





**SEALED BID:** A&E Services - WVSU-HVAC Replacements for Multiple Facilities

BUYER: Jerry Rush

SOLICITATION NUMBER: AEOI WSC240000004 BID CLOSING DATE: 03/26/2024 BID CLOSING TIME: 2:30 P.M.



#### SIGNATURE/CERTIFICATION

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Mark F. Sotosky, Director | Business Development (Name, Title) Mark F. Sotosky, Director | Business Development (Printed Name and Title) 232 Horner Street, Johnstown, PA 15902 (Address) P: 814.536.1651 / F: 814.536.5732 (Phone Number) / (Fax Number) marksotosky@cjlengineering.com (email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through e-mail, I certify that: I have reviewed this solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the Commission/Institution that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the solicitation for that product or service, unless otherwise stated herein; that the vendor accepts the terms and conditions contained in the solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand the Commission/Institution is requiring the vendor to follow the provisions of WV State Code 5A-3-62 which automatically voids certain contract clauses that violate State law.

CJL Engineering (Company) Partner | Vice President (Authorized Signature) (Representative Name, Title)

Matthew R. Sotosky, PE, Partner | Vice President (Printed Name and Title of Authorized Representative)

March, 20, 2024

(Date)

P: 814.536.1651 / F: 814.536.5732 (Phone Number) (Fax Number)



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## **STATEMENT OF QUALIFICATIONS**

CJL Engineering is pleased to submit our proposal for the West Virginia State University HVAC Renovations projects. The CJL team has a rich Higher Education history. We've provided MEP design for hundreds of projects ranging from basic renovations to building new higher education facilities from the ground up. Throughout CJL's partnership, we have provided engineering services that support our client's standards of excellence and contribute to the fulfillment of their missions.

CJL Engineering has seven regional offices and 150+ employees, of which 35 are registered professional engineers; so our bench is deep. Our firm has more than 80 years' experience designing MEP systems for universities/colleges. In the past five years alone, CJL has worked on higher education projects worth over \$1.2 billion and representing 25 million square feet of facility design.

We have a reputation for technical expertise, on-time deliverables and budgetary compliance. The more challenging and complex the project, the more likely it will come to our door. Our team of professionals is the most talented in the region. Over 95% of our projects come from repeat customers and referrals.

We believe our client's success is our success. Which means at CJL, we dig deep to assess accurately and plan comprehensively. Then we listen to be sure we completely understand our client's objectives and aspirations. We design for both present requirements and future possibilities. We work hard to make life easier for our clients. We work hard so our clients shine and enjoy a job well done.

Quality, safety and integrity are CJL's guiding principles. Our goal is to find the best way to provide mechanical and electrical system performance, energy efficiency, maintainability, and flexibility for the future, while keeping costs to a minimum and avoiding undue operational risks.

We hope the following information will give you insight into our team and process. We also trust this information will help you understand why we are the right team to partner with for the upgrade project. We look forward to the next step in your selection process and the opportunity to expand on the ideas included in this document.





Penn State Greater Allegheny, Frable Building Classroom



Wittenberg University, Health, Wellness & Athletic Complex









# **FIRM OVERVIEW**

Established in 1938, CJL Engineering is a full service, mechanical, electrical, plumbing, fire protection, and civil/structural consulting engineering firm, located in western Pennsylvania, eastern Ohio, northern West Virginia and Maryland. Our super-regional focus has enabled us to become one of the preeminent MEP firms in the industry, with a wide range of specializations and clients.

University Projects are a major focus of CJL Engineering's practice. Our firm has been involved in designing MEP/FP systems for universities for 85 years. University work accounts for 25% of our annual billing. Our experience over the past 5 years represents over \$1.2 billion total construction cost and approximately 25 million square feet of university facilities design.



#### **Range of services:**

Analysis and concept Construction budgeting Building information modeling (BIM) Energy modeling Detailed construction documents Construction phase services Building commissioning



#### More than 150+personnel, including;

35 Professional Engineers 20 LEED® Accredited Professionals Certified Energy Manager (CEM) Lighting Certified Professionals [LC] Building Energy Assessment Professional (BEAP) NICET Fire Protection Healthcare Facility Design Professionals (HFDP) Commissioning Authority (CxA) Certified Healthcare Constructor (CHC) Certified Data Centre Professionals (CDCP) Certified Commissioning Professionals (CCP) and Commissioning Process Management Professional (CPMP)



#### A broad range of clients

Education - Colleges, Universities, Trade Schools, K-12 Green Buildings, Science, Laboratory and **Research Facilities** Healthcare - Hospitals, Urgent Care, Medical Centers and Labs **Government and Secure Facilities** High Tech Buildings/Mission Critical **Data Centers** Central Plants, Energy Facilities and Utility **Distribution Centers** Corporate, Commercial, Office Buildings Industrial - Light and Heavy Manufacturing, Warehousing Performing Arts Centers, Museums, Theaters and Libraries Hotels, Ice Arenas and Sports Facilities Apartments, Dormitories and High Rise Historic and Adaptive Retrofit Master Planning and Design



#### Specialization

**HVAC Systems Electrical Systems** Fire Detection and Protection Plumbing Design LEED<sup>®</sup> Green Building Design Commissioning **Energy Modeling Solutions Civil / Structural Engineering** Architectural Lighting and Controls Telecommunications Life Safety Systems Voice/Data/Audiovisual Security Systems Power System/Quality Evaluations Life Cycle Analyses **Retrofit Evaluations REVIT® / BIM** 





# **BY THE NUMBERS**









## WHAT WE DO

CJL engineers roll up their sleeves and get right in there with clients, creating a trusted professional partnership based on strong collaboration and communication, engineering experience and quality technical documents.



### Visualization Tools | Survey Equipment

CJL has led for over 10 years in the use of Building Information Modeling (BIM) as an important design capability within the AEC industry. We use the newest version of Autodesk Revit. We regularly employ sophisticated technologies, including Digital Virtual Reality, Thermal Imaging, and 3D Laser Scanning as part of our advanced engineering toolkit.



# STAFF QUALIFICATIONS





James M. Vizzini, P.E. Partner | Mechanical Engineer

**Contact Information** 814.322.5457 👰 jvizzini@cjlengineering.com

#### **PROFESSIONAL SUMMARY**

Jim Vizzini is a Partner of CJL Engineering that has over 30 years of experience. He is responsible for management decisions, overseeing current projects, and maintaining relationships with architect and clients. While at the Partner level, lim maintains a close connection to all facets of his projects. His responsibilities continue to include on-site surveys, systems comparisons, scope determination, plan and specifications review as well as construction inspection. Jim also supervises HVAC systems facility evaluation and design for colleges, universities, various schools (K-12), health care facilities, and commercial and institutional projects. These projects have ranged from large equipment replacement such as chillers, cooling towers, boilers and air handling units, entire HVAC systems design to district heating and cooling plants. Jim has been responsible for over \$2.5 billion of mechanical and electrical construction projects.

#### **REPRESENTATIVE PROJECTS**

West Virginia University, Morgantown, WV

- Oglebay Hall LEED® Certified
- Reynolds Hall, New Business/ **Economics Building**

St. Francis University, Loretto, PA

- Connors Family Fine Arts Center
- New Science Center, LEED® Compliant
- Sullivan Hall, Health Sciences Experiential Learning Commons
- DiSepio Rural Health and Wellness Center, LEED® Compliant

Grove City College, Grove City, PA

- Pew Fine Arts Air Handling UnitsCompetition Pool HVAC Upgrade

University of Pittsburgh, Pittsburgh, PA

- Frick Fine Arts Building HVAC Upgrade
- McGowan Institute Laboratory Building
- Plum Boro Primate Research Facility
- Biotechnology Center, Animal Research Lab
- Chevron Science Center Renovations Hillman Library Renovations
- Upper Campus Chilled Water Plant
- Gardner Steel Conference Center, Innovation Renovation
- Campus Steam Tunnel & Vault Upgrades
- Benedum Hall, HVAC Upgrade
- Duquesne University, Pittsburgh, PA
- Energy Center Master Plan
- New Cooling Tower
- Steam Absorption Chillers

American College of Sofia, Facility Assessment and Master Plan and Design, Sofia, Bulgaria

West Virginia Wesleyan College, Campus Wide Master Plan, Buckhannon, WV

Penn State University, Greater Allegheny Campus, White Oak, PA

Frable Building Renovations

Ostermayer Lab Building Renovations

The Pennsylvania State University,

University Park, PA

- South Campus, Chiller Plant
- Pollock Dining Hall, HVAC Renovations
- Pattee-Paterno Library, Special Collections HVAC Upgrades
- Pasquerilla Spiritual Center, Campus Chilled Water Bridge
- St. Vincent College, Latrobe, PA
- Rooney Hall Renovations
- St. Benedict Hall Renovations
- Dunlap Family Athletic and
  - **Recreation Center** Campus Infrastructure Master Plan
- Steam Line Replacement

Allegheny College, Facility Assessment and Master Plan. Meadville. PA

The Culinary Institute of America, Energy Consultant and Master Energy Plan Hyde Park, NY

Bucknell University, Lewisburg, PA

- Carnegie Building, Historic Reconstruction and Renovation
- Hildreth-Mirza Humanities Center, LEED<sup>®</sup> Silver

Pennwest University, Campus Master Plan, California, PA

#### **EDUCATION**

1987 - Bachelor of Science Mechanical Engineering Technology University of Pittsburgh at Johnstown

#### **SPECIALIZATIONS**

Mechanical Engineering Master Planning and Feasibility Studies Indoor Air Quality **District Heating and Cooling Plants** LEED<sup>®</sup> and Sustainable Design

#### **REGISTERED PROFESSIONAL ENGINEER**

Pennsylvania, Alabama, Delaware, Maryland, District of Columbia, Massachusetts, Virginia, New Jersey, North Carolina, West Virginia

#### PRESENTER

HVAC System Strategies to Mitigate Spread of COVID-19 - 2020

- Massachusetts Institute of Technology
- UPMC
- Erie School District

International Association of Museum Facility Administrators Annual Conference (Carnegie Museum of Natural History, Chilled water plant Upgrade) Pittsburgh, PA - 2019

KAPPA Conference, Altoona, PA - 2017

KAPPA Conference, Bedford, PA - 2013

Johnson Controls Leadership Conference, Potomac, MD (Consulting Engineers Business

Strategies & Vendor Teaming) - 2012

Energy and Education Conference (Geothermal Design) St. Francis University, Loretto, PA - 2009





Adam B. Hale, P.E. Principal | Mechanical Engineer

Contact Information 11 814.536.1651 12 ahale@cjlengineering.com

#### **PROFESSIONAL SUMMARY**

Adam Hale is a Principal and Mechanical Engineer at CJL Engineering. He joined the firm in 2008 as an intern and became a full-time employee in 2010. Adam is responsible for the design and specification of HVAC and other mechanical systems for educational, healthcare, commercial, and corporate clients. He surveys existing facilities and systems to confirm and evaluate their condition. He conducts engineering studies, establishes design criteria, and estimates project costs. He is also responsible for communicating project needs and requirements between owner, architect, engineer and client.

#### **REPRESENTATIVE PROJECTS**

West Virginia University, Morgantown, WV

- Reynolds Hall, New Business and Economics Building
- Ascend Co-working Facility Renovation
- Puskar Center Performance Dining Facility
- Field Hall Renovation

Marshall University, Lewis College of Business, Brad D. Smith Schools of Business, Huntington, WV

St. Francis University, Loretto, PA

- New Science Center and Vivarium
- Degol Fieldhouse Renovation
- Sullivan Hall, Phase 1

The Pennsylvania State University, Behrend, Advanced Manufacturing and Innovation Center, Erie, PA

University of Pittsburgh, Community Engagement Center, Pittsburgh, PA

Avonworth School District, Pittsburgh, PA

High School Master Plan

• High School Additions / Renovations

Butler School District, Butler High School Auxiliary Gym, Butler, PA

Carmichaels Area School District, Jr/Sr High School Renovations, Carmichaels, PA

Homer-Center School District, Jr/Sr High School HVAC Upgrades, Homer City, PA

Kane Area School District, Middle School Addition, Kane, PA

Mount Pleasant Area School District, Ramsay Elementary School Renovation, Mt. Pleasant, PA West Virginia Wesleyan College, Campus Wide Master Plan, Buckhannon, WV Historic Post Office Building, Feasibility Study, Morgantown, WV

WVU Medicine, Morgantown, WV

- Children's Hospital
- Central Sterile Renovation
- Ruby Campus Master Plan
- MRI Replacement
- EP Lab Renovation
- Ruby Campus Starbucks Renovation

WVU Medicine, Jackson Hospital Renovations, Ripley, WV

WVU Medicine, Fairmont Medical Center Renovations, Fairmont, WV

Confidential Client, Renovations, Elkins, WV West Virginia Capitol Complex, State Office Buildings #3, 5, 6, 36, Charleston, WV

Mon Health Medical Center, Morgantown, WV

- Operating Room, Air Handling Units
- Pharmacy USP Renovation
- Radiology Renovation
- Select Medical Long Term Acute Care

City of Morgantown, City Maintenance Garage, Morgantown, WV

Raleigh General Hospital, Beckley, WV

- Pharmacy Renovation
- Nuclear Camera Renovation
- Cath Lab Renovation

Duke LifePoint, Conemaugh Health Systems, Johnstown, PA

- East Hills Outpatient Center
- Conemaugh Memorial, 'D' Building

#### **EDUCATION**

2010 - Bachelor of Science Mechanical Engineering Technology University of Pittsburgh at Johnstown,

#### **SPECIALIZATIONS**

Mechanical Engineering HVAC Design Facility Analysis Master Planning On-site Troubleshooting

## REGISTERED PROFESSIONAL ENGINEER

West Virginia, Pennsylvania

#### MEMBERSHIPS / CERTIFICATES

ASHRAE ASHRAE HFDP (Healthcare Facility Design Professional)

ASHE



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Matthew C. Corathers, P.E. Senior Associate | Mechanical Engineer

Contact Information 240.457.8738 (2) mcorathers@cjlengineering.com

#### **PROFESSIONAL SUMMARY**

Matthew Corathers is a Senior Associate and Mechanical Engineer of CJL Engineering. He started with the firm in 2021 and has over 15 years of progressive experience. Matthew has been involved with the different stages of building design for Medical, Education, and Food Service Facilities. His responsibilities span from existing conditions surveys to 100% submittals, as well as Construction Administration during project construction phases. He has been involved in engineering and design of various types of HVAC system layouts as well as equipment selection and sizing, load calculation, detail compilation, and specification editing for Contract Document set production. Matthew's HVAC System experience consists of Electric, Natural Gas, Steam, Hot Water, Chilled Water, Condenser Water, Direct Expansion (DX), Variable Refrigerant Flow, Heat pipe, and Desiccant Heat Wheel systems.

#### **REPRESENTATIVE PROJECTS**

West Virginia University, Morgantown, WV

- Reynolds Hall, New Business and Economics Building
- Ascend Co-working Facility RenovationField Hall Renovation
- WVU Medicine, Morgantown, WV
- New Children's Hospital
- EP Lab Renovation
- Starbucks Renovation

WVU Medicine, Camden Clark Medical Center, MEP Infrastructure Assessment, Parkersburg, WV

WVU Medicine, Fairmont Medical Center Renovations, Fairmont, WV

WVU Medicine, Jackson Hospital Renovations, Ripley, WV

Marshall University, Lewis College of Business, Brad D. Smith Schools of Business, Huntington WV

Confidential Client, Renovations, Elkins, WV

James Madison University Dining Hall, Harrisonburg, VA\*

Winchester Medical Center, MOB 1 Expansion and three Fit-outs for Cardiac Rehab, Cardiology, and Cardio-Thoracic, Winchester, VA\*

IHOP Restaurant, Jane Lew, WV

West Virginia Wesleyan College, Campus Wide Master Plan, Buckhannon, WV

City of Morgantown, City Maintenance Garage, Morgantown, WV

Mon Health Medical Center, Morgantown, WV

- Operating Room, Air Handling Units
- Pharmacy USP Renovation
- Radiology Renovation
- Select Medical Long Term Acute Care

Mon General Hospital, Miscellaneous troubleshooting/advising of systems, Morgantown, WV\*

- OR Airflow corrections
- HCC Steam
- MRI Equipment Humidity
- Facilities Boiler Replacement

West Virginia University, Evansdale Traffic Gate Utility, Morgantown, WV\*

Arby's, Jane Lew, WV

Arby's, Charleston, WV

Bridgewater College, Forrer Learning Commons Renovation and Addition, Bridgewater, VA\*

Sentara RMH Mobile MRI Corridor, Harrisonburg, VA\*

Harrison County Schools, Fire Alarm Renovation, Harrison County WV\*

\* Experience from previous employer

#### **EDUCATION**

2005 – Bachelor of Science Mechanical Engineering West Virginia University

#### **SPECIALIZATIONS**

Mechanical Engineering Project Management Field Observations Healthcare Facilities Education Facilities Master Planning On-site Troubleshooting

#### REGISTERED PROFESSIONAL ENGINEER

West Virginia





Rodney A. Wolfe, P.E. Principal | Electrical Engineer

Contact Information

814.536.1651
rwolfe@cjlengineering.com

#### **PROFESSIONAL SUMMARY**

Rodney Wolfe is an Electrical Engineer and Principal of CJL Engineering. He started with the firm in 1993 and he is responsible for overseeing the electrical drafting, design and specifications of projects to assure compliance with local, state and federal codes, regulations and standards, establish company electrical design criteria, and schedule electrical department personnel to complete project assignments. Rodney is involved in the design and specification of low and medium voltage distribution systems, lighting systems, emergency power systems, local area networks, sound and communications systems and site utilities.

#### **REPRESENTATIVE PROJECTS**

West Virginia University, Oglebay Hall LEED® Certified, Morgantown, WV

- University of Pittsburgh, Johnstown, PA
- Buckhorn and Sunset Lodge Renovations
- Wellness and Recreation Center
- Owen Library Renovations
- Freshmen Dorm Renovations: Laurel, Oak, Maple Hickory and Hemlock Halls, Willow Senior Residence Hall
- Blackington Hall Cafe Renovation

Pennwest University, Founders Hall Historic Retrofit, Clarion, PA

Community College of Allegheny County, Pittsburgh, PA

- K. Leroy Irvis Science Center, LEED® Silver
- Jones Hall Historic Retrofit
- West Hall Retrofit of Existing Science
   Building

Penn State Behrend, Advanced Manufacturing and Innovation Center, Erie, PA

Youngstown State University, Williamson College of Business, LEED® Gold, Youngstown, OH

WVU Medicine, Children's Hospital, Morgantown, WV

Harrison-Taylor 911 Center, Bridgeport, WV

- LECOM Health, Corry Memorial Hospital
- Medical Arts Building
- Independent Living Facility

Housing Authority of the City of Erie, PA

- Modernization, Security and Energy Conservation Improvements
- Project H-3 & Project G
- Lake City Dwellings
- Curry/Schell Apartments

Clinton County Housing Authority (CCHA), Lock Haven, PA

- Numerous CFP Modernization Work
- Security Upgrades
- The Johnstown Housing Authority, PA
- New Administration Building for Authority
- Comprehensive Grant Improvements
- Comprehensive Grant 1998 Development Vine Street & Townhouse Towers
- Comprehensive Grant
- Connor Towers, Electrical Room
- PA 19-3 Oakhurst Ext. Replace Metering and Conduit
- Connor Towers Handicapped Entrance / Loughner Fence
- Connor Towers Modernization
- Coopersdale Homes Trash Bins
- Loughner Plaza Automatic Sliding Doors
- Solomon and Coopersdale Homes Various Sites - Security Systems

Somerset Housing Authority

- Di & Di Apartments, Meyersdale, PA
- Windber Terrace, Windber, PA
- Kircher Place, Boswell, PA

Fabios Pizza & Event Center, 1920 Main Street, Wheeling, WV

#### **EDUCATION**

1988 - Bachelor of Science Electrical Engineering University of Pittsburgh

#### **SPECIALIZATIONS**

Electrical Engineering Primary Power Industrial Power Government and Healthcare Schools K-12 Colleges and Universities Building Evaluations Feasibility Studies

## REGISTERED PROFESSIONAL ENGINEER

West Virginia Pennsylvania Maryland Ohio

#### **MEMBERSHIPS/ACTIVITIES**

Member of the Building Industry Consulting Service International (BICSI).

Pennsylvania Society of Professional Engineers (PSPE)

National Society of Professional Engineers (NSPE)



# GLENGINEERING

Jeffrey A. McKendree, P.E., CET Associate Principal | Fire Protection

Contact Information

814.536.1651
jmckendree@cjlengineering.com

#### **PROFESSIONAL SUMMARY**

Jeffrey McKendree is an Associate Principal and Fire Protection Engineer of CJL Engineering. He has 22 years experience in the industry. Jeff is responsible for the fire protection design, specifications and management of current projects. He also maintains relationships with architect and clients in reference to Life Safety Analysis and current Fire Codes. Jeff provides construction observation services, which requires him to visit the construction site to solve field problems and to provide punch lists for completion of the project. He has served as a fire protection design engineer for hospitals, universities, schools, office buildings, high-rise condominiums, mission critical facilities, eCommerce warehouses and personal care homes.

#### **REPRESENTATIVE PROJECTS**

West Virginia University, Morgantown, PA

- Reynolds Hall, Business and Economics Building
- Puskar Center Performance Dining Facility
- Field Hall Renovations

Bucknell University, Gateway Residence Halls HVAC Upgrade/Replacement, Lewisburg, PA

The Edge, LEED<sup>®</sup> Gold, New Mixed-Use, High-Rise Building, State College, PA

The RISE at State College, New High-Rise, Multi-Use Building, State College, PA

University of Pittsburgh, Pittsburgh, PA

- Hillman Library Renovations
- Community Engagement Center
- Posvar Hall Addition

St. Francis University, Sullivan Hall, Health Sciences Experiential Learning Commons, Loretto, PA

Penn State Beaver, New Telecom Room, Monaca, PA

St. Vincent College, Dunlap Family Athletic and Recreation Center, Latrobe, PA

Penn State Health, Milton S. Hershey Medical Center, Penn State College of Medicine, AC-10 & 11 Replacement, Hershey, PA

UPMC Hamot, Patient Care Tower, Erie, PA

Clinton County Housing Authority (CCHA), CFP Modernization Work, Lock Haven, PA

Grove City College, Hopeman Residence Hall Building Assessment, Grove City, PA

WVU Medicine, Fairmont Medical Center Renovations, Fairmont, WV

Allegheny Health Network, St. Vincent Hospital, Erie, PA

- Infill Building
- Fifth Floor Stages 2, 3 and 4
- Tower Modifications, Third Floor

LECOM Health, Corry Memorial Hospital. Corry, PA

Independent Living Facility

Medical Arts Building
 Canon McMillan School District, High

School Renovation, Canonsburg, PA Rust-Oleum Corporation, Fire Alarm

Upgrade, Williamsport, PA

UPMC Magee-Womens Hospital, Green Zone Fire Protection, Pittsburgh, PA

Meritus Medical Center, Meritus School of Osteopathic Medicine, Hagerstown, MD

- UPMC Mercy, Pittsburgh, PA
- Pavilion, Vision & Rehabilitation Hospital
- Heliport Upgrade

Western PA Operating Engineers Training Facility and Dispatch Center, New Alexandria, PA

#### **EDUCATION**

1999 - Bachelor of Science Fire and Safety Engineering Eastern Kentucky University

1997 - Associate of Arts Fire Science Technology Harrisburg Area Community College

#### **SPECIALIZATIONS**

Fire Protection Engineering Code & Life Safety Analysis Hydraulic Calculations AutoCAD<sup>®</sup> REVIT<sup>®</sup> BIM HASS Hydraulic Analysis

#### REGISTERED PROFESSIONAL ENGINEER

Maryland

#### **MEMBERSHIPS/ACTIVITIES**

National Institute of Certifications in Engineering Technology (NICET) Water-Based Systems Layout / III

Society of Fire Protection Engineers Professional Member

National Fire Protection Association Member



# 

James M. Vizzini, III, P.E., CPD Senior Associate | Plumbing Engineer

Contact Information

814.536.1651
jimmyvizzini@cjlengineering.com

#### **PROFESSIONAL SUMMARY**

James Vizzini is a Senior Associate and Plumbing Engineer at CJL Engineering. He joined the firm in 2013 and has over 8 years of plumbing design experience. Jimmy has been involved in the plumbing system design and commissioning of projects for college/ university, health care, schools K-12, industrial, corporate, and government projects. Jim specializes in the design and specification of domestic water distribution systems, sanitary drainage and vent systems, storm drainage systems, natural gas distribution, welding gas distribution systems, and site utilities. On-site industrial building plumbing system evaluations are part of Jim's responsibilities.

#### **REPRESENTATIVE PROJECTS**

West Virginia University, Reynolds Hall, New Business and Economics Building, Morgantown, WV

University of Pittsburgh, Pittsburgh, PA

- SRCC Building Multiple Lab Renovations
- Community Engagement Center
- Katz School of Business
- Gardner Steel Building, Systems Evaluation
- St. Francis University, Loretto, PA
- Connors Family Fine Arts Center
- Saint Margaret Hall, New OT Building
- New Science Building
- Sullivan Hall, Health Sciences
   Experiential Learning Commons
- DeGol Stadium Restroom Building
- Bucknell University, Lewisburg, PA
- Carnegie Building, Historic Renovation
- Hildreth-Mirza Hall, Humanities Center Renovation, LEED<sup>®</sup> Silver
- Grove City College, Grove City, PA
- Buhl Library, Summer Work
- Phillips Field House Renovation

Edinboro University, Ross Hall Renovation, Edinboro, PA

St. Vincent College, Latrobe, PA

- Dunlap Family Athletic and Recreation Center
- Campus Infrastructure Master Plan

University of Pittsburgh, Baldwin Hall and Faulkner Hall Restroom Renovations, Bradford, PA West Virginia Capitol Complex, State Office Building #3 Retrofit, Charleston, WV University of Pittsburgh, Manufacturing Assistance Center, Titusville, PA

Duke LifePoint, Conemaugh Health Systems, Johnstown, PA

- 'D' Building Main Campus Renovations
- East Hills Outpatient Center

Allegheny Health Network, St. Vincent Hospital, Erie, PA

- OSI Building Renovation
- 5<sup>th</sup> Floor Renovations
- Hardner Building, 2<sup>nd</sup> Floor Renovation
- Professional Building, Urology Expansion
- Infill Building Renovations
- Tower 3<sup>rd</sup> Floor Modifications
- 6<sup>th</sup> Floor Pediatrics
- MRI Relocation
- 6th Floor Nursing Unit
- Chemo Infusion
- Emergency Department Renovations
- UPMC Hamot, Erie, PA
- New Patient Care Tower
- Audiology Expansion
- 8th Floor South Complex Renovation
- OB/GYN Additional Services
- Operating Room Upgrades
- Domestic Hot Water System Upgrade
- EP Lab #1 & #2
- North Complex Sprinkler Design
- Stress Lab
- Hyperbaric Suite, MEP Services
- Breast Health Relocation

#### **EDUCATION**

2013 - Bachelor of Science Mechanical Engineering Technology University of Pittsburgh at Johnstown

#### **SPECIALIZATIONS**

Plumbing Engineering Domestic Water Distribution Systems Sanitary Drainage and Vent Systems Medical Gas Systems System Evaluations

#### REGISTERED PROFESSIONAL ENGINEER

Pennsylvania

Certified Plumbing Designer, ASPE

#### **MEMBERSHIPS/ACTIVITIES**

ASPE



# 

Christy L. Cramer, P.E., WELL AP, LEED<sup>®</sup> Accredited Professional, BD+C Associate Principal | Mechanical Engineer

Contact Information

412.262.1220
ccramer@cjlengineering.com

#### **PROFESSIONAL SUMMARY**

Christy Cramer is an Associate Principal and Energy Modeler at CJL Engineering. She joined the firm in 2007 and has 16 years of experience. Christy has a background in HVAC system design for a diverse range of projects from universities to laboratories and K-12 schools to hospitals. Over the past twelve years, her focus has branched from design to in-depth energy modeling and analysis for the purposes of LEED<sup>®</sup> certification, grant applications, plant and system comparison, economic payback analysis and as an aid to architectural design.

#### **REPRESENTATIVE PROJECTS**

West Virginia University, Reynolds Hall, New Business and Economics Building, Morgantown, WV

Duquesne University, Pittsburgh, PA

- Energy Center, Chiller #7 Install
- Energy Center, Cooling Tower Replacement
- Des Places Residence Hall, LEED® Gold

Grove City College, Chiller Upgrades, Grove City, PA

University of Pittsburgh, Pittsburgh, PA

- Hillman Library, Historic Building
- Metering Study

Carnegie Mellon University, Pittsburgh, PA

- Tata Consultancy Services (TCS) Hall,
- GSIA/Posner Academic Backfill

The Pennsylvania State University, University Park, PA

- Pegula Ice Arena Energy Consulting
- Rackley Building, Energy Savings Program
- Pattee-Paterno Library, Energy Savings Pro
- Holuba Hall Lighting Energy Consulting

St. Vincent College, Dunlap Family Athletic and Recreation Center, Latrobe, PA

- Bucknell University, Lewisburg, PA
- Gateway Residence Halls HVAC
   Upgrade/Replacement
- Carnegie Hall Renovation

Penn State University, Greater Allegheny, Ostermayer Lab Building Renovation, White Oak, PA

Trine University, Thunder Ice Arena Forensic Investigation, Angola, IN St. Francis University, Connors Family Fine Arts Center, Loretto, PA

Penn State University, Biology and Anatomy Labs Renovation, New Kensington, PA

UPMC Mercy, Vision and Rehabilitation Hospital, Pittsburgh, PA

Google Bakery Square 1.0 Offices Renovations, Pittsburgh, PA

Carnegie Museum of Natural History, Chilled Water Plant Update, Pittsburgh, PA

Phipps Conservatory and Botanical Gardens, Center for Sustainable Landscape, LEED® Platinum & Living Building Challenge, Pittsburgh, PA

Union Trust Building, LEED<sup>®</sup>Silver: Admin. and energy modeling services were provided for LEED<sup>®</sup> Core & Shell v2009 certification Pittsburgh, PA

National Aviary, The Garden Room, Pittsburgh, PA

Green Building Alliance Headquarters, LEED® CI Gold, Pittsburgh, PA

Railroad Residential Development, Pittsburgh, PA (In-Design)

Smallman Residential Development, Pittsburgh, PA (In-Design)

City Club Apartments, Pittsburgh, PA (In-Design)

The Edge, LEED<sup>®</sup> Gold, Mixed-Use, High-Rise Building, State College, PA

The RISE at State College, High Rise, Multi-Use Building, PA

#### **EDUCATION**

2002 – Bachelor of Science, Mechanical Engineering Grove City College

#### **SPECIALIZATIONS**

Building Energy Modeling LEED® Documentation Energy Audits HVAC Design Feasibility Analysis

#### REGISTERED PROFESSIONAL ENGINEER

Pennsylvania

#### **MEMBERSHIPS/ACTIVITIES**

LEED® Accredited Professional LEED® Building Design + Construction WELL Accredited Professional

#### **MODELING SOFTWARE**

Trane Trace 700 Trane Trace Chiller Plant Analyzer



# **PROFESSIONAL ENGINEERING LICENSES**





#### West Virginia State Board of Registration for Professional Engineers Search: Details

Name:	ADAM BRIAN HALE
WV Professional Engineer:	PE License Number: 023509
	PE License Status: Active
	PE Issue Date: 03/25/2019
	PE Expiration Date: 12/31/2024

#### West Virginia State Board of Registration for Professional Engineers Search: Details

 
 Wame:
 RODNEY A. WOLFE

 WV Professional Engineer:
 PE License Number: 015969

 PE License Status: Active

 PE Issue Date: 04/28/2004

 PE Expiration Date: 12/31/2024

BUREAU OF PROFESSIONAL AND OCCUPATIONAL AFFAIRS

P. O. Box 2649

Harrisburg, PA 17105-2649





BUREAU OF PROFESSIONAL AND OCCUPATIONAL AFFAIRS P. O. Box 2649 Harrisburg, PA 17105-2649 09/27/2023				
License Information				
CHRISTY LANE CRAMER				
PITTSBURGH, Pennsylvania 15236				
Board/Commission:	State Registration Board for Professional Engineers, Land Surveyors and Geologists	Status Effective Date:	09/26/2007	
LicenseType:	Professional Engineer	Issue Date:	09/26/2007	
Specialty Type:		Expiration Date:	09/30/2025	
License Number:	PE074856	Last Renewal:	08/17/2023	
Status:	Active			
Disciplinary Action Details				
No disciplinary actions were found for this license.				



### **ORGANIZATION CHART & STAFFING WORK PLAN**



#### Jim Vizzini, P.E.

Partner | Principal In Charge % Time Assigned to Project: 30 On and Off-Site Participation Engineering Manager overseeing all aspects of the project services. Perform existing conditions survey.

### Adam Hale, P.E.

Principal | Project Manager % Time Assigned to Project: 50 On and Off-Site Participation Supervision and coordination of design and field work. Participation in any meetings.

#### Jeff McKendree, P.E.

Principal | Fire Protection Engineer % Time Assigned to Project: 25 On and Off-Site Participation Supervision and coordination of design and field work. Participation in meetings.

#### Matt Corathers, P.E.

Senior Associate | Mechanical Engineer % Time Assigned to Project: 50 On and Off-Site Participation Perform existing condition survey. Prepare design documents and construction admin. services. Participation in any meetings.

#### Rodney Wolfe, P.E.

Electrical Engineer % Time Assigned to Project: 25 On and Off-Site Participation Supervision and coordination of design and field work. Participation in meetings.

#### Jimmy Vizzini, P.E.

Plumbing Engineer % Time Assigned to Project: 25 On and Off-Site Participation Supervision and coordination of design and field work.

#### Christy Cramer, P.E., WELL, AP, LEED AP, BD+C

Energy Modeling % Time Assigned to Project: 25 Off-Site Participation Prepare energy model



# EXPERIENCE



### WEST VIRGINIA EXPERIENCE











#### **HIGHER EDUCATION**

West Virginia University, Morgantown, WV

- Reynolds Hall, New Business and Economics Building
- Ascend Co-working Facility Renovation
- Athletic Performance Center, Commissioning Services
- Katherine Johnson IV&V Facility, Fairmont, WV
- Studio Theater Renovation
- Oglebay Hall, Forensic Science Lab, LEED® Certified
- Brooks Science Hall
- Campus Master Plan
- Puskar Center Performance Dining Facility
- Field Hall Renovation
- PRT Maintenance Isolation Breakers
- Health Sciences South Substation Upgrade

Marshall University, Lewis College of Business, Brad D. Smith Schools of Business, Huntington WV

Shepherd University, Byrd Hall/Snyder Hall, Shepherdstown, WV Fairmont State College, Fairmont, WV

- Hunt Haught Hall
- Pritchard Hall

West Liberty State College, Fire Alarm System, West Liberty, WV

#### **HEALTHCARE / SENIOR LIVING**

WVU Medicine, Ruby Memorial Hospital, Morgantown, WV

- New Children's Hospital
- Clinical Pharmacy Clean Room
- MRI Replacement
- Campus Wide Master Plan
- L2-L5 Renovation
- Respiratory Relocation Project
- Starbucks Renovation
- Southeast Tower, Commissioning Services
- Cancer Research Center, Commissioning Services
- Cath Lab, Commissioning Services
- Inpatient Pharmacy, Commissioning Services

WVU Medicine, Camden Clark Medical Center, MEP Infrastructure Assessment, Parkersburg, WV

WVU Medicine, Jackson Hospital Renovations, Ripley WV

WVU Medicine, Fairmont Medical Center Renovations, Fairmont, WV

Mon General Hospital, Morgantown, WV

- Operating Room, Air Handling Units
- Pharmacy USP Renovation
- Radiology Renovation
- Weirton Medical Center, Weirton, WV
- Administration Suite, CT Scanner, Emergency Power



### WEST VIRGINIA EXPERIENCE











- Medical Records, MRI, Pharmacy, Sleep Lab
- Women's Center, Endoscopy, Fire Pump
- Medical Office Building, Business Office
- New OR Suite, Physician Lounge and Library
- Normal Power Switchgear Replacement
- GI Lab Relocation

Raleigh General Hospital, Beckley, WV

- Pharmacy Renovation
- Nuclear Camera Renovation
- Cath Lab Renovation

Bluefield Regional Center, Bluefield, WV

Chestnut Manor, Renovation Project, Weirton, WV

Valley Hospice Personal Care Home, Wheeling, WV

#### GOVERNMENT

Confidential Client, Renovations, Elkins, WV West Virginia Capitol Complex, State Office Buildings #3, 5, 6, 36 LEED® Certified, Charleston, WV Beckley Neville Street Renovation Project, Beckley, WV Community Bank of Parkersburg, Parkersburg, WV West Virginia International Yeager Airport, Charleston, WV Harrison-Taylor 911 Center, Bridgeport, WV NUCOR, Sheet Mill, Commissioning Services, Mason County,WV (In-Progress) City of Morgantown, City Maintenance Garage, Morgantown, WV

#### CULTURAL

Historic Post Office Building, MEP Feasibility Study, Morgantown WV BOPARC Morgantown Ice Arena Phase 1 Facilities Evaluation and Upgrade, Morgantown, WV (In-Design) Metropolitan Theatre, Mechanical Systems Upgrade, Morgantown, WV

Arby's, Jane Lew, WV

Arby's, Charleston, WV

IHOP Restaurant, Jane Lew, WV

Fabios Pizza & Event Center, Wheeling, WV (In-Design)



# Henry Buhl Library Renovation Grove City College, Grove City, PA



#### THE PROJECT

CJL Engineering designed the mechanical, electrical and plumbing and fire protection systems for this renovation project. The newly renovated spaces includes the addition of group study and classroom space, a new reading room, updated stacks, a new café, lounge, and patio. State-of-the-art technology and abundant power sources for student computing are also included. The phased project allowed the library to remain operational during design and construction.

#### **CJL DESIGN SOLUTIONS**

 The existing RTAHU (17,500 CFM) serving the Main Reading Room was converted to variable air volume (VAV). New ductwork was extended from this unit to variable volume boxes.

- The VAV boxes include hot water coils for heat in the winter and reheat in the summer.
- A new integrated control system was required and was connected to the campus Building Automation System.
- Due to various issues that were noted by facilities' technicians, new grounding triad at service entry of building was provided.
- A new 480V, Service rated, 4W, 800A, Main distribution switchboard ('HVMDP') was installed in the new electrical room.
- A new 4W, 3 Phase 125kW natural gas generator was installed.
- Extended existing site lighting circuits and relocated pole site lighting. Provided additional site lighting and circuiting (architectural uplighting and bollards) for new outdoor seating area.

- A new voice fire alarm system was provided throughout the entirety of the building.
- Replaced all of the sanitary and vent piping and storm piping, above and below slab.
- Natural gas system were modified to supply the new HVAC and generator system.



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# Baker Hall Adamson Wing Renovation Carnegie Mellon University, Pittsburgh, PA



#### THE PROJECT

CJL Engineering was contracted to provide Carnegie Mellon University mechanical, electrical, plumbing and fire protection consulting engineering services for the renovation to the Baker Hall, Adamson Wing. The 4,500 SF Adamson Wing in Baker Hall consists of classrooms and computer labs. These University classrooms offer resident audio and visual technology. The technology found in these classrooms include: single or dual displays, document cameras, Blue-ray players touch panels, input connection for laptop/mobile devices and video conferencing.

#### **CJL DESIGN SOLUTIONS**

- Conducted surveys to obtain existing site information to develop design
- Designed new HVAC systems and renovated existing systems
- Conducted heating, cooling and ventilation calculations to support HVAC design
- Met with facility staff to ensure they were in agreement with design approach
- Used feedback from maintenance staff and incorporated it into final design
- Attended kick-off meeting and progress review meetings
- Provided dehumidification strategies to help mitigate dampness throughout the building due to local environment
- Prepared punch list, reviewed shop drawings and assisted in the review and evaluation of mechanical and electrical change orders







# Alumni Hall, Cumulative Projects

University of Pittsburgh, PA



#### THE PROJECT

CJL Engineering has designed numerous systems upgrades for renovation projects within the building. Originally a Masonic Temple, this massive building houses a variety of university offices, including the alumni association, office of admissions and financial aid, lecture halls and the offices of CIDDE.

#### **CJL DESIGN SOLUTIONS**

8th Floor: Renovations to CIDDE Office

- CJL provided mechanical, electrical, plumbing and fire protection design services for this renovation.
- The project included the relocation of the director's offices on the eighth floor.

3rd and 4th Floor: Office of Admissions and Financial Aid (OAFA)

- CJL provided mechanical and electrical, design services for this renovation.
- Identified source of electrical power and data wiring as required by CSSD and FM in 3rd floor Open Office Area 322A and 4th floor rooms 429/430.
- Designed new variable frequency drives for air handling unit.







# **DiSepio Institute for Rural Health & Wellness** St. Francis University, Geothermal & LEED<sup>®</sup>, Loretto, PA



#### THE PROJECT

The DiSepio Institute for Rural Health & Wellness Center is a 30,000 SF education and research facility. It includes a clinic and rehabilitation center, strength and conditioning area, classrooms and research facilities. Designed to be LEED® compliant, the building features a three-level atrium, the center serves the University's Rural Health Sciences program that focuses on a telemedicine curriculum linking medical centers with remote locations. Served by a new Geothermal Well System, the building is joined with the existing Sullivan Hall.

#### **CJL DESIGN SOLUTIONS**

- The geothermal system is comprised of 44 wells; 350 feet deep with a heat pump design that serves the HVAC needs of the building.
- Energy modeling was used to calculate the heating and cooling loads of the glazing walls, windows and skylights.
- Emergency generator distribution system for life safety devices and heat pumps can carry the building for any unforeseen shut-down of power.
- Electrical design includes 480 Volt, 3-Phase, 1,200 Amp service with electrical closets on each floor for branch panels.
- Energy efficient lighting design uses linear and compact fluorescent lamps.
   Occupancy sensors and lighting control panels provide automatic shut off of lighting systems.







# **Roxian Theatre**

Adaptive Reuse, McKees Rocks, PA



AIA Pittsburgh, Medium Category Certificate of Merit - 2019

#### THE PROJECT

After sitting vacant for 16 years, the Roxian Theatre required a major overhaul. The \$9 million revitalization project skillfully blends revitalization of the former vaudeville theatre, with interiors, detailing, and state-of-the-art sound and lighting that introduce a rock and roll vibe. The 32,000 SF live music venue includes a lobby area; concert hall with first floor general admission standing area, and 2<sup>nd</sup> and 3<sup>rd</sup> floor balcony seating (total house capacity: 1,470); proscenium stage; 3 bar/ concession areas; mezzanine and house overlook at 3<sup>rd</sup> floor Sky Bar; 3 restrooms.

#### **CJL DESIGN SOLUTIONS**

• All building systems were replaced, with new systems engineered to accommodate needs of a modern performance venue.

- New mechanical systems were designed to serve loads anticipated for the house and the gathering spaces. Design was fine-tuned, factoring in performance times and typical seasons of operation.
- Electrical loads have been reduced as much as possible using LED lighting, occupancy sensors in back-of-house areas, and efficient fixtures that decrease the overall number required.
- Lighting fixtures concealed within new and existing architecture to maintain immaculate sight lines from all areas of the house.
- Hexagonal chandeliers with perimeter cove lighting in the entry lobby blend the existing architecture with a modern vibe.
- Indirect back-lighting of the original plaster rosette medallions also highlights the coffered ceiling.

- Original plaster filigree work at stage front accented with concealed linear fixtures.
- Frosted glass walls on either side of the stage are back-lit to mimic light shining through a window.
- Bar/concession areas carry through the modern design with downlighting and exposed bulb-style accent lighting. Vertical recessed fixtures add visual interest to the space.



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# **Metropolitan Theatre**

Mechanical Systems Upgrade, Morgantown, WV



#### THE PROJECT

The Metropolitan Theatre began its life in 1924 as a 1,300 seat movie palace. Today it has been renovated and rehabilitated into an events and concert venue. It is currently open after extensive renovations. It now has a state of the art sound and lighting system and a small portable screen for movies.

#### **CJL DESIGN SOLUTIONS**

- The original supply air blower was reused and the return, mixed air plenums were refurbished, and a new hot water heating coil was custom fit to the built up fan system. This system served the theater proper
- Four new air handling systems were installed with heating and cooling coils (cooling coils for future cooling) to serve the ancillary areas of the theater. A chilled water system was planned for future installation of air conditioning
- New primary secondary pumping/ piping arrangement was provided for the existing hot water

- The relatively new boilers and primary pumps that had been abandoned were retained and refurbished
- The hot water distribution piping system, air handling unit coils, unitary heating equipment, and auxiliaries were provided to complete the heating system





### **HIGHER EDUCATION REFERENCES**



Daniel Fisher Assistant Vice Chancellor Operations and Maintenance University of Pittsburgh 412.383.9955 dan.fisher@pitt.edu

Susan Grimm Director of Operations Grove City College 724.458.2984 GrimmSC@gcc.edu





David H. Williams Director of Physical Plant Saint Francis University 814.472.3251 dwilliams@francis.edu



Douglas E. Eppley Director of Facilities Capital Management, and Planning Saint Vincent College 724.532.5034 douglas.eppley@stvincent.edu





ENGINEERING

## **ANTICIPATED CONCEPTS & METHODS OF APPROACH**

Goal/Objective 1: Review existing plans and conditions as well as the operation of the facility and evaluate while communicating effectively with the owner to determine a plan that can be implemented in a manner that will minimize disruption to concurrent operation of the facility and meet all objectives.

The best way to accelerate the design and construction schedules is to provide an experienced team, led by our most senior engineers. CJL has significant experience in modernizing MEP/FP systems within existing buildings, while maintaining operations and minimizing disruptions. At the same time, it will be critical to bring contractors, as well as WVSU facilities staff on board from the beginning of the project, as they will have crucial insights on phasing, constructability, and schedules.

Then, the most important first step is for our team to work closely with the Owner to carefully analyze how the building is used now and going forward; operational, maintenance and security requirements, including HVAC, power, emergency power, life safety, water and IT systems; energy performance, indoor environmental quality (IEQ), and monitoring requirements. This will require multiple meetings in the early stages, but the investment is well worth the effort. CJL and the contractors will conduct detailed surveys and evaluations of the existing MEP/FP systems and utility infrastructure.

Once the design/construction team has a good understanding of the building operational requirements, CJL can begin to evaluate HVAC systems options, while the Project Team can begin to evaluate and plan demolition and construction phase sequencing in coordination with WVSU operational schedules. Our structural engineer will assess the impact of equipment on the roof or in ceilings, mechanical rooms, to determine whether structural modifications are required.

At this time, the Project Team will begin to have a good understanding of the project scope of work and can begin to establish the project budget and anticipated costs. The design can then be adjusted to meet performance and budget requirements. However, it should be also be anticipated, and this is another challenge, that as the HVAC systems are considered for replacement, other systems will also have to be considered for replacement or significant upgrades, such as the electrical infrastructure, Fire Alarm System, emergency power, and security systems.

Once the new scope of work is defined, another significant challenge in this process is understanding and implementing temporary systems capabilities for the courthouse during changing construction phases. In particular, power, emergency power, Fire Alarm System and security system operations, plumbing, as well as physical egress requirements will all be impacted during construction. New systems will often have to work in parallel or communicate with existing systems during the construction phases. The new systems will have to be extended into new areas, as they are renovated. As construction may need to occur during unoccupied periods, coordination and communications with WCC daytime operations and schedules will be critical and more difficult.

# Goal/Objective 2: As a portion of this process outlined in Objective 1, provide all necessary services to design the facilities described in this EOI in a manner that is consistent with West Virginia State University needs, objectives, current law, and current code; while following the plan to design and execute the project within the project budget.

CJL Engineering is very familiar with the local/regional markets of West Virginia. CJL has been providing professional design services in the state of West Virginia for over 20 years and have had a local presence in Morgantown since 2019. CJL had a number of clients and projects in the Morgantown and surrounding areas and opening a new office enabled us to serve them better with staff proximity to the job sites and generally better accessibility.

CJL Engineering's capability to manage projects based on construction dollars and the stakeholder's preferred budget is a well-established internal strength and process we bring to the design team. It begins at the earliest possible time in the Schematic Design Phase of the project. It is imperative that the key stakeholders and decision makers fully participate in the initial kickoff meeting, including Owners, Architects, Engineers, Construction Manager, Facility Personnel and Major Trades representatives if possible. The on-site survey, investigation, and review of existing facilities and drawings will validate the actual conditions the project will be facing. CJL's concentration and experience for assessment of existing MEP/FP equipment, controls, and systems conditions provide a baseline to compare to the owners desired expectations against the construction budget. Anticipated Concepts & Methods of Approach AEOI 2400000004 A&E Services - WVSU HVAC Renovations Projects for Multiple Locations Page 2

A strong commitment by the project managers to communicate and collaborate is CJL's fundamental process with a strong emphasis on interaction with the Owner, Architects, Construction Manager and other professionals on the design team from the onset of the project. This helps to integrate the MEP/FP design into the beginning phases of project. CJL provides recommendations for new or upgraded systems and options for design based upon the owner's budget and also provides estimates of probable construction costs and options for much wanted items which may be beyond the budget constraints.

The proper balance between design and cost is integral to CJL's approach to accurate engineering. As your engineer, it is our responsibility to develop a comprehensive, efficient, and reliable design for the MEP/FP systems that meet code at a cost that fits the budget. Our team once established provides continuity for the life of the project. The same engineers that develop the design will remain involved through the completion of the project, insuring stability, and the benefits of experience in the construction of the project.

The CJL team will identify construction logistical issues that may arise and offer possible phasing options presented as applicable. MEP/FP on-site construction management is standard procedure. Our change order rates are historically provable to run less than 1% range for the total on both Errors & Omissions and Unforeseen Conditions.

## Goal/Objective 3: Provide Construction Contract Administration Services with Competent professionals that ensures the project is constructed and functions as designed.

Matthew Corathers, West Virginia native, will be our dedicated on-site construction administration personnel for this projects. He is very familiar with this process because he has handled the CA Services for numerous West Virginia projects. During the Construction Administration Phase of the project, CJL will provide the following services:

- 1. Review and respond to bidders' questions, RFIs; issue required clarifications, and comment on MEP/FP bids.
- 2. Review of shop drawing submissions.
- 3. Observation of critical alarm and smoke tests, emergency generator tests.
- 4. Assist in the review and evaluation of mechanical and electrical change orders.
- 5. Attend project construction meetings during active MEP/FP construction, and perform periodic site observations including the preparation of an ongoing punch list of mechanical and electrical deficiencies as construction progresses through completion.
- 6. Preparation of final punch list upon substantial completion of services, prior to occupancy, including project signoff after the Construction Manager has certified that all corrective services has been successfully completed. We will conduct as many visits as required for site observation and punch lists.
- 7. Review of MEP/FP installation testing reports.



# Dynamic Design for Changing Times

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