



LANE COBURN & ASSOCIATE

FIRM PROFILE

2010

ELECTRICAL ENGINEERING SOLUTIONS
FOR THE CONSTRUCTION INDUSTRY

ELECTRICAL ENGINEERING

D/B TEAM MEMBER

LIGHTING DESIGN

CONSULTING

LEED A.P



LANE COBURN & ASSOCIATES, LLC *Electrical Engineering Solutions for the Construction Industry*

Electrical & Telecommunications Engineering/Design/CAD & Construction Administration Services.

Specialty Design Services Include; Power/Coordination Studies, Arc Flash Studies, Power Quality Analysis, Lighting Design & Photometric Analysis & Energy Audit Studies.

With our LEED Certification and LEED Project Experience, We are a Strong Green Building Team Member. We also provide Data Systems Design. We are RCDD/NTS Certified through BICSI.

LCA has the Advantage of Professional Engineering Licenses, a General Electrical Administrator License and a Journeyman Electrician License. With our Expertise and Hands on Experience we will provide Designs with the Most Value and Constructability.

Our eight staff members include Professional Engineers, Sr. Electrical Designers & CAD designers. With an average of over 25 years of experience each, our team has the expertise to support your project.

The LCA Team



Keith Lane, P.E., LEED Scott Coburn Bill Waldrop, RCDD Gary Mullin, P.E. Nick Alexander, LEED Don Pontsler, P.E. Vicky Williams Theresa Lane

Keith Lane, P.E, RCDD/NTS, TPM, LC, LEED A.P.
Scott Coburn
Bill Waldrop, RCDD
Gary Mullin, P.E.
Don Pontsler, P.E., MPA
Nick Alexander, LEED A.P.
Vicky Williams
Theresa Lane

President/CEO & Chief Engineer
Principal
Sr. Associate/Telecom Group Manager
Sr. Electrical/Communication Engineer
Sr. Electrical Engineer
Associate, CAD Manager
Associate, Sr. Electrical Designer
Associate, Office Manager

Contact Lane Coburn & Associates, LLC
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Lane Coburn & Associates, LLC Receives 2009 Best of Business Award

Small Business Commerce Association's Award Honors the Achievement

SAN FRANCISCO, November 7, 2009, Lane Coburn & Associates, LLC has been selected for the 2009 Best of Business Award in the Business services category by the Small Business Commerce Association (SBCA)

The SBCA 2009 Award Program recognizes the top 5% of small businesses throughout the country. Using statistical research and consumer feedback, the SBCA identifies companies that they believe have demonstrated what makes small businesses a vital part of the American economy. The selection committee chooses the award winners from nominees based off statistical research and also information taken from monthly surveys administered by the SBCA, a review of consumer rankings, and other consumer reports.



LANE COBURN & ASSOCIATES, LLC - COMPANY PROFILE

Lane Coburn & Associates, LLC is an electrical engineering firm located in Bothell, Washington. We offer electrical engineering & Telecommunications consulting and design services for the construction industry. We will also provide electrical engineering services for fast paced projects as a key member of your dynamic design build team.

We fully embrace and understand the importance of technology to better serve our clients. We stay mobile and agile with laptops and blackberry's. We stay connected to our clients with a company FTP site and with Video Conferencing and Live Meetings. We also have extensive experience with 3D modeling, 3D animation, Autodesk Building Systems Revit for BIM (Building Information Modeling) and other software including SKM Power Tools.

Lane Coburn & Associates, LLC has extensive experience with both consulting and design/build projects. These projects include:

- Data Center, Mission Critical, DC Plant
- High Tech, High Rise, Commercial
- Hotel, Mixed Use, Retail, Residential
- Lab/Hospital, Clean Rooms, cGMP
- Special Events, Museum, Historical Convention Center
- High Voltage, Community Infrastructure
- School, Government, Agency Projects
- Wastewater Treatment Facilities

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Lane Coburn & Associates Principals and employees have a long history of successful relationships with a diverse set of clients. We have provided engineering services for General Contractors, Developers, Design/Build Electrical Contractors, Electrical Consultants, Mechanical Consultants, Mechanical Contractors, Architects, Owners, Government Agencies and City Agencies.

In addition to superior customer service, Lane Coburn & Associates, LLC main objectives are providing a design with maximum value and constructability. Our mission statement is: "Work in conjunction with the Design Team to provide the Client with superior design, value engineering and constructability."

Lane Coburn & Associates, LLC has an extensive amount of telecommunication design and building systems integration experience. In addition, Lane Coburn & Associates holds the RCDD (Registered Communications Distribution Designer) professional credential a NTS (Network Transport System) Specialist and a TPM (Telecommunication Project Manager) certification.

Lane Coburn & Associates is "LC" Certified (Lighting Certified Qualified Professional) through the National Council on Qualifications for the Lighting Professional (NCQLP). The "LC" certification along with our twelve year professional membership with the Illuminating



Engineering Society of North America (IESNA), our extensive electronic library of photometrics, state of the art three-dimensional lighting programs and our extensive experience with high end, high profile lighting projects ensures a high quality, professional, competent lighting design.

Lane Coburn & Associates, LLC maintains LEED accreditation (Leadership in Energy & Environmental Design) with the United States Green Building Council and Professional Electrical Engineering licenses in several states. These states include; Washington, Oregon, Alaska, Nevada, Utah, California, Hawaii, Arizona, Nevada, Pennsylvania & Idaho.

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Maintaining the highest quality product means keeping abreast of the latest technologies, products and codes. In addition to participating in continued education, Lane Coburn & Associates, LLC has professional memberships in the following organizations:

- ▶ BICSI - A Telecommunications Company
- ▶ The Illuminating Engineering Society of North America
- ▶ The Washington State Society of Professional Engineers
- ▶ 7x24 Power Exchange
- ▶ The Washington State Society of Healthcare Engineers
- ▶ The National Fire Protection Agency - Electrical Section
- ▶ Honored Member of the American Registry of Outstanding Professionals

Lane Coburn & Associates offers full electrical engineering, design and CAD services, including:

- ▶ Complete Engineering / Design Services
 - ▶ Quality Assurance, Quality Control Process
 - ▶ High Quality Computer Aided Design (CAD)
 - ▶ Conceptual Engineering
 - ▶ Cost Estimating
 - ▶ Construction Administration
 - ▶ Peer Review Services
- ▶ Plan Review Coordination Services
- ▶ Lighting Design
- ▶ Power System Studies
- ▶ Energy Audit Studies

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Our ultimate goal is to provide a quality and timely product.

We would appreciate your consideration in using Lane Coburn & Associates as your Electrical Engineering Consultant and/or part of your Design/Build team. If you have questions or need additional information, please do not hesitate to contact us at (425) 368-4848 or at klane@lanecoburn.com.

Client Recommendations

At Lane Coburn & Associates our customers are our primary concern. It is critical that we bring exceptional value to any project. Attached below is a sampling of some of our client's recommendations that we have received since opening our doors in 2007:

"Lane Coburn & Associates was hired to do the electrical engineering for a large data center project on which I was the owner's representative. Keith took the lead on the project and from the beginning did an excellent job of balancing cost and quality to achieve the highest value of designed systems for the client. Keith consistently considers new and alternative approaches to systems and brings new, creative solutions to the table. He is a leader in his field and I would be pleased to work with him in the future." *December 9, 2008*

Top qualities: Great Results, Expert, High Integrity

[Terry Rennaker](#), Owner of Rennaker Company LLC - Hired Lane Coburn & Associates as an Electrical Engineer in 2008

"I work with Keith on a very complicated mixed-use Seattle condominium project which included residential, retail and hotel components. Keith was able to take the divergent requirements of each component and weave those requirements in to a cohesive, constructible, cost effective electrical system design. Keith's attention to detail and finger-tip knowledge of electrical codes made him an invaluable member of the design team. Keith's innovative approach to electrical system design incorporates new, cutting-edge technology solutions in balance with cost objectives. Keith is a leader in his field and I look forward to future opportunities to work with him." *February 11, 2009*

[Jim Alekson](#), *President & CEO, Alekson Development Group*

"Sequoyah Electric has worked with Lane Coburn and Associates on various projects throughout the Seattle, Washington area which have proven to be very successful for all parties involved. The engineering Team that Keith Lane and Scott Coburn developed has proven to be excellent in their knowledge of the Industry and proactive in design creativity along with understanding budget constraints. We feel that the Lane Coburn Team always brings to us their refined skills and insights to a project which eliminates conundrums and positions a project for success. Lane Coburn and Associates will continue to be a instrumental part of our business and future growth throughout the Washington area." *February 17, 2009*

[Jeff Casino](#), *Sequoyah Electric Pre-construction Manager*

"I have worked with Keith on several mission critical projects over the past 7-8 years. I first worked with Keith at SASCO and have recently worked with Keith at Lane Coburn & Associates. Keith is an excellent engineer with a strong work ethic. Keith brings an in depth knowledge of the leading edge technologies and design philosophies to ensure a project has the desired amount of reliability and value. Keith has a unique ability to communicate design options in basic terms to the owner and the other design team members. Keith is a leader and I would be pleased to work with him in the future." *January 08, 2009*

Matt Blackburn, *Owner, Lighthouse Electric Group.*

"I recently worked with Keith on two data center projects (one in the pre-planning stage and one in construction). He is a very detail oriented electrical engineer who is a pleasure to work with. He is very code savvy and a true team player. I hope to work with Keith again in the near future." *December 29, 2008*

Michael Frank, P.E., *Senior Engineer, McKinstry.*

"Keith's dedication to constant improvement and knowledge growth ensures that his design incorporates all of the latest innovations and ideas." *December 16, 2008*

Top qualities: Great Results, Expert, High Integrity

Tom Williams, Sr. Project Manager SASCO - Hired Lane Coburn & Associates as an Engineer in 2008/2009.

"Keith is an outstanding engineer and has a very strong work ethic. We worked together for several years for a consulting engineering firm. We have also worked on some of the same projects at my current position. I highly recommend Keith and his firm for all types of electrical engineering." *December 14, 2008*

Gary Mullin, P.E., *Electrical Engineer, Port of Seattle.* Worked directly with Keith at Lane Coburn & Associates, LLC.

“Dear Keith, Tactical Vs. Technical set the tone for the referenced project. It is all too common to rely on the field crews to initiate rigging and cable pulling techniques for a large project. However, LCa staff proved that your firm works beyond just electrical technical knowledge. At my clients request LCa provided “Tactical” calculations for installing over 5000 feet of medium voltage cable weighing 12 pounds per foot. The weight and lengths of these cables required precise cable pulling calculations to assure that ropes, cables and sheaves would meet the tensions and pressures during the installation process. In addition, LCa staff designed “Sheave Placements” for use by the Linemen during the installation.

The engineering work by LCa was incorporated into the “Work Plan” that was written by Salish Group to provide a safe and professional installation of the 15KV cables. Previous work was halted for two months due to three near fatalities occurring in a very short duration prior to Salish Group becoming the construction management team on the project. With Lane Coburn’s tactical approach to solving the aforementioned issues the project was completed on time and the client conceded that they were not certain the work could have been completed without proper engineering assistance.

I look forward to working with you again!” *October 26th, 2009*

[Jim Long](#), Owner of Salish Group Construction Services - Hired Lane Coburn & Associates for the electrical engineering on the 11.95 KV Switchyard - 15KV Cable Replacements at Grand Coulee Dam.



Keith Lane, P.E., RCDD/NTS Specialist, TPM, LC, LEED A.P.
Professional Electrical Engineer, General Electrical Administrator
President/CEO - Chief Engineer – Lane Coburn & Associates, LLC



Years of Experience

17

P.E. Licenses

Washington, Alaska, California, Oregon, Utah, Montana, Idaho, Hawaii, Nevada, Arizona, Pennsylvania & Virginia

Qualifications

Keith is a Professional Electrical Engineer licensed in twelve states (P.E.), a Licensed General Electrical Administrator in Washington State, a Registered Communications Distribution Designer (RCDD) through BICSI, a Network Transport System Specialist (NTS (LAN) Specialist) registered through BICSI, a Certified Telecommunications Project Manager (TPM) through the Telecommunication Project Management Association (TPMA), a Lighting Certified Qualified Professional (LC) through the National Council on Qualifications for the Lighting Professional – NCQLP and a LEED Accredited Professional (LEED A.P.) (Leadership in Energy and Environmental Design) through the U.S. Green Building Council. Keith has active memberships in several professional organizations including; BICSI, TPMA (Telecommunication Project Management Association), the NFPA, the 7 x 24 Exchange – End to End Reliability, the Illuminating Engineering Society, the Washington State Society of Healthcare Engineers.

Work History

LANE COBURN & ASSOCIATES, LLC. ***7/07 – Present***
President/CEO – Chief Engineer

SASCO - Electrical Design/Build Contractor ***12/99 – 7/07***
Overall Director / Vice President/ Engineer of Record (P.E.)

Keith was the Overall Director of Engineering for SASCO, for the largest privately held electrical and data contractor in the nation. In addition, he was the Vice President of Engineering and Engineer of Record for the Northwest and Northern California operations. Keith provided management, engineering/design and construction administration services for a broad range of project including; commercial, industrial, high-tech, high-rise, residential, mix-use, retail, data center, switch facilities, healthcare, historic, school, government, and public utilities. He has proficiencies in various engineering, management, coordination study, CAD and lighting analysis/design programs. He stays current with memberships in several professional organizations.

Keith oversaw, managed and was professionally responsible for the engineering and construction administration of approximately \$85,000,000/year of commercial and industrial electrical construction. Keith played an integral role in the interregional sharing of resources and ideas between SASCO regional offices through weekly video conf. calls and meetings.

Keith is a nationally recognized author and has provided numerous technical articles to leading engineering magazines and has served as an expert panelist on several nationally broadcast web casts. Keith has also served on the Seattle Code Committee, which evaluated the 2005 & 2008 National Electrical Code .

Gray & Osborne Consulting Engineers ***4/95 – 12/99***
Sr. Electrical Engineer/P.E.

Keith was a Sr. Electrical Engineer and a Professional Electrical Engineer at Gray & Osborne. Keith provided Professional Electrical Engineering services for projects including



City infrastructure, High Voltage Distribution, Industrial, Street Lighting, Wastewater Treatment Facilities, Military Facilities, Schools, Fire Station, City Hall and Pump Stations. In addition to providing professional engineering services for plans and specifications on many diverse projects, Keith was integrally involved as either Sr. Electrical Engineer or Engineer of Record with several Capital Improvement Plans, reports and studies.

Cochran Electric
Electrical Engineer

12/94 – 4/95

Keith was a Sr. Electrical Engineer at Cochran Electric. Keith provided engineering services for a broad range of projects including; commercial, high-tech, theatre, retail & data centers.

In addition to providing plans and specifications, Keith provided extensive field investigation and documentation throughout the entire design process. The Construction Administration process included field investigation, verification of scope and code compliance and project closeout.

Sparling Consulting Engineers
Electrical Engineer

12/93 – 12/94

Keith was an Electrical Engineer at Sparling. Keith provided engineering services for a broad range of projects including; commercial, high-tech, retail, hospital & data centers. In addition to providing plans and specifications, Keith provided extensive field investigation.

Veca Electric Electrical Engineer

2/93 – 12/93

Keith was an Electrical Engineer at Veca. Keith provided engineering services for a broad range of projects including; commercial, high-tech, theatre, retail and data centers. In addition to providing plans and specifications, Keith provided extensive field investigation.

Professional Certifications, Education & Activities -Professional Electrical Engineering Lic.

Washington: 1998 (#35731) **Alaska:** 2001 (#10332) **California:** 2001 (#E16471)
Arizona: 2002 (#38527) **Oregon:** 2001 (66879PE) **Utah:** 2001 (#4909891)
Montana: 2001 (#14712PE) **Idaho:** 2001 (#10104) **Hawaii:** 2002 (#10622)
Nevada: 2002 (#015900) EIT Certified: 1994 (#19253) **NCEES Record**
Licensed General Electrical Administrator – Washington State: LANE*KT943DR

Additional Certifications / Accreditations:

- (RCDD) Registered Communications Distribution Designer – BICSI #07016
- (NTS (LAN) Specialist) Network Transport System Specialist – BICSI #01506
- “LC” Lighting Certified Qualified Professional (NCQLP)
- TPM – Certified Telecommunications Project Manager through the (TPMA)
- LEED Accredited Professional (Leadership in Energy & Environmental Design)
- Cold Regions Engineering Certified-University of Washington & University of Alaska
- Advanced project manager training BICSI – PM 125
- International Illumination Design Award (IIDA) 2003 - Section Participant Award

Education

Bachelor of Science in Electrical Engineering, Seattle University, 1993
Dean’s List, Seattle University, Electrical Engineering Department 1992
Dean’s List, University of Washington, Engineering Department 1987, 1988

Professional Memberships & Activities

Member of the Seattle Code Committee Implementation of the NEC – 2005 & 2008
Contributing Editor to Consulting Specifying Engineering Magazine – 2004/2005
Advisory Board for Consulting Specifying Engineering 2005 - 2009
Named one of the “Top 40 Engineers Under 40” by Consulting Specifying Engineering (2008)
Member of the Illuminating Engineering Society of North America.
Member of the 7x24 Exchange – Northwest Chapter (End to End Reliability).
Member of BICSI – A Telecommunications Association.
Member of the Telecommunication Project Management Association (TPMA)
Member of the Washington State Society of Healthcare Engineers.



Scott Coburn
Sr. Electrical Designer - Licensed Journeyman Electrician
Principal- Lane Coburn & Associates, LLC.

Years of Experience 21

Qualifications

Scott is an experienced Electrical Designer / Project Manager with over 21 years of experience and background in electrical design, engineering, management and budget control for extensive range of project including; Bio-tech, Bioreactors, cGMP, Class 10 (ISO 4) CleanRooms, Vivariums, military, NAVFAC, SPAWAR, Home land security, Healthcare, MRI, NMR, Waste management facilities, fueling stations, Higher Education, Retail, Entertainment, Public/Civil projects, Motion Capture Facilities, Data Centers and robotics laboratories.

Scott has worked as Vice-President of engineering, Project Manager, Director of estimating, General Electrical Foreman and a Journeyman Electrician. Scott has extensive 3D Expertise including clash detection with Navisworks and VR fly through.

Scott has designed several projects that have won major awards including the San Diego Animal Control Facility (San Diego 2002 Orchids award) and Navy Lodge Complex NAS North Island, Coronado, CA. (Awarded a Southwest Division Award for Outstanding design). Scott designed the Sony SCEA Motion Capture Studio in San Diego, CA. At the time of design Sony SECA was the largest, most advanced Motion Capture Studio in the world.

Scott was also involved in many OSHPD (Office of Statewide Health Planning and Development) Projects including the UCSD Thornton Hospital stem cell laboratory project and the Glendale Memorial Hospital X-ray Room and Orthopedic suites.

Scott has the significant advantage over typical consulting engineers because of his deep understanding of field related issues. Knowing how project actually go together from an engineering and code stand point but also a field stand point allow him to provide unique perspective on Design/Build and Value Engineering. Scott will utilize his extensive project experience to coordinate with field personnel to add Constructability and Value Engineering to the Design and Engineering process.

Work History

LANE COBURN & ASSOCIATES, LLC.
Principal

7/07 – Present

SASCO - Electrical Design/Build Contractor
Sr. Electrical Designer

10/05 – 7/07



Scott was a Sr. Electrical Designer for the largest privately held electrical and data contractor in the nation (SASCO). Scott provided management, engineering/design and construction administration services for a broad range of project including; commercial, industrial, high-tech, high-rise, residential, mix-use, retail, data center, switch facilities, healthcare, historic, school, government, and public utilities. He has proficiencies in various engineering, management, coordination study, CAD and lighting analysis/design programs. He stays current with memberships in several professional organizations.

Rock Electric – San Diego

8/87 – 10/05

Vice President, Sr. Electrical Designer/Project Manager/Journeyman Electrician

Scott was the Vice-President of engineering at Rock Electric Inc. This included “cradle to grave” and “cradle to cradle”, design, utility design and coordination and Project Management of all Design Build projects. From conception to final buy off by owner Scott works hands on in all aspects of the project to ensure compliance with design and good engineering practices, code and local requirements, efficient and cost effective building methods and satisfaction of all stakeholder.

Education & Activities

Journeyman Electrician
SKM Power Tools
Captor/Dapper/Arc Flash
Navisworks
Jetstream V5
CalcWare AmpCalc
ETAP
AutoCAD through ACAD2009
Architectural Desktop 2009
Bentley Microstation
Revit 2009 MEP
AutoCAD P&ID
3DMAX
Visual 2.5
Lexicon 2.5.25
AGI32
GIS-ArcView
Primavera 6.0 (P6™)
Primavera Expedition to Version 8.5
Sure Track
Masterspec
Accubid Bid Winner Version 6
Accubid C/O Version 5
McCormick
Energy Pro Version 3.0
COMcheck 5.5.2
Microsoft Office
Working knowledge of National Electrical Code
Working knowledge of IES lighting standards
Working knowledge of construction trade



Bill Waldrop, RCDD
Sr. Associate, Telecommunications Group Manager
Associate – Lane Coburn & Associates, LLC

Years of Experience 30

Qualifications

Bill is a Registered Communications Distribution Designer (RCDD) through BICSI and LCA' Telecommunications Group Manager. Bill's background includes extensive project experience in commercial, municipal, institutional, industrial, airport, seaport and military projects. Design experience includes site lighting, power distribution, standby and emergency power systems, building power, lighting, communications, controls, cost estimating, project management and construction administration. Computer skills include proficiency in AutoCAD, Microsoft Word and Excel, and other engineering programs. Bill's goal on every project is to create high-quality construction documents, including calculations, plans, details and specifications, and to coordinate effectively with the design team and other disciplines to ensure quality control and code compliance.

Work History

LANE COBURN & ASSOCIATES, LLC. ***7/08 – Present***
Associate - Sr. Electrical Designer

Bill joined Lane Coburn & Associates to contribute his experience to the design team for the successful completion of projects, including commercial, industrial, high-tech, high-rise, residential, mix-use, retail, data center, switch facilities, healthcare, historic, school, government, and public utilities. Bill stays current with memberships in several professional organizations.

McGowan Broz / CB Engineers ***5/01 – 7/08***
Sr. Electrical Designer

Bill worked at McGowan Broz Engineers as a Sr. Electrical Designer on commercial, industrial, municipal and military projects. In addition to project design work, Bill developed panel and feeder schedules to include automatic demand load, fault current and circuit voltage drop calculations, rewrote the company policies and procedures manual, including development of standard office forms, created project management and quality control checklists, developed electrical survey forms for condition assessment reports, and created a business disaster preparedness plan. During the transition from McGowan Broz Engineers to a branch office of San Francisco based CB Engineers, Bill worked with staff members in other offices to coordinate design, drafting and project management procedures for incorporation into overall company standards.

SASCO - Electrical Design/Build Contractor ***2/00 – 5/01***
Sr. Electrical Designer

During his employment with SASCO, Bill provided all elements of electrical design, including field investigation, calculations, drawings and specifications for this electrical contracting



company. Coordination was required with construction project managers and the cost estimating department to ensure profitability on all design-build contracts. Bill assisted in updating symbol libraries, drafting and presentation standards.

McGowan Broz Engineers
Sr. Electrical Designer

6/95 – 2/00

Bill joined McGowan Broz Engineers shortly after the company started business to provide electrical design and drafting support. Bill learned AutoCAD and developed symbol libraries, drafting and presentation standards for the office. Project work included industrial, municipal, commercial, military and government facilities. Bill further developed his electrical design skills, including field investigation, calculations and specifications, and was assigned to both project management and project administration responsibilities on numerous small to medium scale projects. Bill's attention to detail and accuracy contributed significantly to the success of each project.

Coffman Engineers
Electrical Designer

6/83 – 6/95

Bill joined Coffman Engineers for the opportunity to learn electrical design and computer aided drafting using Microstation. When the company changed drafting software to Pegasys, Bill learned the system, converted symbol libraries, documented hardware and software changes and trained others. Bill developed electrical design skills through on-the-job training, including calculations, specifications, and cost estimating, and was given limited project management and construction administration opportunities. Project work included commercial, industrial, municipal facilities. Bill developed a good working relationship with other design team members to consistently produce high-quality construction documents.

URS Engineers
Design Technician

5/77 – 6/83

Bill joined URS Engineers after completing his degree in structural drafting. Bill was highly regarded for his drafting speed and accuracy and was given additional responsibilities as a drafting technician in other disciplines. Projects were typically for municipal clients and included numerous large water and wastewater treatment plants and associated pump stations.

United States Navy
First Class Data Systems Technician

6/69 – 6/75

After two years of training, Bill was assigned duty on the guided missile frigate USS England. Bill made rank quickly and become the division leading petty officer responsible for the operation, maintenance and troubleshooting of Naval Tactical Data Systems equipment aboard the ship, including computer systems and transmission equipment. Bill served three tours of duty during the Vietnam conflict.

Education & Activities

Registered Communications Distribution Designer (RCDD) through BICSI
Associate of Applied Science Degree in Structural Drafting
AutoCAD through ACAD2006
Microsoft Office 4.0
Visual 2.5
Energy Pro Version 3.0
Working knowledge of National Electrical Code
Working knowledge of IES lighting standards
Participation in various continuing education seminars, including National Electrical Code updates, Lighting Design, Grounding and Bonding, and CSI Specifications
Working knowledge of construction trade



Gary Mullin, P.E.
Professional Electrical Engineer
Electrical and Communications Engineer – Lane Coburn & Associates, LLC



Years of Experience 19
P.E. Licenses Washington

Qualifications Gary is a Professional Electrical Engineer licensed in Washington State. Gary has an active membership in the I.E.E.E. communications society.

Work History

<u>LANE COBURN & ASSOCIATES, LLC.</u>	7/09 – Present
<i>Electrical and Communications Consulting Engineer</i>	
<u>Port of Seattle, Seattle-Tacoma International Airport, Facilities and Infrastructure</u>	10/03 – 4/09

Senior Electrical and Communications Engineer/P.E.

- Provided technical leadership and implementation support for communication infrastructure at Sea-Tac airport.
- Team leader and member of several design teams.
- Managed several capital projects in the areas of telephony, networking, voice and data.
- Coordinated radio frequencies and managed radio systems.
- Managed communications, networks and controls systems, including:
 - ◆ Fiber-optic networks
 - ◆ Real-time controls systems running on Cisco networks
 - ◆ Digital voice paging systems (airport-wide)
 - ◆ Radio systems (VHF, UHF and microwave)
 - ◆ CCTV and broadband CATV systems
 - ◆ Security, facility monitoring and control systems
- Approved designs for new infrastructure projects, including tenant improvements, airport-wide cellular/Wi-Fi access, IP-based voice and video upgrades.
- Chaired the Sea-Tac telecommunications architecture review team (START).
- Delegated work to technicians and other engineers.
- Performed design reviews and field commissioning.
- Worked with consultants and electrical controls contractors.
- Managed and maintained databases, programming and as-built drawings.
- Acted as a technical resource to managers, consultants and technicians.
- Managed budgets and schedules on several projects.

Bonneville Power Administration (BPA), Telecommunications, Vancouver, WA
Sr. Electronics Engineer/P.E. **4/02-7/03**

- Responsible for maintaining technical expertise on telecommunications and networking systems.
- Received technical training on telecommunications equipment, including:
 - T1 channel banks, drop and insert TDM (DS0/DS1/DS3/OC3/OC12 transport), SONET, fiber optics and SCADA
- Analog and digital microwave radio systems



- Cisco routers and TCP/IP-based networks
- Managed a telecommunications training and repair program.

Coffman Engineers, Seattle, WA **4/00-9/01**

Electrical Engineer, Instrumentation and Controls

- Provided electrical and controls systems design solutions for data centers.
- Customized PLC software for controlling medium voltage switchboards at a Microsoft data center.
- Developed as-built documentation for existing networks and controls systems.
- Developed, tested and commissioned custom PLC and HMI software including GE/Fanuc, Allen Bradley and Wonderware.
- Fluent in AutoCAD

Gray & Osborne Consulting Engineers **4/98 – 3/00**

Sr. Electrical Engineer/P.E.

- Designed SCADA systems, motor controls, medium voltage distribution and instrumentation for municipal water and wastewater projects.
- Developed engineering cost estimates including man-hour and equipment estimates.
- Worked with PLC's, RTU's, HMI software, LAN and radio systems.

Innovation, Inc; Coastal Environmental Systems **5/94-4/98**

Project Manager/Electrical Engineer

- Managed the design and production of integrated cellular and paging base stations for the wireless telephone industry.
- Developed low voltage power distribution drawings using AutoCAD.
- Member of a product development team for a cell site power generator.
- Managed schedules and budgets for multiple revenue projects
- Managed the design, systems integration and testing of networked data acquisition systems, including UHF / VHF radio links.
- Successfully installed and repaired complex systems domestically and internationally.

U.S. Navy **3/90-5/94**

Electronics Engineer

- Designed and managed the development of a high-bandwidth fiber-optic telemetry and data acquisition system for a U.S. Navy acoustics research laboratory.
- Designed communications systems for Naval vessels.

Professional Certifications, Education & Activities -Professional Electrical Engineering Lic.

Washington: 2002 (#39455)

EIT Certified: 1998

Education

Bachelor of Science in Electrical Engineering, Seattle University, 1990

Professional Memberships & Activities

Member, I.E.E.E.



Nick Alexander, LEED A.P.
Associate - CAD Manager / Sr. Electrical Designer
LEED Accredited Professional



Years of Experience 17

Qualifications

Nick is an experienced electrical CAD designer with a strong background in electrical design of residential, hotels, bio-tech, military and commercial projects. His experience includes managing projects and skills with AutoCad. Nick is a LEED Accredited Professional (LEED A.P.) (Leadership in Energy and Environmental Design) through the U.S. Green Building Council.

Work History

LANE COBURN & ASSOCIATES, LLC. ***9/07 - Present***
Associate – CAD Manager

Hultz/BHU/Cross ***3/04 – 4/08***

SASCO - Electrical Design/Build Contractor ***4/02 – 3/04***
CAD Designer - Electrical Designer

Nick was an experienced electrical CAD designer with a strong background in electrical design of residential, hotels, bio-tech, military and commercial projects. His experience includes managing projects and skills with AutoCad. Nick is a LEED Accredited Professional (LEED A.P.) (Leadership in Energy and Environmental Design) through the U.S. Green Building Council.

Cross Engineers ***11/95 – 4/02***
CAD Designer - Electrical Designer

Education & Activities

- LEED Accredited Professional
- AutoCAD through ACAD2009
- Architectural Desktop 2009
- Visual 2.5
- Microsoft Office 4.0
- Working knowledge of National Electrical Code
- Working knowledge of IES lighting standards
- Working knowledge of construction trade



Donald Pontsler, P.E.

***Professional Electrical Engineer, Masters of Public Administration
Sr. Electrical Engineer – Lane Coburn & Associates, LLC***

Years of Experience 30

Qualifications

- Extensive experience in the design of **Overhead and Underground Electric Utility Distribution Systems** and materials specification and procurement, with knowledge in the design of ancillary systems (Street Lighting).
- Experience in the design of **Water and Wastewater** related projects (wells, booster & lift stations, treatment facilities).
- **Professional Engineer** License Washington State – 1971.
- Bachelor of Science in **Electrical Engineering**, Washington State University – 1966.
- Master of **Public Administration**, University of Puget Sound – 1981
- Member **IEEE**.

Work History

LANE COBURN & ASSOCIATES, LLC – 1/2008 – Present

Sr. Electrical Engineer and Utility Expert – Overhead and Underground Transmission and Distribution system.

GRAY & OSBORNE, INC. – 4/1997 to 2/ 2000 (Consulting as required) 2/2000 to 12/2007

Have designed the electrical and controls portion of Wastewater, and Water Treatment Plants, Sewer Lift Stations, Wells, Street Light Systems as well as upgrades to these facilities for various Washington clients and Security Gates and Controls for Fort Lewis. Did the design and specification for Center Street single phase to 3-phase overhead upgrade (Town of Eatonville). Designed and coordinated with Orchard Ave street improvement to place main Underground Feeder at same time as street improvement (Eatonville). Did design and electrical portion of specification for City of Milton 1998 Electrical Improvements – Installation of conduit paralleling existing direct bury 12.5 kV Cable. Did design and specifications for conversion of existing overhead 12.5kV electrical service to underground and related 12.5 kV distribution for DSHS - Maple Lane School, Centralia, WA. Completed design and specification for City of Milton 1996-97 Electrical Distribution Upgrade.

PUGET SOUND ENERGY - PSE (VOLT SERVICES GROUP) 10/1998 to 1999

Acted as Projected Manager in the NCC (New Customer Construction) group – Olympia WA office. Met with new Electric and Gas customer to Design their new services as required. Also included minor Gas Main and Electrical Line Extensions. Developed costs for the work based upon PSE’s standard costs.

RTB CONTRACTING

Fall 1996

Designed and specified material for **Primary Metered Service** to cellular phone site – Tacoma Park Junction – Location: DNR Forest Lands near Elbe, Washington

R. L. ANGELINE and ASSOCIATES

July 1996 – September 1996

Completed the specifications and awards of contracts in process at the Light Division before retirement from City of Tacoma, Light Division

COWLITZ SHORES CAMPERS COUNTRY CLUB, Inc. 1992

Designed, purchased material, coordinated, supervised, and helped install a complete **primary metered distribution system** to serve 60+ electrical meters. This included 2 new spans of overhead construction, 3500 feet of primary underground, 4 single-phase padmounted transformers, and 58+ metered RV Power Outlets. Coordinated with Lewis County PUD for the acquisition of one span of overhead line, existing transformation and meter for water well, and primary meter installation. This work was accomplished with lay laborers except for work around energized primary, stringing the overhead primary, and termination of underground



primary which was done by one member who was a Puget Power Line Foreman. Approved by the Washington State Department of Labor and Industries, Electrical Inspection Section.
Location: Cowlitz River near Toledo, Washington

CITY OF TACOMA, LIGHT DIVISION February 1966 – June 1996

1983 - 1996 - Materials Engineer – Specified all standard distribution equipment and transformers which included contract administration for purchasing of these materials totaling several million dollars. **Light Division Representative** to the NW Utility Quality Assurance Conference. **Chairman** of the Light Division's Material Committee and served on the Tool Committee, Standards Committee, and Purchase Order/Materials Management System Users Committee.

1983 – Special Project to Convert Street Lights to High Pressure Sodium Fixtures

Provided engineering coordination and administration of the street and area lighting conversion to high pressure sodium fixtures as part of the BPA conservation plan. This involved the administration of six formal and four informal contracts for fixtures, totaling over \$2 million, approximately \$600,000 in labor charges by Light Division field forces and the replacement of over 14,000 fixtures.

Prior to 1983 - **Supervising Engineer** for the Underground Residential Distribution (URD) Group

Supervised the design of large and small additions to the URD system, approved WO's for URD system additions and for minor additions to the overhead system, met with customers as required. Budgetary responsibility for URD Additions and Betterments. Developed new Standards for URD construction practices. Was the **Liaison Engineer** to the Dept. of Public Works for improvements requiring coordination of Light Division work/crews. This included serving in 1980 to 1982 as **Tacoma Dome Light Division Liaison/Project Engineer**, where I provided initial information on Light Division Facilities for the Tacoma Dome site selection. As project engineer: engineered and coordinated removal of lines, temporary services, in-house engineering for undergrounding the main (800-amp) feeder on East "D" Street

1981 – Special Project to select a Distribution Analysis Computer Program

Selected, evaluated and obtained approval for purchase of a package of computer programs for analysis of the electrical distribution system. Researched available programs for compatibility with engineering computer. Prepared data processing forms including economic analysis of impact of these programs on the Distribution Engineering Section (Cost Benefit Analysis). Administered contract. Coordinated conversion of program to engineering computer with software supplier. Provided in-house coordination of facilities and purchase of terminals needed to operate analysis programs.

July 1972 to 1975 – **Design Engineer** for URD; **Overhead Engineer** for new/revised services and underground feeds requiring major rebuilding of overhead lines. Met with customers, designed and wrote the WO's for large and small additions to the Overhead Distribution and URD systems including the required Bill of Materials. **Light Division Representative** to the Pierce County Utility Coordinating Council.

Spring 1970 to July 1972 – **Overhead and URD Engineer** for new services and underground projects

Met with customers, designed and wrote the WO's for additions to the Overhead and URD systems under the supervision of a senior engineer.

Spring 1969 to 1970 – **URD Engineer** - Designed URD additions and supervised Drafting of the Design Layout. Coordinated with the Civil Engineering group for installation of Underground Cables and Structures by contract.

February 1966 to Spring 1969 – **General Communications Engineer**- Under the supervision of a senior engineer developed requirements for and did field survey for 5 path Microwave addition, including voice multiplex requirements for telephone intracomunications. Developed the specification and administrated the contract for the 5 path Microwave addition.



Vicky Williams
Associate, Sr. Electrical Designer

Years of Experience 30

Qualifications

I have over 30 years of design experience in electrical engineering and telecommunications, with a broad background that includes critical facilities/data centers, commercial high-rise and mixed-use, hospitality, health care, municipal, military, industrial, aviation and seaport projects. My project experience includes low- and medium-voltage electrical distribution, branch-circuit wiring, interior and exterior lighting, data/com, CATV, security and access control, and mass notification. My computer skills include proficiency in AutoCAD, Microsoft Word and Excel, and various other engineering design programs. I work with the rest of the design team to create high-quality construction documents, including calculations, details, plans, and coordinate with other disciplines to meet the client's objectives.

Work History

LANE COBURN & ASSOCIATES, LLC. ***1/2010 – Present***
Associate – Sr. Electrical Designer

CB Engineers - Senior Electrical Designer ***2007 – 2009***

Provide design services for a range of projects including high-rise residential, data center, offices and military. Provide high-quality design for medium voltage, mechanical, and lighting systems to meet the client's objectives and local electrical codes. Took part in establishing company CADD symbols, details, calculation forms, and menus.

SASCO - Electrical Design/Build Contractor - Electrical Designer ***2000 – 2007***

Provide design services for a range of projects including high-rise residential, mixed use, data centers, offices, hospitality, municipal, convention center, health care and museum. Provide high-quality design for medium voltage, mechanical, and lighting systems to meet the client's objectives and local electrical codes.

McGowan Broz - Electrical Designer ***1996-2000***

Provide design services for a range of projects including parks, pump stations, and tenant improvements. Design medium voltage, mechanical, and lighting systems to meet the client's objectives and local electrical codes. CADD drafting for the electrical and mechanical departments meeting company standards. Took part in establishing company CADD symbols, details, and menus. Proficient in the use of AutoCAD, Word, and Excel.

Weiland Lindgren - Electrical Designer ***1995-1996***

Provided design services for military and Port of Seattle. Design medium voltage and lighting systems to meet the client's objectives and local electrical codes. Work on projects from schematic design, construction through the record close-out process. Proficient in the use of AutoCAD and Microstation CADD systems.

Boeing Facilities Design Support - Electrical Designer ***1985-1995***

Provide design services for new and tenant improvement projects for the Boeing Company at multiple locations throughout the Seattle area. CADD lead for the electrical department meeting the company standards. Design and draft data systems from the fiber backbone to fiber to the desk. Design electrical medium voltage power and lighting.

Rust International - CADD Lead ***1979-1985***

CADD shift lead for rotating shifts in the drafting department coordinating workflow through the department to meet project schedules. Developed programs to create drawings from engineers input into the database.

Education

Undergraduate work, Alvin Community College 1976, 1977



Theresa Lane
Associate - Office Manager

Years of Experience: 19

Background

Theresa managed her own small business for over three years. Her responsibilities included servicing clientele, marketing, sales and monthly billing analysis. She has also worked for over 10 years managing hundreds of clients as a personal trainer. Part of her role as a personal trainer included scheduling and billing. Theresa was one of the most successful personal trainers at the Pro Sports club and was well respected for her expertise. In addition, Theresa managed three rental properties over a seven year period. Theresa will leverage her years of management experience, client development, scheduling analysis, invoicing and billing to provide accounting and administrative support for Lane Coburn & Associates, LLC.

Work History

Lane Coburn & Associates, LLC **7/07 - Present**
Associate – Office Manager

Theresa Lane Coaching **10/01 – 12/04**
Small Business Owner

Theresa owned and ran her own small business as a Personal Life Coach. She started and managed all facets of the business. This included all start operation, client relations, marketing, sales and billing.

Property Manager **9/99 – 12/06**
Property Manager

Theresa managed three rental properties continuously over a seven year period. Her duties included; interviewing tenants, running criminal background and credit checks, managing repairs, monthly billing and move in / move out paperwork.

Pro Sports Club **12/93 – 5/04**
Personal Trainer

Theresa was Personal Trainer. Theresa managed a large clientele, scheduled and invoiced clients on a monthly basis. Theresa achieved and maintained the following certifications: American Council on Exercise (ACE), American Federation Fitness Association (AFFA), Clinical Exercise Specialist (CES). Theresa was one of the most successful personal trainers at the Pro Sport Club.

Remax Realty **1993 – 1995**
Administrative Support

Education & Activities

Theresa coordinated first time home buyer seminars.
 American Council on Exercise (ACE) Certification
 American Federation Fitness Association (AFFA) Certification
 Clinical Exercise Specialist (CES) Certification
 QuickBooks Training
 Quicken Training - MSFT Project Training