

ENGINEERING HALL

Engineering the future



OVERVIEW

KONSORTUM1, since its inception in 1996, has developed an industry leading reputation as a talented electrical engineering/design firm by providing high quality, architecturally pleasing, state-of-the-art electrical designs. We serve clients ranging from nationally recognized architects, developers, and design-build electrical contractors to educational, municipal and governmental agencies.

Our staff of licensed professionals and team members (including our in-house compliment of Registered Electrical Engineers, LEED Accredited Professionals, Illuminating Engineering Society members, International Association of Lighting Designer members, and BICSI Registered Communication Distribution Designers, CTS-Certified Technology Specialists, and CTS-D-Certified Technology Specialist Design), is utilized as the project schedule and scope demands. We currently employ more than 40 full-time design professionals in our Santa Ana, Riverside, and Roseville offices.

All work is performed using the latest computer-aided design technology and equipment, including software packages such as AutoDesk Revit MEP 3-D modeling software, AutoDesk AutoCAD software, and AGI32 lighting rendering/modeling software.

KONSORTUM1 develops a clear understanding of our client's objectives and schedules from the beginning stages of the project through the final stages of completion. Our licensed professionals and accredited team members are involved with each project from its inception through client acceptance.

KONSORTUM1 provides a diverse range of engineering and design services including the following:

- FULL SERVICE ELECTRICAL ENGINEERING
- ARCHITECTURAL LIGHTING CONSULTING (via **STUDIOK1**)
- UTILITY COMPANY CONSULTING
- FIRE ALARM AND LIFE SAFETY SYSTEMS CONSULTING
- SECURITY AND ACCESS CONTROL SYSTEMS CONSULTING
- CCTV SECURITY SYSTEMS CONSULTING
- AUDIO / VISUAL SYSTEMS CONSULTING
- TELECOMMUNICATIONS SYSTEMS CONSULTING
- SUSTAINABLE ENERGY DESIGNS
- DATA CENTER CONSULTING

KONSORTUM1 is committed to designing sustainable environments and we truly believe that sustainability and good design go hand in hand. We are a member of the U.S. Green Building Council and an EPA Energy Star Partner.

KONSORTUM1's reputation and success is based on our ability to perform by meeting the needs of our client and the project.



ELECTRICAL ENGINEERING:

KONSORTUM1 provides state-of-the-art electrical engineering designs for a wide variety of project types. **KONSORTUM1** incorporates the basic electrical requirements of each project with a keen eye to the architectural appearance of the final project. **KONSORTUM1** consistently researches new technologies and products and proactively incorporates them into our design. Our highly trained engineering/technical staff consistently provides industry leading and award winning electrical engineering project's that are also architecturally pleasing to the eye.

ARCHITECTURAL LIGHTING DESIGN:

KONSORTUM1 takes great pride in our lighting design capabilities and we believe that these services are one of the key factors that separate us from other electrical engineering firms. Our in-house lighting studio, **STUDIOK1**, is proactively involved in all of our project lighting designs. **KONSORTUM1/STUDIOK1** provides award winning architectural lighting designs for a wide variety of project types. Our services include lighting master plans, interior and exterior building lighting design, landscape lighting design, and environmental impact analysis. Working closely with architects, interior designers and landscape architects, our goal is to provide a lighting system that compliments and accentuates the architectural features of the project while providing a visually comfortable environment.

TELECOMMUNICATIONS:

In keeping with our goal of providing comprehensive engineering and design services, our telecommunications consulting staff combines continuing education and years of diverse experience to provide a level of service that is not offered by other consulting firms. In combination with our electrical engineering staff, our telecommunications staff ensures all facets of project planning are complete from pathway planning to commissioning of LAN and voice systems. Our staff is uniquely qualified with industry leading BICSI RCDD design certifications to provide a wide variety of services including:

- TECHNOLOGY BUSINESS PLANNING/ASSESSMENT
- TECHNOLOGY INFRASTRUCTURE AUDITS
- DISASTER RECOVERY DESIGN
- SERVICE PROVISION ANALYSIS
- MIGRATION PLANNING
- TELECOMMUNICATIONS MASTER PLANNING:
 - ◀ Public Services Right-of-Way Planning/Coordination
 - ◀ Inside Infrastructure/Cable Plant
 - ◀ Outside Infrastructure/Cable Plant (Campus)
- LAN DESIGN
- WIRELESS LAN DESIGN
- NETWORK SECURITY
- PHYSICAL SECURITY
- NETWORK INTEGRATION
- CONTROLS INTEGRATION
- TELEPHONY SYSTEMS (PBX)
- TELEPHONY SYSTEMS (VOIP)
- CALL CENTER INFRASTRUCTURE DESIGN



ORCHARD HILLS TOWN CENTER | IRVINE, CA

AUDIO/VISUAL SYSTEMS:

Another component of **KONSORTUM1**'s comprehensive engineering design services is the design of audio/visual systems. In this highly technical and complex arena, knowledgeable AV design professionals foster a productive, efficient and effective project experience, mitigating problems and budget overruns. **KONSORTUM1**'s utilization of CTS and CTS-D certified designers offers assurance of our staff's expertise and provides customers confidence that their job will be undertaken and completed in the best way possible. Our capabilities range from the design of complex theatrical sound reinforcement systems and high-end corporate teleconferencing systems to that of a simple paging system. In all cases, our designs incorporate state-of-the-art equipment and are designed to seamlessly blend in with the interior design.

SECURITY SYSTEMS:

The design of a wide variety of security systems is another element of **KONSORTUM1**'s portfolio of available engineering and design services. Our design capabilities include complex access control systems, intrusion alarm and theft detection systems, closed circuit video surveillance and digital video storage/retrieval. As with all of our design services, we keep a keen eye on the architectural appearance of a project's secondary system, without compromising the system's effectiveness.

FIRE ALARM AND LIFE SAFETY SYSTEMS:

Unlike other engineering firms that only provide generic design-build performance specifications, **KONSORTUM1** provides a much more comprehensive fire alarm and life safety system engineering and design service. Our fire alarm and life safety system designs range from our highest level of service detailed full design drawings (complete with wiring diagrams, battery and voltage drop calculations) to our minimum level service of "enhanced" design-build drawings and specifications (specific and architecturally coordinated device locations). In all of our designs, we serve to limit the negative architectural impact of these complicated code restrictive systems.

SUSTAINABLE DESIGN:

KONSORTUM1 is a United States Green Building Council National Member, an EPA EnergyStar Partner, and a CHPS Corporate Member. We are aware of and fully embrace the critical role that sustainability plays in all of the work we produce. Our design capabilities include designs for LEED Certified projects, fuel cells, micro-turbine generators, wind turbines, and photovoltaic arrays – all of which have been successfully installed in **KONSORTUM1** projects.

UTILITY COMPANY CONSULTING:

Another component of **KONSORTUM1**'s comprehensive engineering/design services is that of dry utility consulting. Much like other services that we provide, we strive to gracefully incorporate any required utility company infrastructure into the project's architecture and landscape architecture. Utility power service, voice services, and CATV infrastructure are fully coordinated with the local utility companies per the project requirements. Site utility infrastructure requirements are carefully coordinated with Civil, Structural and Landscape elements to avoid conflicts during the construction of the project.



TOYOTA HEADQUARTERS | TORRANCE, CA



RAY SWARTZ

RAYMOND SWARTZ | IESNA | PE | LEED AP
Principal/President

EXPERIENCED IN THE FIELD SINCE 1987

GENERAL INFORMATION

As President of **KONSORTUM1**, Mr. Swartz' responsibilities include being involved in all aspects of design operations and production activities for the firm's complete range of electrical engineering/design services. Mr. Swartz acts as the Principal in Charge, as well as the project's Electrical Engineer of Record for all projects that with which he is involved. Mr. Swartz's day-to-day involvement with each project ensures a coordinated quality design that will result in a highly successful end product. Mr. Swartz also specializes in architectural lighting design/consulting and has been responsible for innovative and creative lighting designs which have enhanced the utility, comfort, and grace of numerous architectural and landscape projects. Mr. Swartz also provides principal management and creative direction for all projects and oversees **KONSORTUM1**'s financial, planning and administrative functions.

EDUCATION

BS Physics – University of California, Riverside

REGISTRATION

California Professional Engineer #E-15610

PROFESSIONAL AFFILIATIONS

American Institute of Architects/Orange County Chapter
Society of American Military Engineers (SAME)
Illuminating Engineering Society of North America (IESNA)
US Green Building Council LEED Accredited Professional

AWARDS

WATSON LAND COMPANY | CARSON, CA

- IES International Illumination Award of Merit

ENVIRONMENTAL NATURE CENTER | NEWPORT BEACH, CA

- IES Orange Section Illumination Award of Excellence

ORCHARD HILLS TOWN CENTER | IRVINE, CA

- IES Orange Section Illumination Award of Excellence

BOWERS MUSEUM | SANTA ANA, CA

- IES Orange Section Illumination Award of Merit – Interior
- IES Orange Section Illumination Award of Merit – Exterior
- IES International Illumination Award of Merit - Exterior

SAGE HILL SCHOOL | NEWPORT COAST, CA

- IES Orange Section Illumination Award of Merit
- Lumen West Lumen Award
- IES International Illumination Award of Merit

MISSION VIEJO PUBLIC LIBRARY | MISSION VIEJO, CA

- IES Orange Section Illumination Award of Merit – Interior
- IES Orange Section Illumination Award of Merit - Exterior
- Lumen West Lumen Award - Exterior
- IES International Illumination Award of Merit - Exterior



THE GRAND DEL MAR | DEL MAR, CA



THE RESORT AT PELICAN HILL | NEWPORT COAST, CA



ZAWADZKI RON

RONALD ZAWADZKI | RCDD | LEED AP
Principal/Vice President

EXPERIENCED IN THE FIELD SINCE 1990

GENERAL INFORMATION

As Vice President and Director of Telecommunications at **KONSORTUM1**, Mr. Zawadzki oversees engineering decisions and is responsible from the initial planning stages to the final construction support services of a large number of projects.

Mr. Zawadzki is involved in all phases of construction document preparation including the initial planning services, construction documents, energy compliance documentation, comprehensive electrical specifications, estimating and construction field support.

In addition, Mr. Zawadzki specializes in Telecommunication/Data Systems, data center design, University Facilities design, and high voltage power systems engineering and has been responsible for many state-of-the-art, as well as technically superior engineering designs for a wide variety of projects.

EDUCATION

BS Electrical Engineering – Worcester Polytechnic Institute – Worcester, MA
MS Environmental Management – Westcoast University – Santa Barbara, CA

REGISTRATION

RCDD #126544 – BICSI Registered Communications Distribution Designer

PROFESSIONAL AFFILIATIONS

Building Industry Consulting Services, International (BICSI)
US Green Building Council LEED Accredited Professional

AWARDS

TACO BELL CORPORATE HEADQUARTERS | IRVINE, CA

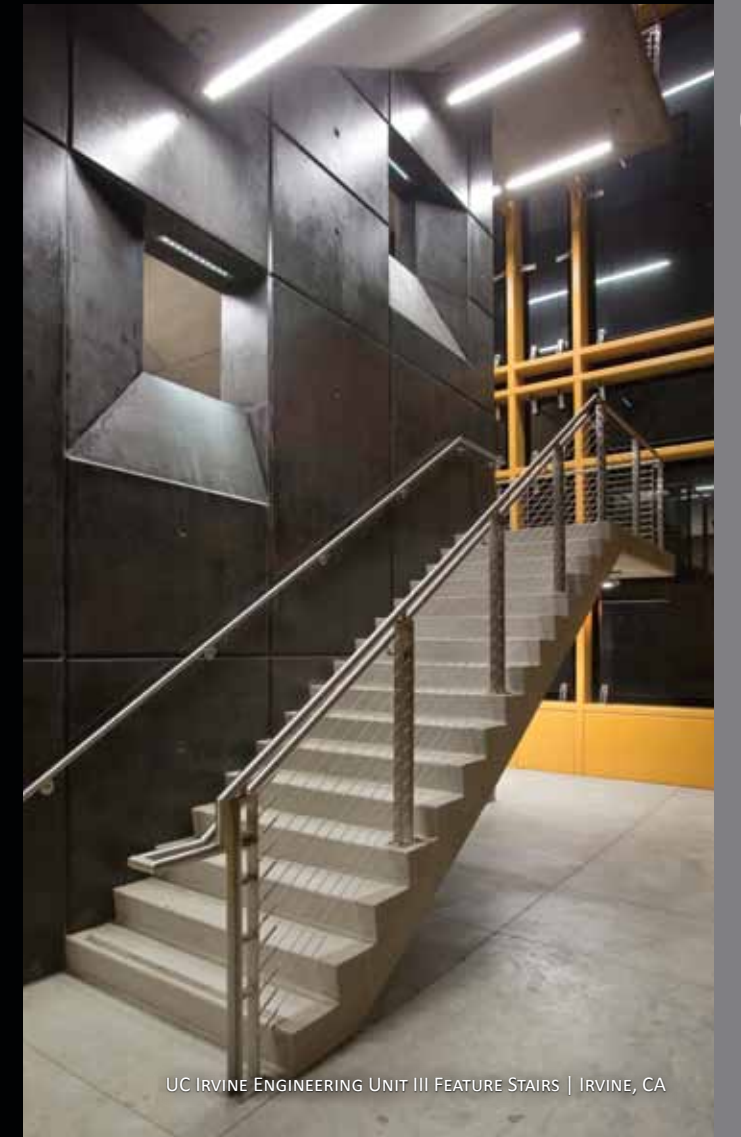
- IES Orange Section Illumination Award of Merit – Interior
- IES Orange Section Illumination Award of Merit – Exterior
- IES International Illumination Award of Merit - Exterior

UC IRVINE ENGINEERING UNIT III | IRVINE, CA

- IES Orange Section Illumination Award of Merit – Interior
- IES International Illumination Award of Merit



TACO BELL CORPORATE HEADQUARTERS | IRVINE, CA



UC IRVINE ENGINEERING UNIT III FEATURE STAIRS | IRVINE, CA



JOEL BRANDTS

JOEL BRANDTS | IESNA
Principal

EXPERIENCED IN THE FIELD SINCE 1982

GENERAL INFORMATION

As a Principal at **KONSORTUM1**, Mr. Brandts' responsibilities include being involved in all aspects of design operations and production activities for the firm's complete range of electrical design services.

Mr. Brandts is involved in all phases of construction document preparation, including schematic and design development services, energy compliance documentation, comprehensive electrical specifications, estimating and construction field support.

In addition, Mr. Brandts is also a design leader for school projects and education/institutional campuses, sports club complexes/recreational facilities, commercial centers, theaters, hotels and industrial facilities.

Mr. Brandts also provides principal management and creative direction for all projects and is active in **KONSORTUM1's** financial, planning and administrative functions.

EDUCATION

BS Industrial Design – California State University, Long Beach
Architecture Studies – University of Southern California, Los Angeles

PROFESSIONAL AFFILIATIONS

Institute of Electrical and Electronic Engineers (IEEE)
Illuminating Engineering Society of North America (IESNA)



GARY MCFARLAND

GARY MCFARLAND | IESNA | LEED AP
Principal

EXPERIENCED IN THE FIELD SINCE 1981

GENERAL INFORMATION

As a Principal at **KONSORTUM1**, Mr. McFarland is involved in all engineering decisions and is responsible for the day to day management of projects from the initial planning stages to the final construction support services.

Mr. McFarland is involved in all phases of construction document preparation, including schematic and design development services, energy compliance documentation, comprehensive electrical specifications, estimating and construction field support.

In addition, Mr. McFarland is also a design leader for school projects and education/institutional campuses, parks/recreational facilities, military and correctional institutions.

EDUCATION

Santa Ana Community College
Industrial Controls – California State University, Fullerton
Southern California Edison Advanced Lighting
Master Electrician – International Correspondence Schools

PROFESSIONAL AFFILIATIONS

Illuminating Engineering Society of North America (IESNA)
US Green Building Council LEED Accredited Professional

AWARDS

OCEANSIDE CIVIC CENTER | OCEANSIDE, CA
• *Architectural Record Magazine*



BREA OLINDA HIGH SCHOOL | BREA, CA



HAWTHORNE ELEMENTARY SCHOOL | RIVERSIDE, CA



BEVERLY HILLS HIGH SCHOOL CAMPUS REFURBISHMENT | BEVERLY HILLS, CA



MIKE MATONIC

MICHAEL MATONIC | IESNA | PE
Associate

EXPERIENCED IN THE FIELD SINCE 1990

GENERAL INFORMATION

As an Associate at **KONSORTUM1**, Mr. Matonic brings a diverse level of experience in electrical engineering. Mr. Matonic is involved in all engineering decisions and is responsible for a wide variety of engineering projects from the initial planning stages to the final construction support services.

Mr. Matonic is involved in all phases of construction document preparation including schematic and design development services, energy compliance documentation, comprehensive electrical specifications, estimating and construction field support.

In addition, Mr. Matonic assists in the lighting design of various specialty projects and is a key individual in **KONSORTUM1**'s lighting consulting services.

EDUCATION

BS Mechanical Engineering California State University, Fullerton
Lighting Design Curriculum – Illuminating Engineering Society of North America (IESNA)

REGISTRATION

California No. E-16601

PROFESSIONAL AFFILIATIONS

Illuminating Engineering Society of North America (IESNA)



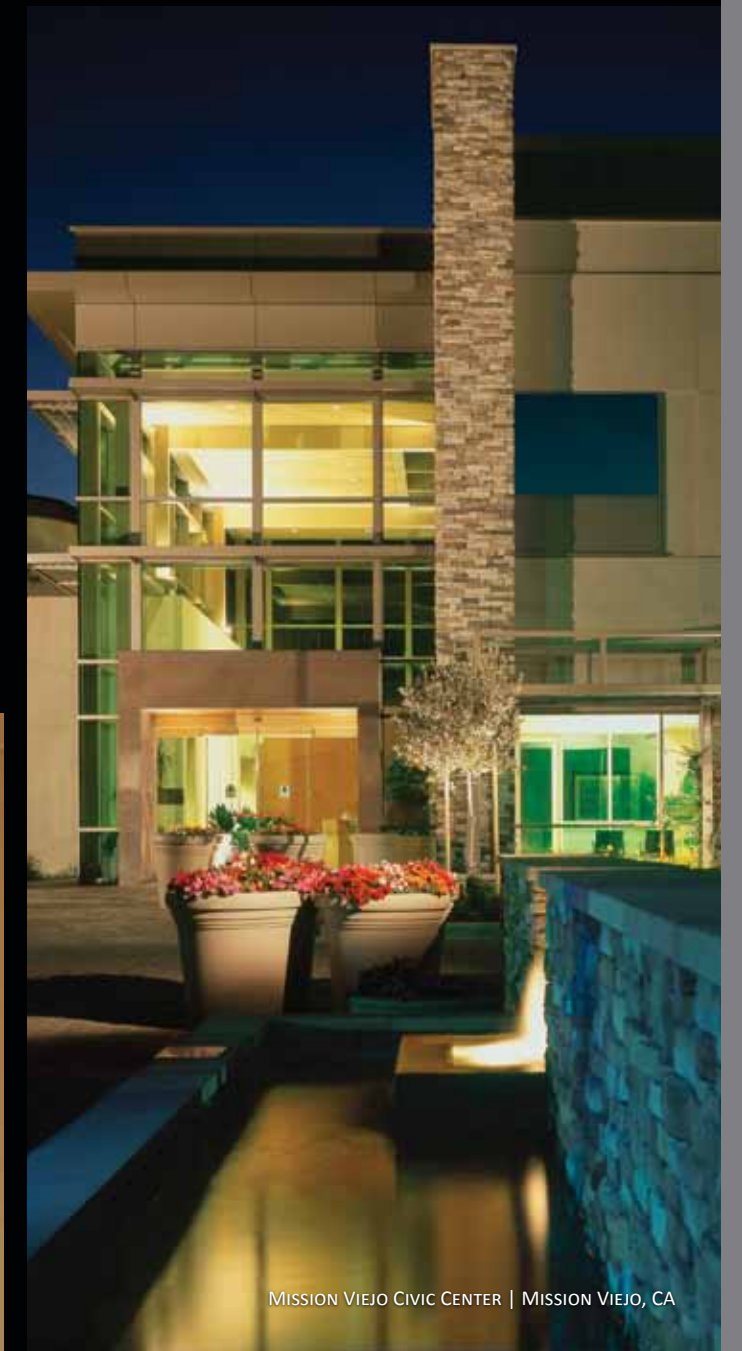
TRABUCO GROVE | IRVINE, CA



THE RESORT AT PELICAN HILL | NEWPORT COAST, CA



SAGE HILL SCHOOL | NEWPORT BEACH, CA



MISSION VIEJO CIVIC CENTER | MISSION VIEJO, CA



JEFF MIXER

JEFFREY MIXER | IESNA
Associate

EXPERIENCED IN THE FIELD SINCE 1989

GENERAL INFORMATION

As an Associate at **KONSORTUM1**, Mr. Mixer is involved in all engineering decisions and is responsible for the day-to-day management of projects from the initial planning stages to the final construction support services.

Mr. Mixer is involved in all phases of construction document preparation, including schematic and design development services, energy compliance documentation, comprehensive electrical specifications, estimating and construction field support.

In addition, Mr. Mixer assists in the lighting design of various specialty projects and is a key individual in **KONSORTUM1**'s expanding lighting consulting capabilities. He is also a design leader for private specialty schools and civic and municipal facilities.

EDUCATION

Lighting Design Curriculum – Illuminating Engineering Society of North America (IESNA)
Electrical Engineering Curriculum – California State University, Fullerton

PROFESSIONAL AFFILIATIONS

Illuminating Engineering Society of North America (IESNA)

AWARDS

SAGE HILL SCHOOL | NEWPORT COAST, CA

- IES Orange Section Illumination Award of Merit
- Lumen West Lumen Award
- IES International Illumination Award of Merit

MISSION VIEJO PUBLIC LIBRARY | MISSION VIEJO, CA

- IES Orange Section Illumination Award of Merit – Interior
- IES Orange Section Illumination Award of Merit - Exterior
- Lumen West Lumen Award - Exterior
- IES International Illumination Award of Merit

TARBUT V'TORAH COMMUNITY DAY SCHOOL | IRVINE, CA

- IES Orange Section Illumination Award of Merit
- IES International Illumination Award of Merit



Engineering the future

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