service, pole rental rates, and cost effectiveness of DSM programs.
- Conducted seminars on rate and energy management topics.

## MANAGEMENT

- Served as oversight witness for interconnection relay and trip testing for Central Maine Power Company.
- Served as Project Manager of Central Maine Power Company's Generation Management System (GMS), Androscoggin Energy LLC (AELLC), Rumford Power Associates (RPA), and Bucksport Energy, LLC (BELLC) Merchant Plant Projects.
- Managed the Central Maine Power Company's power contracts and joint owner's agreements associated with Maine Yankee, Connecticut Yankee, Vermont Yankee, Yankee Rowe and Millstone Unit 3.
- Served as Director of System Engineering for Central Maine Power responsible for relay and control panel designs for line terminal and transformer panels, procurement specifications for large power transformers, uninterruptable power supplies, battery systems and other electrical components.
- Directed the organization and development of the Electric Council of New England (ECNE) National Conference "Demand-Side Management: Partnerships in Planning" held in Boston, Massachusetts in November of 1989.
- Worked with clients to resolve technical questions related to rates, energy management programs and power quality.

## **EDUCATION**

<u>B. S., Electrical Engineering</u>, University of New Hampshire, 1974 M. S., Management, Thomas College, 1980

## **EMPLOYMENT HISTORY**

<u>E·PRO ENGINEERING & ENVIRONMENTAL CONSULTING, LLC – Augusta, ME</u> 1999 – Present *Principal Electrical Engineer* 

- E-PRO AND CENTRAL MAINE POWER COMPANY Augusta, ME
- 1997 1999 Principal Electrical Engineer
- 1995 1996 Director of Business Development

## CENTRAL MAINE POWER COMPANY - Augusta, ME

1994 – 1995 *Technical Coordinator, Nuclear and Interim Manager of Electrical Support* Services



Principal Electrical Engineer

1991 – 1993 Director of System Engineering
1986 – 1990 Director of Energy Management Planning
1984 – 1985 Director of Costing and Pricing Analysis
1975 – 1983 Staff Engineer in the Operating and Rate Departments

# **PROFESSIONAL AFFILIATIONS / REGISTRATIONS**

- Registered Professional Engineer, Maine, #3811, since 1978
- Registered Professional Engineer, New Hampshire, #10409, since 2001

## Geotechnical Engineering: S.W. Cole Engineering, Inc

## www.swcole.com

S. W. Cole Engineering, Inc., was established in May of 1979 in Bangor, Maine to provide geotechnical engineering, geologic and construction quality assurance testing services. Through the years, we expanded our capabilities to include environmental services, soil science and wetland evaluation. Branch offices were established in Caribou, Maine (1985), Gray, Maine (1990), Somersworth, New Hampshire (1998), and Augusta, Maine (1999) to more effectively provide services to our clients throughout northern New England.

S.W. Cole Engineering, Inc., provides services in three major areas – geotechnical engineering, scientific and environmental consulting, and field and laboratory testing. The firm's geotechnical services include engineering analyses and recommendations on site feasibility, foundation alternatives, bearing capacity, soil improvement, slope stability, pavement structures, and subsurface drainage for projects that vary from building foundations and roadways to wastewater treatment facilities and transmission towers. Clients include architectural/engineering firms, contractors, governmental agencies, and commercial, industrial, and individual concerns.

## **ROBERT E. CHAPUT, P.E.** Vice President Senior Geotechnical Engineer Augusta, Maine Office Manager



Bob Chaput is a native of Winthrop, Maine who has been an integral part of the growth of S. W. Cole Engineering, Inc., having helped start two of our branch locations. Bob attended the University of Maine, where he earned an A.S. degree

in Civil Engineering and a B.S. in Construction Management Technology. Recently, Bob earned an M.S. degree in Geotechnical Engineering from the University of Maine in 2004. During college, he worked as an Engineering Technician for S. W. Cole Engineering, Inc. in Bangor and for Morrison Geotechnical Engineering in Winslow, Maine. In 1990, Bob rejoined S. W. Cole Engineering, Inc. as a Materials Engineer and helped start our new office in Gray, Maine. The firm later promoted him



### Education:

M.S., Geotechnical Engineering, University of Maine
B.S., Construction Management Technology, University of Maine
A.S., Civil Engineering, University of Maine

#### **Registration**:

• Professional Engineer (P.E.), Maine, New Hampshire

## Certifications:

ACI/MCTCB Certified Concrete Testing Technician
Certified Nuclear Densometer Operator

## Affiliations:

American Society of Civil Engineers (ASCE)
Associated Constructors of Maine (ACM)
ASFE/Professional Firms Practicing in the Geosciences
American Council of Engineering Companies (ACEC) to the position of Geotechnical Engineer, and in 1999, after S.

W. Cole Engineering, Inc. acquired the former operation of Morrison Geotechnical Engineering, Bob moved to our new Winslow, Maine office and oversaw its eventual move to Augusta, Maine. Bob is a Vice President, Senior Geotechnical Engineer and the Manager of our Augusta office. His responsibilities include office management and project management of geotechnical engineering projects, coordination of subsurface investigations, technical analysis, and design of shallow and deep foundations and earth slopes.

## Honors:

• Distinguished Engineer, The Francis Crowe Society, University of Maine, 2001

• Chi Epsilon – Civil Engineering Honor Society, Chapter Honor Member, Inducted 2003

## Achievements:

- Board of Directors, Construction Specifications Institute
- President, American Society of Civil Engineers, Maine Section

• Graduate, ASFE Fundamentals of Professional Practice Course

• Board of Directors, S. W. Cole Engineering, Inc.

## Specialized Training:

• Fundamentals of Deep Foundations, 45-Hour Short Course, University of Florida

## S. W. COLE ENGINEERING INC.

## ROBERT E. CHAPUT, JR., P.E.

## BRUCE P. GRAY, P.E. President Senior Geotechnical Engineer



A native of Orrington, Maine, Bruce has more than 25 years of experience in the geotechnical consulting field. He attended schools in Orrington and Brewer, Maine before attending the University of Maine, where he graduated with a B.S. degree in Civil Engineering. After graduating, Bruce worked

#### Education:

B.S., Civil Engineering, University of Maine
Post Graduate Courses in Geotechnical Engineering, University of Maine

#### **Registration**:

• Professional Engineer (P.E.), Maine

#### Achievements:

 Co-Chair, Board of Directors for the Maine QBS (Qualifications Based Selection) Council
 Member, Maine Bureau

• Member, Maine Bureau of General Services Alternative Delivery Review Panel

• Past Member, Technical Advisory Group to the Governor's Commission on School Facilities

• Past Treasurer, American Society of Civil Engineers (Maine Chapter)

• Board of Directors, S. W. Cole Engineering, Inc.

#### Civic Activities:

Youth Soccer, Basketball and Baseball Coach
Past Chair, Orrington School Building Committee
Past Chair, Orrington

School Committee

as a Geotechnical Engineer in the Bangor office of Jordan Gorrill Associates. When Jordan Gorrill closed the Bangor office in 1979, Bruce moved to the company's Portland office, then relocated to the Bangor area to join S. W. Cole Engineering, Inc. in 1980.



Bruce served as Vice President of

S. W. Cole Engineering, Inc. from 1980 until his appointment to Senior Vice President in 1999. He was appointed President of the firm in 2002. His responsibilities include corporate and project management duties, technical analysis, and design of shallow and deep foundations and earth slopes. Bruce has provided geotechnical engineering for a wide variety of projects and has substantial experience with compressible soil sites.

## Publications:

"Earthquakes." National Engineers Week Supplement. Bangor Daily News. 1990.

"Orrington Slope Stabilization Project." National Engineers Week Supplement. Bangor Daily News. 1993.

Meteorological Data Analysis and Consultation: Ron Nierenberg

## **OBJECTIVE**

Design, implement, manage and analyze wind energy assessment programs to optimize production from windfarm developments.

## **QUALIFICATIONS**

- \* 25+ years experience as wind energy meteorologist.
- \* Sited/assessed 1,000 MW of wind farms in both 2001 + 2003, ~2/3 of U.S. installations.
- \* Managed wind monitoring programs with aggregate value of \$3 million.
- \* Conceived and managed two DOE funded wind research projects.
- \* Developed software library for wind energy analysis.
- \* Conducted original wind study of the Altamont Pass.

## **ACHIEVEMENTS**

Designed and managed large federally funded wind turbine study. Analyzed energy production test data to determine causes of variability in turbine performance. Resulted in authorship of two DOE/NREL (SERI) reports. Achieved 99.9% data recovery rate.

Consolidated and analyzed wind data from entire Altamont Pass to explain multi-million dollar revenue losses due to macro-scale wake effects. Findings published in five journals.

Developed extensive software library, used exclusively for wind energy analysis, which can run on mainframes or advanced PCs.

Co-authored original wind resource assessment study of the Altamont Pass, published by California Energy Commission, which led to the installation of \$1 billion of wind turbines.

Designed and managed hundreds of wind monitoring programs for windfarm developments in California, and other states, as well as Canada, Latin America, China, India and the UK, to accurately assess economic viability of these projects.

## **EXPERIENCE**

Consulting Meteorologist,	DOE, FPLE, and other utilities,	1982-Present
	and every major U.S. wind developer	
Meteorologist,	Howden Wind Parks Inc.	1986-1989
Director of Meteorology,	NFC Energy Corp.	1983-1984
Chief Meteorologist,	Windfarms, Ltd.	1981-1982
Meteorologist,	Pacific Gas & Electric Co.	1978-1981
Meteorologist,	Oceanroutes	1977-1978
Researcher,	National Center for Earthquake Research	1975-1976

## **EDUCATION**

B.S.	Meteorology, California State University, San Jose	1976
B.A.	Geography, California State University, San Francisco	1971

## **PUBLICATIONS**

R. Nierenberg, <u>Wake Deficit Measurements on the Jess and Souza Ranches, Altamont Pass</u>, U.S. Department of Energy/SERI, April, 1990.

R. Nierenberg, <u>Free-Flow Variability on the Jess and Souza Ranches</u>, Altamont Pass, U.S. Department of Energy/SERI, March, 1989.

R. Nierenberg, <u>Macro-Scale Wake Effects</u>, American Wind Energy Association, September, 1989. Portions of this paper appeared in *Wind Power Monthly*, *Independent Energy*, *WindStats Newsletter* and *European Wind Energy Conference and Exhibition*, July, 1989.

R. Nierenberg, <u>An Innovative Wind Measurement Program Using Fixed</u>, <u>Mobile and Kite</u> <u>Anemometers</u>, American Wind Energy Association, October, 1983.

Davis, E. and R. Nierenberg, <u>Wind Energy Prospecting in Alameda and Solano Counties</u>, California Energy Commission, May, 1980.

## AWARD

Special award "For making critical contributions to the development of wind energy in the U.S. and around the world", presented by the American Wind Energy Association, April 1998.

## Legal Counsel for Permitting: Bernstein Shur Sawyer & Nelson

Bernstein, Shur, Sawyer & Nelson, established in 1915, is one of northern New England's largest law firms. With offices in Portland and Augusta, Maine, and Manchester, New Hampshire, BSSN is a full service law firm serving a diverse client base locally and throughout the world. Widely regarded as one of New England's most entrepreneurial firms, BSSN counsels clients of all sizes and backgrounds. With attorneys specializing in a wide range of expertise, BSSN is able to mobilize the resources needed to solve today's increasingly complex legal challenges.

www.bssn.com

# **JEFFREY A. THALER**

jthaler@bssn.com

Concentrating in Federal and State Trials, Environmental and Natural Resources Law, Commercial, Toxic Tort, Malpractice, Insurance Coverage and Personal Injury Litigation

One of Maine's best-known and most successful trial and environmental attorneys, Jeff Thaler has a wide-ranging practice that includes environmental permitting and litigation, as well as litigation for clients with commercial, medical and legal disputes, insurance coverage, personal injury, or toxic tort problems. Jeff is listed in *Best Lawyers in America* for his business and personal injury litigation skills, as well as for his environmental and natural resources work.

In 2003 Jeff was trial counsel in a federal accounting case in which a jury awarded his client over \$6.6 million. He also was lead trial counsel in obtaining a hard-fought settlement of more than \$5 million relating to the design, construction and operation of a waste-to-energy plant, and has several other seven-figure settlements. Jeff has successfully defended many attorneys and law firms throughout Maine in State and Federal Courts. He also was environmental counsel for Florida Power & Light's acquisition of the energy producing assets of Central Maine Power Company in 1999, and for Fjord Seafood's acquisition of Atlantic Salmon of Maine in 2001.

Following 14 years serving as a member of the Maine Supreme Court's Committee on the Code of Professional Responsibility, Jeff now counsels other attorneys on issues of professional ethics, and has served as an expert witness in legal malpractice cases. He is a frequent lecturer to lawyer, business and citizen groups on such topics as toxic torts, environmental legislation, court decisions, and legal ethics. He has written extensively for many state and national publications.

## **EDUCATION:**

Yale University Law School (J.D., 1977)

Williams College (B.A., magna cum laude with Highest Honors, 1974)

## **BAR ADMISSIONS:**

New York (1977), Maine (1979), District of Columbia (1978), New York (1977), U.S. District Court, Southern District of New York (1978), U.S. District Court, District of Maine (1979), U.S. Court of Appeals, First Circuit (1996), U.S. Supreme Court (1996)

## **PROFESSIONAL ASSOCIATIONS:**

State Land for Maine's Future Board, 2004-present

Maine Supreme Judicial Court Advisory Committee on Professional Responsibility, 1989-2000; Chair, 1996-2000

Adjunct Professor, University of Maine School of Law, January 2000-2001

Maine State Bar Association: Chair, Environmental & Natural Resources, 1997-1999; Administrative Law; Employment Law; Judiciary; Municipal Law

Edward T. Gignoux Inn of Court, Team Leader, 1997-2003

Maine Trial Lawyers Assn.: Board of Governors, 1998-present

Cumberland Bar Association – Member

American Bar Association – Member

Maine Trial Lawyers Association – Member

American Trial Lawyers Association – Member

## **CIVIC AND CHARITABLE ORGANIZATIONS:**

Environmental and Energy Technology Council, Board of Directors, 2002-present

KIDS Consortium, Member, Executive Committee and Board of Directors, 1996-present

Governor King's Task Force on Lead Poisoning Liability & Insurance, 1996-2000

Tom Allen for Congress, Issues Committee, 1996

Tom Allen for Governor, Steering Committee, 1993-94

Trial Lawyers for Public Justice Foundation, Maine State Coordinator, 1993-2002

Legal Panel of the Maine Civil Liberties Union, Member and Attorney, 1980-84, 1986present

Center for Grieving Children, Facilitator, 2001-present

Yarmouth Athletics Field Committee, Member 1999-2003

Alumni Society of Williams College, Executive Committee, 1995-1998

Casco Bay YMCA Capital Campaign, Team Leader, 1996

Yarmouth Community Services, Coach Baseball, Basketball, Soccer 1993-1998

Island Institute, Clerk & Member, Board of Trustees 1990-1993

Profile of Turbine Manufacturer, Vestas Wind Systems A/S



## **Profile of Vestas**



Vestas is the world leader in wind technology and a driving force in the development of the wind power industry.

Vestas' core business comprises the development, manufacture, sale, marketing and maintenance of wind power systems that use wind energy to generate electricity.

#### Vestas' background - from pioneer to market leader

Vestas started to manufacture wind turbines in 1979 and has played an active role in this dynamic industry ever since. In 1987, Vestas began to concentrate exclusively on wind energy and since then, the company has developed from a pioneer in the industry with a staff of around 60 to a global hi-tech market-leading group with more than 9,500 employees (June 2004).

Click here for a closer look at Vestas' history. Click here to see the Vestas' key figures.

#### Vision and mission

Click here to read Vestas' vision and mission.

#### Values

Vestas' core values are trustworthiness, care, the power to act and development. These values are the foundation of Vestas' attitudes and corporate culture. Click here to find out more about Vestas' values.

#### Strategy and goals

Vestas' strategy is to supply customised wind power solutions based on standard wind turbines and standardised options that can generate electricity of the optimal quality at the most competitive price. Click here to find out more about Vestas' strategy and goals. Click here to see Vestas' strategic plan of action 2005-2008.

#### Vestas - a trustworthy partner

At Vestas global experience and local expertise go hand in hand. Over the years, Vestas has built up a worldwide sales and service network. As a result, working relationships with turbine owners do not end with delivery. On the contrary, the final delivery of a turbine marks the beginning of close collaboration over a period of at least 20 years. In short, Vestas cares for its turbines, no matter where in the world they may be. This ensures that Vestas remains a truly trustworthy partner.



Vestas

Vestas Wind Systems A/S Alsvej 21 8900 Randers Denmark Tel.: +45 97 30 00 00

Vestas is the world leader in wind technology and a driving force in the development of the wind power industry.

Vestas' core business comprises the development, manufacture, sale, marketing and maintenance of wind power systems.

>> Read more...



#### **Quality assurance**

#### Purpose

The purpose of a quality assurance system is to ensure that all products manufactured and supplied meet Vestas' specifications in full. This applies to all aspects of quality: product quality, on-time delivery, correct quantities and all other services. However, it also involves making sure that all suppliers live up to Vestas' high standards. Only by ensuring that every link of the chain is equally strong can Vestas maintain these standards - and continue to operate as a reliable partner.

Another purpose of quality assurance is to record and analyse the causes of any errors that may occur, and to allow Vestas to locate, correct and prevent such errors. Vestas was certified according to the ISO 9002 standard in 1991, and this certification was extended to the ISO 9001 standard in 1996.

#### Quality and care

Quality and care are key concepts at Vestas. That is why Vestas trains all employees and informs them about the group quality policy. The company also works to influence attitudes among both employees and partners to achieve understanding of Vestas' objectives and the need for shared efforts.

#### Means

Vestas' policy is to manufacture all components that cannot be purchased externally in standard or slightly modified forms on the basis of total-economic considerations. This means that the group itself possesses the know-how required, which naturally makes Vestas less dependent on sub-suppliers.

Every activity undertaken stems from requirements for quality and care. This naturally applies to product deliveries - but the services associated with the pre-sale phase, project management and erection, as well as subsequent service and maintenance, are also carried out in accordance with a set of fixed internal procedures.

Vestas regularly visits selected suppliers and critically analyses all vital production processes. A "control agreement" is then drawn up between Vestas' quality department and the supplier's quality manager. This agreement ensures that all components are made to Vestas' specifications and thoroughly checked before delivery.

#### Documentation

Vestas has established a range of follow-up systems. A project group consisting of technical personnel from different departments actively carries out "product follow-up procedures" on new turbines and evaluates the need for improvements on the basis of feedback from commissioned products. The conclusions drawn by the project group are used to correct production and, if necessary, the commissioned products themselves.



Vestas

## Vestas Wind Systems A/S

Alsvej 21 8900 Randers Denmark Tel.: +45 97 30 00 00 Fax: +45 97 30 00 01

Vestas is the world leader in wind technology and a driving force in the development of the wind power industry.

Vestas' core business comprises the development, manufacture, sale, marketing and maintenance of wind power systems.

>> Read more...