

The following documentation is an electronicallysubmitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Velcome, Robert M Ross Velcome, Robert M Ross Solicitation Response(SR) Dept: 0211 ID: ESR11142300000002349 Ver.: 1 Function: New Phase: Final Modified by batch , 11/14/2023 Header @ 1	WOASIS	Jump to: PRCUID 🛃 💿 😚 Home 🌽 Personalize 🚳 Accessibility 🛐 App Help 🌾 About 😈
Header # 1         Federal Information       Contact       Default Values       Discount       Document Information       Clarification Request         Procurement Topier:       1274101       SD Doc Code:       CEOI         Procurement Topier:       1274101       SD Doc Code:       CEOI         Procurement Topier:       1274101       SD Doc Code:       CEOI         Procurement Topier:       12701       SD Doc Code:       CEOI         Vendor ID:       000000131555       SD       SD Doc Doc ID:       SD Code:       CEOI         Legal Name:       SMTHGROUP INC       SD Doc Doc ID:       SD IX700300002       SD Doc ID:       SD IX70030002         Legal Name:       SD Doc Doc ID:       SD IX700300002       SD Doc ID:       SD IX700300002       SD Doc ID:       SD IX70030002         Legal Name:       SD Doc Doc ID:       SD IX700300002       SD Doc ID:       SD IX70030002       SD ID:       SD IX70030002       SD ID: </th <th>leicome, Robert M Ross</th> <th></th>	leicome, Robert M Ross	
Central Information       Contact       Default Values       Discount       Document Information       Clarification Request         Procurement Folder:       127101       S0 Doc Code:       CEOI         Procurement Type:       Central Contract - Fixed Ant       S0 Doc Doc Code:       CEOI         Vendor ID:       00000101555       C       S0 Doc Doc S0240000002         Legal Name:       SMITHGROUP INC       Published Date:       11/7/23         Alias/DBA:       Close Date:       11/14/203         Total Bidi:       0.00       Status:       Close Time:       13.0         Response Date:       11/14/2023       Solicitation Description:       For Vocument Project         Response Time:       12.57       Solicitation Description:       For Vocument Project         Responded By User ID:       SmithGroup       Solicitation Coles:       1         First Name:       Lisa       Total of Hader Attachments:       1         Total of All Attachments:       1       Total of All Attachments:       1		
Procurement Folder:       1274101       S0 Doc Code: CEOI         Procurement Type:       Central Contract - Fixed Amt       S0 Doc ID:       S0 Doc ID:       GSD 240000002         Legal Name:       SMITHGROUP INC       Published Date:       11/7/23         Alias/DBA:       Close Date:       11/14/23         Total Bid:       50 00       Solicitation Description:       EO: New Consolidated State Laboratory Facility Project         Response Date:       11/14/203       Solicitation Description:       EO: New Consolidated State Laboratory Facility Project         Responded By User ID:       SmithGroup       Total of Header Attachments:       1         First Name:       Lisa       Total of All Attachments:       1		E List View
Procurement Type: Central C Contract - Fixed Ant   Vendro ID: 00000181556   Vendro ID: 00000181556   SO Doc ID: GSD240000002   Legal Name: SMITHGROUP INC   Alias/DBA: Close Date:   Total Joit: 50 00   Close Date: 11/14/23   Total Joit: 50 00   Response Time: 12.57   Responded By User ID: SmithGroup   First Name: Lisa   Lisa Contract - Fixed Ant Contract - Fixed Ant Contract - Fixed Ant Contract - Fixed Ant SmithGroup Contract - Fixed Ant Contract - Fi	General Information Contact Default Values Discount Document Information Clarification Request	
Vendor Die 00000 181556 SO Doc Die: GSD240000002   Legal Name: MITHGROUP INC   Alias/DBA: Close Date: 11/1/23   Total Bit: 0.00   Total Bit: 0.00   Response Time: 12:57   Response Time: 12:57   Solicitation Description: EOI: New Consolidated State Laboratory Pacity Project   Solicitation Description: EOI: New Consolidated State Laboratory Pacity Project   Image: Solicitation Description: EOI: New Consolidated State Laboratory Pacity Project   Solicitation Description: EOI: New Consolidated State Laboratory Pacity Project   Image: Solicitation Description: EOI: New Consolidated State Laboratory Pacity Project   Image: Solicitation Description: EOI: New Consolidated State Laboratory Pacity Project	Procurement Folder: 1274101	SO Doc Code: CEOI
Legal Name: SMITHGROUP INC   Alias/DBA: Close Date:   11/14/2023 Close Time:   11/14/2023 Close Time:   11/14/2023 Close Time:   12:57 Solicitation Description:   12:57 Total of Header Attachments:   11/14/201 Total of All Attachments:   11/14/2023 Total of All Attachments:	Procurement Type: Central Contract - Fixed Amt	SO Dept: 0211
Legal Name: SMITHGROUP INC   Alias/DBA: Close Date:   11/14/2023 Close Time:   11/14/2023 Status:   Close Time: 13.30   Solicitation Description: EOI: New Consolidated State Laboratory Facility Project   Responded By User ID: SmithGroup   First Name: Lisa	Vendor ID: 000000181556	SO Doc ID: GSD240000002
Alias/DBA: Close Date: 11/14/23   Total Bid: 50.0 Close Time: 13.30   Response Date: 11/14/2023 State: Closed   Response Time: 12:57 Solicitation Description: Pacifity Project   Responded By User ID: SmithGroup   First Name: Lisa		Published Date: 11/7/23
Response Date: 11/14/2023   Response Time: 12:57		Close Date: 11/14/23
Response Date: 11/14/2023   Response Time: 12:57     Responded By User ID: SmithGroup     First Name: Lisa     Total of All Attachments:     1	Total Bid: \$0.00	Close Time: 13:30
Response Time: 12:57   Responded By User ID: SmithGroup   First Name: Lisa	Response Date: 11/14/2023	Status: Closed
Total of All Attachments: 1		Solicitation Description: EOI: New Consolidated State Laboratory Facility Project
Total of All Attachments: 1	Responded By User ID: SmithGroup	Total of Header Attachments: 1
Last Name: Ries		Total of All Attachments: 1
	Last Name: Ries	
Email: lisa.ries@smithgroup.com	Email: lisa.ries@smithgroup.com	
Phone: 7346692769	Phone: 7346692769	



Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

# State of West Virginia Solicitation Response

Proc Folder:	1274101				
Solicitation Description:	EOI: New Consolidated State Laboratory Facility Project				
Proc Type:	Central Contract - Fixed Amt				
Solicitation Closes		Solicitation Response	Version		
2023-11-14 13:30		SR 0211 ESR11142300000002349	1		

VENDOR					
000000181556 SMITHGROUP INC					
Solicitation Number:	CEOI 0211 GSD2400000002				
Total Bid:	0	Response Date:	2023-11-14	Response Time:	12:57:44
Comments:					

FOR INFORMATION CONTACT THE BUYER Melissa Pettrey (304) 558-0094 melissa.k.pettrey@wv.gov					
Vendor Signature X	FEIN#	DATE			
All offers subject to all terms and conditions contained in this solicitation					

Line	Comm Ln Desc		Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	EOI: New Consolidated State Laboratory Facility Project					0.00
Comm	Code	Manufacturer		Specifica	ation	Model #
811015	508					

Commodity Line Comments: SmithGroup + Silling Architects Response to EOI

### Extended Description:

EOI: New Consolidated State Laboratory Facility Project

WEST VIRGINIA DEPARTMENT OF ADMINISTRATION, GENERAL SERVICES DIVISION

# NEW CONSOLIDATED STATE LABORATORY FACILITY PROJECT

Expression of Interest | Architectural / Engineering Services Solicitation No: CEOI 0211 GSD2400000002

November 14, 2023

# SMITHGROUP + SILLING

APILARORATORY



One PPG Place, Ste 2300 Pittsburgh, Pennsylvania 15222 405 Capitol Street, Upper Atrium Charleston, West Virginia 25301

November 14, 2023

Re: West Virginia, Dept. of Administration, General Services Division New Consolidated State Laboratory Facility Project Expression of Interest | Architectural / Engineering Services

### MELISSA PETTREY, SENIOR BUYER

Department of Administration, Purchasing Division 2019 Washington Street East Charleston, West Virginia 25305-0130

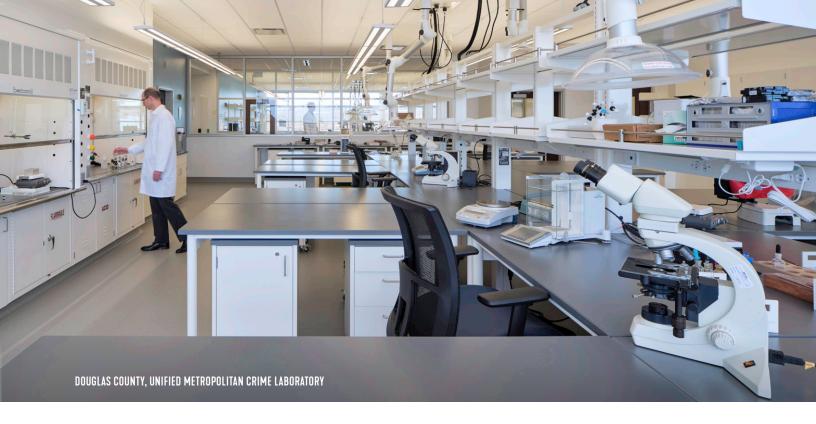
Dear Ms. Pettrey and Members of the Selection Committee:

Planning for the new Consolidated State Laboratory Facility's operational needs requires careful consideration of the varied divisions' needs and a wide range of practices, standards, and technologies. Combined with the imperative for adaptability, future flexibility, and security, a key goal is to provide high quality environments for your scientists and staff to ensure safety and productivity across divisions and with partner institutions.

WHY THIS TEAM? SmithGroup is a nationally recognized firm with deep experience in the design of state and federal laboratory facilities of your anticipated program and is actively working with major institutions in West Virginia. Our partner, Silling Architects in Charleston, WV, has extensive experience working on large, complex projects in West Virginia and nationally. Our team is partnership-focused with the Agency and the project's stakeholder groups. *Our time-tested process* will lead your diverse team smoothly through the design of a high performing, state-of-the-art facility, overlaying best practices with the unique needs of your programs, providing thoughtful design options, managing budgets, and maintaining project schedules.

**PROVEN EXPERIENCE IN HIGHLY SPECIALIZED GOVERNMENTAL LABORATORIES:** Having received twelve prestigious "Lab of the Year" awards from SEFA, SmithGroup has planned and designed **more than 40 million square feet of research and regulatory facilities** for federal and state laboratories, top-tier research universities, and institutes, including medical examiners/coroners, crime labs, metrology labs, and environmental labs. Through this experience, SmithGroup has developed **extensive benchmarking and simulation tools** that assist in forming or validating comprehensive programs for regulatory, research, and clinical facilities.

**DEDICATED INTEGRATED DESIGN TEAM**: The SmithGroup-Silling team is ready to begin your project immediately. SmithGroup, the Architect and Engineer of Record, brings an integrated team of architects, designers, lab planners, and engineers with staff that have **direct experience** in the programmatic elements anticipated for your project. SmithGroup will provide overall project management, design leadership, laboratory planning, and technical architecture and engineering services. Our partner, Silling Architects, knowledgeable with state project processes, will provide project management support, architecture support, and full-time construction administration presence on-site.



Through the involvement of Silling and SmithGroup, our team has decades of experience through dozens of projects that have been delivered in alignment with all WV Purchasing guidelines, utilizing AIA documents and appropriate State of WV Supplementary Conditions.

The New Consolidated State Laboratory Facility is a significant project for the residents of West Virginia and deserves incredible focus on short- and long-term needs, creativity with pragmatism, and careful stewardship of state resources. We would like to be your partner in the development of this new facility and we welcome the opportunity to meet you and present our team in an interview, share insights, and learn more through discussion. Thank you for your thoughtful consideration.

Sincerely,

Jill Swensen, AIA, NCARB, LEED AP Principal-in-Charge | SmithGroup P | 724.355.4631 / E | jill.swensen@smithgroup.com State of WV Registered Architect: No. 5716

moshin

Jody Driggs, AIA, NCARB Project Executive | Silling Architects P | 304.549.4036 / E | jdriggs@silling.com State of WV Registered Architect: No. 3380

**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.

 (Printed Name and Title)
 Jill Swensen, Principal | Studio Leader

 (Address)
 One PPG Place, Suite 2300, Pittsburgh, PA 15222

 (Phone Number) / (Fax Number)
 P | 724.355.4631 / N/A

 (email address)
 jill.swensen@smithgroup.com

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract 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 State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract 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 this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; 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 this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

SmithGroup

(Company)		
(Signature of Authorized Representative) Jill Swensen, Principal   Studio Leader	11/14/2023	
(Printed Name and Title of Authorized Represe P   724.355.4631 / N/A	entative) (Date)	
(Phone Number) (Fax Number)		
jill.swensen@smithgroup.com		

(Email Address)

Revised 8/24/2023

### ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: GSD2400000002

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received: (Check the box next to each addendum received)

🖌 Addendum No. 1	🗌 Addendum No. 6
Addendum No. 2	Addendum No. 7
Addendum No. 3	Addendum No. 8
🗌 Addendum No. 4	🔲 Addendum No. 9
Addendum No. 5	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

SmithGroup

Company ul-Junsi

Authorized Signature

11/14/2023

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 11/1/2022

## INTERACTIVE NAVIGATION

Click on a section on the right to jump ahead.

Click the box on each section tab to return to the Table of Contents.

HAMILTON COUNTY CORONER AND CRIME LAB FACILITY



# **TABLE OF CONTENTS**

1	Firm Background	6
2	Team Qualifications	12
3	Team Organization & Experience	20
4	Relevant Project Experience	46
5	Project Understanding & Approach	98
6	References & Licensure	112



# FIRM BACKGROUND

To return to the Table of Contents

**CLICK HERE** 

**SECTION 1** 

1



# **SMITHGROUP**

SmithGroup is an award-winning, multidisciplinary architecture and engineering firm that employs research, data, advanced technologies, and design thinking to help clients solve their greatest challenges.

Working across a network of 20 offices, our team of 1,300 experts are committed to excellence in strategy, design, and delivery—giving rise to new and innovative processes and methodologies that are redefining the way we work as teams. Our specialists—from artists and engineers, to nurses, workplace strategists and beyond—develop beautiful, sustainable, future-focused solutions for healthcare providers, science + technology organizations, higher education and cultural institutions, urban environments, diverse workplaces, mixed-use and waterfront developments, and parks and open spaces.

Our integrated Science & Technology National Practice has provided comprehensive planning and design services for more than 40 million square feet of forensic, government, academic, and corporate research and regulatory laboratories worldwide, ranging from small laboratory renovations to large research campuses. We have successfully designed award-winning laboratory environments for representative clients such as the State of Utah, the State of New Mexico, San Diego County, Denver County, and numerous national labs and forensic facilities. YEARS IN BUSINESS 170 Years

#### LOCATIONS

Pittsburgh, Pennsylvania\* Phoenix, Arizona\* Detroit, Michigan\*

+17 other Cities

\*Location of Project Team Member(s)

STAFF SIZE 1,300 Team Members

#### SERVICES

Architecture Laboratory Planning **Building Envelope Campus** Planning **Civil Engineering Coastal Engineering** Landscape Design M/E/P Engineering Structural Engineering **Fire Protection Engineering Historic Preservation** Interior Design Sustainability Technology Design Workplace Strategy Urban Design



### With over 120 years of professional practice in West Virginia, Silling Architects is deeply committed to making our state a better place through passionate service and innovative, meaningful design.

Based out of downtown Charleston, Silling Architects is a design-oriented architectural, planning, and interiors firm that is intensely committed to passionate service and a comprehensive response to our clients' distinct needs. We are fascinated with the study of place and time, informing a design process that adds relevance and meaning to our clients' stories. We are a legacy architectural firm with beginnings in 1902, decades of service to generations of West Virginians, and showcase a rich variety of building types where we live, work, and play.

At Silling, we place an extraordinarily high value on client and stakeholder relationships. We understand, at depth, the design and construction process and the untold number of participants involved in conceiving and executing a highly successful project. Managing the process is paramount to design excellence. Our clients find that we both listen and internalize; we both lead and follow; we are both innovative and practical; we respect the constraints of budgets and the demands of schedules, while passionately pursuing meaningful design solutions.





YEARS IN BUSINESS 121 Years

LOCATIONS Charleston, West Virginia\* Orlando, Florida \*Location of Project Team Member(s)

STAFF SIZE 21 Team Members

### SERVICES

Architecture Building Information Modeling (BIM) Construction Administration Interior Design

### SMITHGROUP + SILLING PARTNERSHIP

Your SmithGroup + Silling team is an experienced partnership of nationally recognized and local experts who bring innovative solutions and design excellence and are committed to you and this project.

Our team's unique blend of local knowledge, civic and laboratory design expertise, and collaborative design philosophy can guide your stakeholders to make confident decisions regarding the future Consolidated State Lab within established budgets and schedules.

An integrated, multi-disciplinary approach is core to our design philosophy; we create spaces to meet specialized needs while incorporating flexibility to accommodate ever-changing technology. The new Consolidated State Lab is an exciting initiative that is about public safety, efficiency, and peace of mind. Our team understands that **it is ABOUT West Virginia and FOR West Virginia.**  To aim high is our team's mission. The composition of our team is intentionally diverse to include datadriven engineers, inspired architects, and researchbased planners who collectively leverage information to derive integrated, impactful designs from the inside out to the outside in. Our team is eager to play a role in transforming state services in West Virginia. Our team is passionate about creating a collaborative, flexible laboratory, with **YOU** in mind.

We have assembled a team that brings you the very best local team, Silling, who brings strong experience in project management support and project execution, along with SmithGroup, who brings national expertise in the planning and design of scientific laboratories. Our team will share their knowledge of design trends, best practices, and opportunities for innovation. Our team has chemistry, and we have years of experience working to successfully deliver projects in West Virginia. We are strengthened through our experiences and will bring valuable lessons learned to provide the State with the best results possible.





### **OUR SUBCONSULTANT PARTNERS**

We create the best project team for our clients by selecting consultants who bring planning and design expertise, innovative problem solving, and strong communication skills. Our leadership team will integrate our subconsultants from the beginning. We approach our consultants as partners, sharing knowledge and communicating openly so they are prepared to participate effectively and efficiently from Day 1. We have integrated a number of highly qualified local and national firms to provide professional services who have worked with us on past, similar projects and/or have had direct experience working with the State.

### **PROJECT COST RESOURCES, INC. | COST ESTIMATING**

Project Cost Resources, Inc. is a cost management firm providing quality project controls, including cost estimating, scheduling and other related services to architects and engineers, owners, developers and government agencies during all phases of project development including planning, design, and construction. Their estimators have provided conceptual estimates on billions of dollars of large, phased, and complex construction projects, including multiple forensic facilities with SmithGroup.

KEY STAFF MEMBER: Greg Edwards, LEED AP | Cost Manager

TERRADON | LANDSCAPE ARCHITECTURE & CIVIL ENGINEERING

Terradon provides a wide range of land development and civil engineering services, and is particularly suited to serve the project given their years' of successful experience serving governmental, educational, commercial, and recreational projects throughout West Virginia, as well as direct experience serving a number of projects at the West Virginia Regional Technology Park. Their firm has been recognized through numerous awards from the American Society of Civil Engineers, State Highway Departments, the Department of Environmental Protection, and the American Institute of Architects.

KEY STAFF MEMBERS: Greg Fox, RLA, ASLA, LEED AP | Landscape Architect Jim Nagy, PE | Civil Engineer

### **COLIN GORDON | VIBRATION/ACOUSITCS**

Colin Gordon provides specialized consulting services in acoustics and vibration control. Staff members include technical experts in architectural acoustics and noise control, vivaria, industrial and environmental noise studies, structural dynamics and building vibration, computer modeling techniques, and dynamic measurements.

KEY STAFF MEMBER: Blong Xiong, INCE | Vibration/Acoustics Consultant



To return to the Table of Contents

*y* CLICK HERE

## **SECTION 2**

-

6.6

-

**TEAM QUALIFICATIONS** 

### NATIONAL LEADERS IN LABORATORY DESIGN

Drawing on over nine decades of laboratory planning and design for many leading institutions, SmithGroup is able to create flexible environments that help to advance multidisciplinary efforts in today's health laboratories.

SmithGroup is nationally recognized as a leader in the planning and design of laboratory environments. Year after year, SmithGroup's laboratory facility designs are bestowed with awards from some of the most prestigious organizations throughout the world including the American Institute of Architects (AIA), Sustainable Buildings Industry Council and Architect Magazine. Most notably, SmithGroup has received the highest number of honors from SEFA's Laboratory of the Year gold-standard for international lab planning awards.

We have been a trusted design partner to leading research organizations, national laboratories, government agencies and Academic Institutions for over a century. Our success has been due to our integrated in-house approach to design including all the major disciplines within the same firm. This is important because of the common ethos that we retain as a design firm.

SmithGroup has worked with the majority of national laboratories, the National Institute for Health, the Environmental Protection Agency, multiple states, and most of the nation's top 25 National Science Foundationranked research universities just in the last ten years. This experience will be invaluable as the SmithGroup team works with West Virginia to develop a consolidated lab program that is sensitive to laboratory user needs. SmithGroup has some of the nation's best lab planning expertise as well as awardwinning engineering disciplines in-house.



### LEADING THE WAY

- Four time winner of Lab Manager's new Excellence in Innovation Design Award program and seven time recent AIA JFR Justice Facility award winner
- First LEED Platinum Federal Lab
- Completed the planning and design of more than 40 million square feet of Academic, Corporate and Government Research Laboratories
- National leader in U.S. Department of Energy federal lab design
- Ranked 2nd in Building Design + Construction's Science and Technology Firms
- On the forefront of all-electric laboratories across the country
- Government Clients include NIH, NASA, EPA, FBI, USDA, NIST, FDA, DEA, CIA, DOE, NNSA, GSA
- Work with Public Health/Forensic Facilities in more than 25 states
- Presents regularly at major science and research facilities conferences such as Tradeline, Lab Design and I2SL
   International Institute for Sustainable Laboratories
- Presents regularly at the National Association of Medical Examiners and American Society of Crime Lab Directors Annual Conferences
- National ASHRAE Awards for Innovation in Laboratory Design

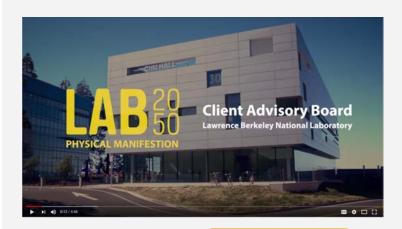


### STAYING AHEAD OF THE CURVE

SmithGroup invests time and dollars to examine the new technologies, scientific trends and economics shaping the laboratory landscape. For two decades the firm has sought out knowledge experts from leading research institutions and companies to better understand their expectations for the future, so that SmithGroup can be optimally prepared to provide transformative programming, planning and design solutions. We pride ourselves in cultivating an environment that encourages this sort of questionasking, futuristic solution-seeking culture.

Building on this research, SmithGroup hosts various Client Advisory Boards throughout the year comprised of an esteemed think tank with some of the top minds in the research, technology and real estate experts across the globe. Our team is actively engaged, working to understand trends and emerging technologies that will shape the concepts and systems for laboratories of the future. Collaboratively, with our scientific clients nationally, we are identifying trends that will give shape to Lab 2050 the Lab of the Future.

In scientific environments, change is inevitable. We seek flexible configurations that can respond to the specific needs of reliability, safety, ease of operations, environmental responsiveness and project budgets.



To learn more about Lab 2050

**CLICK HERE** 

### FORENSIC AWARD-WINNERS AND THOUGHT LEADERS

SmithGroup has an unprecedented, industry-leading 12 "Lab of the Year" awards and is the winner of seven nationally recognized Justice Facility awards in eight years, including the San Diego County Sheriff's Office Crime Lab in 2019 and the Hamilton County Coroner and Crime Lab in 2021. Our team contributes to publications as subject matter experts, presents at conferences including the American Society of Crime Lab Directors annual symposium, and has participated in six forensic round-tables in the last six years.

### **PREMIER LABORATORY PLANNERS & DESIGNERS**

As leaders in the design of specialized laboratory facilities, including government and multidisciplinary research buildings, SmithGroup brings inventive skill, vision, and in-depth understanding of the issues affecting states nationwide. Our portfolio of design work includes recent facilities for **more than 30 state and federal clients**, demonstrates our experience and excellence that are similar in scope, complexity, and program. The featured projects in Section 4 showcase some of the nation's best examples of integrated design solutions highlighting creativity, collaboration, and innovation and align closely with the attributes and goals of the new Consolidated State Laboratory.



23 Pima County Medical

24 Drug Enforcement

Laboratory

Examiner's Facility

Administration Offices and

**Systems Integration Facility** 

Hospital Integrated Research

**16** National Institutes of Health

**Rocky Mountain Laboratory** 

Center

- 8 State of Michigan, City of Detroit Public Safety Headquarters & Public Health Lab
- **9** U.S. EPA Nationwide Laboratory Assessments

MIL SF OF PROJECTS FOR THE STATE OF WV

### **WORKING IN WEST VIRGINIA**

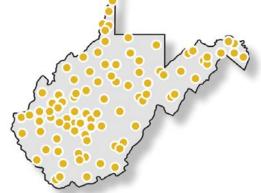
Your SmithGroup + Silling team is a dynamic partnership of nationally recognized and local experts who are committed to you and this project.

Our team's unique blend of local knowledge, civic and laboratory design expertise, and collaborative design philosophy can guide your stakeholders to make confident decisions regarding the future Consolidated Lab within established budgets and schedules.

As the longest running architectural firm in the state, Silling Architects has extensive experience delivering successful projects for local, state, and national agencies. The firm's current generation of leadership has been involved in the planning and design of **state and local government facilities totaling just over 6.2 million square feet**. Additionally, **3.5 million square feet of work with the state** includes service to the WV General Services Division, WV Division of Corrections, WV Lottery Commission, WV Supreme Court, and the WV Courthouse Facility Improvement Authority. Silling has **worked in all 55 counties in the state** including extensive government work. SmithGroup is also working on projects at West Virginia University and Wheeling Hospital.

Silling will be your local "boots on the ground" providing local project management, support design, technical execution, interior support, and a dedicated team member on site for construction administration. Working with the State allows the team to easily partner with stakeholders and user groups, navigate permitting, design requirements, and more.





We have local resources available to support you, keep design services fees in the state, and remain nimble and responsive during the design and construction phases. We're here when you need us, and even when you don't. Our team has proven our dedication to the region through current and previous work in and around Charleston as well as other nearby communities. Team members live, work, and play in your backyard. We're neighbors, and we'll treat you like one.



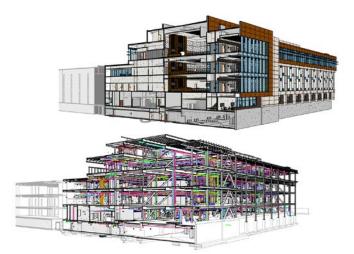
# EXCEPTIONAL EXPERIENCE IN DESIGN, MANAGEMENT, AND EXECUTION OF LARGE, COMPLEX, AND TECHNICALLY CHALLENGING PROJECTS

As a legacy Charleston, WV design studio, Silling Architects has evolved as a national expert in the Justice Architecture market, leading the planning, design, production, and execution of projects with similar size, scale, and complexity as that of your proposed Consolidated State Laboratory Facility.

Silling's recent portfolio of completed work includes the 320,000 square foot Cabarrus County Courthouse Project. This significant design commission was delivered entirely by the Silling staff and included 889 sheets across four volumes of construction drawings and over 3,913 pages of detailed project specifications. Building Information Modelling developed by the Silling team coordinated the design efforts of all engineering partners and through a very intentional and thorough pre-construction process collaboratively resolved systems coordination and clash detection alongside the building construction entities. The nimble, experienced team within the Silling studio responsible for delivering the Cabarrus County project within an aggressive design schedule includes the very same team members assigned to serve the Consolidated State Laboratory Facility.

Following best practices for modern, secure facilities, Silling has come to understand and expertly execute similar projects with critical security and internal zoning requirements. These design parameters begin with a keen sensitivity to the site parti diagram, managing the access and circulation of public, staff, law enforcement, and support vehicles and pedestrians in a way that ensures the safety and well-being of all users. Similarly, building access and the internal zoning of varying departments throughout Silling's project experience provides for optimal operational efficiency while maintaining the sanctity of processes, secure containment of disparate populations, and the purity of evidentiary materials throughout the chain of custody.

As a supportive partner in the delivery of the Consolidated State Laboratory Facility, Silling's appreciation of the complex needs of this facility



BIM MODELING AT THE CABARRUS COUNTY COURTHOUSE



coupled with the design and production capacity and technical expertise exhibited in projects like the Cabarrus County Courthouse equip them as a local, meaningful participant in the delivery of this project. More information on the project can be found in the Project Experience section of this document.



Dating back to the mid-20th century, Silling Architects has been recognized as the premier local partner in the state of West Virginia, recruiting the most talented and experienced national design firms to serve our communities. Historic projects to their credit include the WVU Medical Center, WV Cultural Center, and WVU Coliseum as iconic landmarks. The current principals of Silling have carried this tradition forward, crafting a collaborative, humble approach to design that continues to attract and leverage world-class expertise.

Key to the success of these partnerships are shared corporate cultures toward service, clear understanding of responsibility, and an equity in each firms' capacity to deliver design excellence in their respective roles. Through each of the firm's collaborations, a "singular studio" mentality pairs Silling team members with their national counterparts, creating intricate synapses of communication and knowledge-sharing across all aspects of the project's planning, design, production, and delivery.

As unrivalled Honor Award recipients in their own rite, Silling is seen as a valued design voice in the shared discourse of these partnering projects. In addition to the design leadership of the firm, the staff architects and project managers, production support staff, and construction administrators have all gained insight and experience delivering the studio's acclaimed projects and serve as trusted peers to their thoughtleading national partners.

An appropriate level of both partners' participation is crucial from the earliest program validation meetings through the close-out procedures of construction, and Silling's collaborative spirit and practical experience positions them as the bestvalue West Virginia architectural studio to support the unparalleled lab planning and design efforts of SmithGroup.

### **TEAM QUALIFICATIONS**

Large, complex projects like yours require innovation not only through the delivery of design, but also in the delivery of construction period services to ensure the performance of both the building and its builders. Both SmithGroup's and Silling's clients recognize the need for a far greater presence and participation on the construction site by the architectural team – resulting in nearly full-time and full-time onsite representation for the Cabarrus and Delaware County projects, respectively. The architectural team, through their collaborative spirit, constant support, and extreme accessibility served as an invaluable resource to the construction team.

Silling's location in downtown Charleston positions them to even more effectively serve in a full-time onsite contract administration role at the West Virgina Regional Technology Park, ensuring the design intent of the Consolidated State Laboratory Facility is achieved and that project excellence is realized.







To return to the Table of Contents



**SECTION 3** 

# TEAM ORGANIZATION & EXPERIENCE

11110

# YOUR PROJECT TEAM

Our team of experts brings extensive knowledge, substantial experience, and a passion for innovative design to your project. We believe that great design begins with listening; we take the time to understand the complex, multifaceted requirements specific to each client's needs. We work at all scales, from small renovations to long-range master plans, and our team brings broad, diverse experience to bear on developing holistic design solutions tailored to your goals and vision.

The SmithGroup + Silling team offers a collective synergy between the broad individual talents of our designers, planners, architects, engineers, and laboratory specialists. We will accord you the highest level of client service and dedication.

### **TEAM LEADERSHIP**

Jill and Jody will partner to provide executive oversight and support to the greater team. They will ensure the team's highest performance, design, resources, and execution.

### **PROJECT MANAGEMENT**

Doug and Brian will partner to manage the project. Doug will be your primary point-of-contact for communication between the State and design team. He will be responsible for the project's budget, schedule, and quality of team execution.

### **PROGRAMMING & PLANNING**

SmithGroup's National Forensic Market Leader, Chris, along with Director of Lab Planning, Adam, will bring years of experience and lessons learned to lead lab adjacency and programming efforts ensuring the team meets today's needs and tomorrow's demands.

### **DESIGN & INTERIORS**

Design Director Mark will oversee the design team. Will, Wes, and Holly (Interior Designer) will work with the broader local team to develop an innovative, efficient, state-of-the-art lab facility design that resonates with the State.

### **TECHNICAL DELIVERY & CONSTRUCTION ADMINISTRATION**

Abby and Jeremy will incorporate stakeholder input and ensure the design vision is coordinated within the planning and construction documents. Glenn will be your dedicated team member during Construction Administration.

### ENGINEERING

Due to the highly intricate nature of a lab's functional, ventilation, and critical support needs, we have chosen to have SmithGroup's integrated and experienced engineering staff to deliver the engineering design for this complex project. Rob, Bianca, and Lowell will lead the engineering design, keeping the highly intricate nature of a the lab's functional, ventilation, and critical support needs in mind throughout the process. They will be supported by a dedicated staff of local engineering designers.

### **ADDITIONAL TECHNICAL RESOURCES**

As an integrated firm, we offer additional, valuable services in-house. Supplemental to our core team, we offer expertise in Life Safety and Fire Protection Engineering, AV/IT/Security, and Energy Analysis.

### **SUBCONSULTANTS**

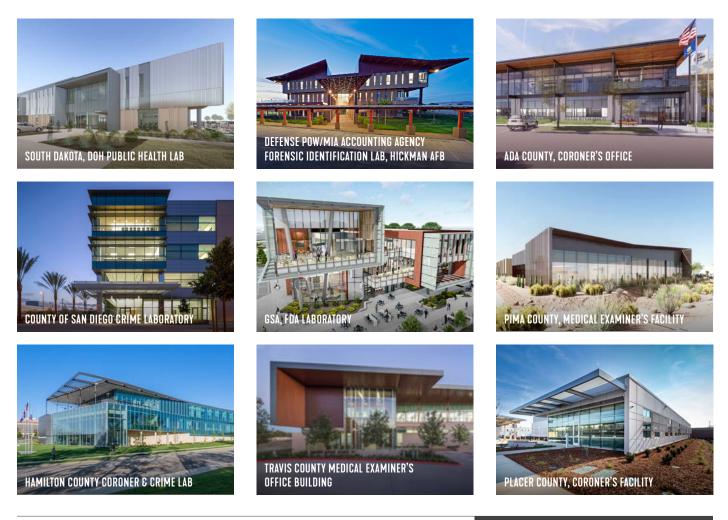
Our leadership team will integrate our subconsultants from the beginning. Our talented Civil and Landscape team, Terradon is located in nearby Poca and entrenched in the community. They will provide valuable site development strategy and work closely with the design team. Cost Consultant, PCR, has worked, and is currently working with SmithGroup on similar facilities. PCR will step in early to keep the team on track to meet budget goals. Vibration and Acoustics partner, Colin Gordon, has worked with SmithGroup on many complex, laboratory projects and has a proven record of success in developing cost-effective solutions for a wide variety of noise and vibration challenges.

### **TEAM ORGANIZATION & EXPERIENCE**

### SMITHGROUP'S SEASONED INTEGRATED DESIGN DREAM TEAM OF EXPERTS



Integrated Design is the hallmark of SmithGroup's practice and culture. Our core interdisciplinary team is comprised of national leaders in forensic and laboratory design from Architecture, Engineering, and Lab Planning who will work side-by-side to empower you with information and best practices to help create a facility that meets your needs both day one and into the future. Specialized expertise, long-standing track record, commitment, and trust, built on decades of working together is the result, and the experience the the State will have because of the rapport this group of professionals has developed together.





### LOCAL PRESENCE & NATIONAL EXPERTISE

We have assembled a team that brings you the very best national expertise in the planning and design of laboratory facilities, with a local firm strong in project management and project execution. Charleston design firm Silling Architects, local presence and experience working with state and civic entities combined with the national design and lab planning expertise of SmithGroup creates a dynamic team ready to meet your needs.

Silling will be your local partner along with SmithGroup Pittsburgh team members, nearby up I-79. SmithGroup's national Science & Technology team effectively serves clients across the globe through great communication skills supported by today's latest business technologies. Our key team members anticipate being on-site frequently to meet the scheduling goals of your project, ensuring that you never feel out of touch with the design process. We are dedicated to empowering you with information and best practices to create a facility that meets your needs both day one and far into the future.

In the combination of these capabilities and resources, our team creates a synergy of knowledge necessary to complete this complex project and an understanding of how you operate. Acknowledging this as a critical aspect of a successful project, we look forward to helping the State of West Virginia achieve your vision and goals with your new Consolidated Lab.

COLOR KEY | TEAM LOCATION
Local Team
National Expertise

### **TEAM ORGANIZATION & EXPERIENCE**

### INTEGRATED, MULTIDISCIPLINARY TEAM

### **DESIGN & INTERIORS ENGINEERING** Holly Dezinski Will McCrory **Rob Thompson Bianca Jimenez** Project Designer Interior Designer Lead Mechanical Engineer Lead Electrical Engineer Wes Wright **Jacqueline** Link Andrea Reynolds **Lowell Manalo** Project Designer Interior Designer Structural Engineer Lead Plumbing Designer **Colin Pocock** Susan McLane Steve Lobo **Dan Stanton** Mechanical Designer Interior Designer **Electrical Designer Plumbing Designer ADDITIONAL TECHNICAL RESOURCES** Katrina Kelly-Pitou **Kevin Burda David Glenn** Fire & Life Safety Engineer AV/IT/Security **Energy Analysis SUBCONSULTANTS**



Jim Nagy **Civil Engineer** Terradon



**Greg Fox** Landscape Architect Terradon

**Greg Edwards Cost Estimator** Project Cost Resources (PCR)



**Stephen Jaeger** Vibration/Acousitcs Colin Gordon

### TEAM LEADERSHIP



### JILL SWENSEN, AIA, NCARB, LEED AP PRINCIPAL-IN-CHARGE

Jill specializes in leading project teams through the programming, planning, and design of engineering and science projects. Jill is a supercommunicator with client leadership and management, diverse project stakeholder groups, and project design team members. An early adopter of Lean Project Design techniques (Lean Construction Institute), she has a track record of projects that have been delivered on budget and on schedule without compromise to aspirational and functional goals. This speaks to the long term relationships she develops with clients. A researcher and national speaker, Jill studies trending, new innovations, and benchmarks to inform client discussions and design decisions. Speaking forums include: Tradeline, Lab R&D, and the Construction Owners Association of America (COAA).

### YALE UNIVERSITY, PSYCHOLOGY, NEUROSCIENCE & THE HUMAN BRAIN DISCOVERY CENTER

**New Haven, Connecticut.** Renovation of 100,000 sf to support new space for the Department of Psychology, neuroscience research, and the new Wu Tsai Institute. These spaces, spanning three floors, will become part of a new epicenter for brain and cognition research.

### YALE UNIVERSITY, 101 COLLEGE BIOINFORMATICS, ENDOCRINOLOGY, NEPHROLOGY & VIVARIUM

**New Haven, Connecticut.** Yale School of Medicine will occupy 125,000 sf with space for Endocrinology, Nephrology, core vivarium, and a new Bioinformatics Institute. This research hub will also be home to a number of biotech startups in New Haven.

### WEST VIRGINIA UNIVERSITY, SCHOOL OF DENTISTRY RENOVATION

**Morgantown, West Virginia.** As the State's only dental school, this project will support the transformation of WVU's School of Dentistry's physical home. Beginning with a master plan update and schematic design phase, SmithGroup will re-envision patient, student, and faculty experiences and the School of Dentistry identity. Off-campus programs will be brought back into the facility at the Health Science Center on WVU's medical campus.

### U.S.DEPARTMENT OF AGRICULTURE, FEDERAL MILK MANAGEMENT FACILITY RENOVATIONS\*

**Chicago, Illinois.** This project included programming, planning, and renovations to 20,000 sf of testing facilities to accommodate equipment and improved work flows for the agency.

### WEST VIRGINIA UNIVERSITY, ADVANCED ENGINEERING RESEARCH BUILDING\*

**Morgantown, West Virginia.** 100,000 sf, Engineering research and teaching facility, including core Class 1,000 clean room.

\*Work performed prior to SmithGroup

### EDUCATION

Master of Architecture, Syracuse University Bachelor of Arts, Penn State University

#### REGISTRATIONS

Registered Architect: West Virginia, Pennsylvania, Connecticut

LEED Accredited Professional

#### **PROFESSIONAL AFFILIATIONS**

National Council of Architectural Registration Boards, Certified

U.S. Green Building Council

American Institute of Architects (AIA), Member

The Ellis School, Board Member 2016 – present

Butler County Chamber of Commerce, Board Member 2014–2016

Innovation Grant Review Committee, PA

### **TEAM LEADERSHIP**



### JODY DRIGGS, AIA, NCARB PROJECT EXECUTIVE

Jody is a 27-year member of Silling Architects and has served as a Principal since 2001. His primary focus within the firm is instilling a special notion of service and care in the way that we practice, driven by a pursuit of design excellence and rooted in a humility responsive to our client's trust. Jody's desire to serve exceptionally powers the studio's constant efforts of innovation and improvement. In addition to serving as managing partner, he is also a design architect and project manager and appreciates the firm's opportunities to develop solutions for a diverse and ever-expanding client base. He excels at developing a customized design team of studio members and consultant partners to engage in a discourse unique to every opportunity. The variety of building typologies, and more importantly, architectural language and character in the firm's portfolio are evidence of his and the firm's approach to client-centeredness and critical design.

### KANAWHA COUNTY PUBLIC LIBRARY

**Charleston, West Virginia.** Expansion and renovation of a downtown historic public library in association with HBM Architects. The project included a 20,000 square foot modern addition and 80,000 sf of renovations, exterior restoration, and new exterior lighting. \*AIA WV Honor Award for Excellence in Architecture; AIA Cleveland Honor Award

### **CABARRUS COUNTY COURTHOUSE**

**Concord, North Carolina.** New 240,000 sf courthouse, as well as 72,000 sf in existing facility renovations, four Superior Court jury-capable courtrooms, six District Court courtrooms, two future courtrooms, and a 45,000 square foot shell space for future expansion.

### **CHARLESTON PUBLIC SAFETY CENTER**

**Charleston, West Virginia.** Comprehensive feasibility study for a new consolidated public safety center for the City of Charleston in association with Architects Design Group. The new facility will include all police operations, municipal court and related clerk of courts, and fire department administration.

### WEST VIRGINIA LOTTERY HEADQUARTERS

**Charleston, West Virginia.** Renovations to the 13-story, 146,000 sf former City West office tower for the West Virginia Lottery Commission, State Racing Commission, Real Estate Division, Alcohol Beverage Control Commission, Banking Division, and Municipal Bonds Division.

#### EDUCATION

Bachelor of Architecture, University of Tennessee

#### REGISTRATIONS

Registered Architect: West Virginia, Florida, Maryland, North Carolina, Pennsylvania, Virginia, Kentucky, Ohio

#### AFFILIATIONS

American Institute of Architects (AIA), Member

National Council of Architectural Registration Boards, Certified

AIA Academy of Architecture for Justice

### **DESIGN LEADERSHIP**



#### EDUCATION

Master in Architecture, with Honors, Thesis Prize, McRae Foundation Thesis Award, Arizona State University

Bachelor of Science in Architectural Studies, Honor Graduate High Distinction, University of Nebraska -Lincoln

#### REGISTRATIONS

Registered Architect: Arizona, Georgia LEED Accredited Professional BD+C

#### **PROFESSIONAL AFFILIATIONS**

American Institute of Architects, Fellow

American Institute of Architects Mentor Program

National Council of Architectural Registration Boards, Certified

Arizona State University Faculty Associate, College of Architecture & Environmental Design

### MARK KRANZ, FAIA, NCARB, LEED AP BD+C DESIGN DIRECTOR

Mark is the premiere design leader for forensic facilities across the U.S. and serves as SmithGroup's Design Director. He is a Fellow in the American Institute of Architects with built work across the U.S. and recognized with over 175 regional and national design awards. His work is punctuated by innovative, performative, and highly sustainable solutions in technically sophisticated buildings. Mark understands the larger picture relative to project success and is uniquely talented at extracting latent design ideas from clients, stakeholders, contractors, and subcontractors.

### HAMILTON COUNTY, CORONER AND CRIME LAB FACILITY

Blue Ash, Ohio. See project information on page 48.

### STATE OF UTAH DFCM, UNIFIED STATE LABORATORY

Salt Lake City, Utah. See project information on page 52.

### CITY AND COUNTY OF DENVER, DENVER POLICE DEPT. CRIME LAB

Denver, Colorado. See project information on page 56.

### COUNTY OF SAN DIEGO, CRIME LABORATORY

San Diego, California. See project information on page 60.

### STATE OF SOUTH DAKOTA - DEPT. OF HEALTH, PUBLIC HEALTH LAB

Pierre, South Dakota. See project information on page 64.

### DEFENSE POW/MIA ACCOUNTING AGENCY FORENSIC IDENTIFICATION LAB

Hickman AFB, Oahu, Hawaii. See project information on page 68.

### TRAVIS COUNTY, MEDICAL EXAMINER'S OFFICE

Austin, Texas. See project information on page 72.

### **U.S. GENERAL SERVICES ADMINISTRATION, FDA LABORATORY - DENVER**

Denver, Colorado. See project information on page 78.

## U.S. DEPARTMENT OF AGRICULTURE, ARID-LAND AGRICULTURE RESEARCH CENTER

Pierre, South Dakota. See project information on page 89.

### PIMA COUNTY, MEDICAL EXAMINER'S FACILITY

**Tucson, Arizona.** New 34,000 sf Medical Examiner facility along with a parking garage. The new facility will perform examinations for Pima and eight surrounding Counties while the parking garage will serve the entire Medical Campus.



#### EDUCATION Bachelor of Architecture, Illinois Institute of Technology

**REGISTRATIONS** Registered Architect: Arizona LEED Accredited Professional

**PROFESSIONAL AFFILIATIONS** American Institute of Architects (AIA), Member

### WILL MCCRORY, AIA, LEED AP PROJECT DESIGNER

Will has 20 years of experience working on complex Science & Technology projects. He is a talented and passionate designer who approaches each project with a pursuit of design excellence. He has been involved with numerous award-winning, highprofile, forensic laboratory projects from planning and programming to design. Will drives the decision making process and leverages the latest tools and analysis to create innovative solutions. He will work with Mark to explore creative solutions to drive the decision making process.

## HAMILTON COUNTY, CORONER AND CRIME LAB FACILITY

**Blue Ash, Ohio.** See project information on page 48.

### COUNTY OF SAN DIEGO, CRIME LABORATORY

San Diego, California. See project information on page 60.

## STATE OF SOUTH DAKOTA - DEPT. OF HEALTH, PUBLIC HEALTH LAB

Pierre, South Dakota. See project information on page 64.

## U.S. GENERAL SERVICES ADMINISTRATION, FDA LABORATORY - DENVER

**Denver, Colorado.** See project information on page 78.



EDUCATION Bachelor of Architecture, Oklahoma State University

**REGISTRATIONS** Registered Architect: Connecticut

#### **PROFESSIONAL AFFILIATIONS**

American Institute of Architects (AIA), Member

National Council of Architectural Registration Boards, Certified

### WES WRIGHT, AIA, NCARB PROJECT DESIGNER

As a design architect for Science & Technology projects, Wes brings 16 years of experience in all phases of the architectural process. A detail-oriented generalist, Wes takes care to keep sight of long-term project objectives and milestones, while diligently engaging with client user groups to ensure that project needs and expectations are met. He believes that collaborative problem solving, research-based design, sensitive leadership, and overt optimism drive the development of successful projects. Wes strives for a design that is responsive to the client, responsible to the public realm, and inclusive of the great diversity of our human family.

### WVU - MEDICINE, WHEELING HOSPITAL Consolidated Pediatric Clinic

Wheeling West Virginia. Expansion of pediatric health care services including a rapid-care style and after-hours clinic for children.

## GROVE CITY COLLEGE, ROCKWELL HALL RENOVATION & ADDITION

**Grove City, Pennsylvania.** Design of 60,000 sf to support STEM teaching and undergraduate research an emerging new Exercise Science program.

## ST. FRANCIS XAVIER UNIVERSITY, CENTRE FOR HEALTH INNOVATION

Antigonish, Nova Scotia. 80,000 sf building to support kinesiology, exercise science, psychology, speech therapy, and neurocognitive research.

### LAB PROGRAMMING & PLANNING



### ADAM DENMARK, AIA, LEED AP BD+C LAB PROGRAMMER

Adam has more than 25 years of targeted experience in all project phases of laboratory design and construction. As SmithGroup's Science & Technology Strategist and Director of Lab Planning, he drives strategy and thought leadership for a range of laboratory types. He specializes in facilities for forensic science, medicolegal autopsy, bio-containment, engineering research and materials analysis. He will lead the programming process along with Chris.

#### HAMILTON COUNTY, CORONER AND CRIME LAB FACILITY

Blue Ash, Ohio. See project information on page 48.

#### STATE OF UTAH DFCM, UNIFIED STATE LABORATORY

Salt Lake City, Utah. See project information on page 52.

#### CITY AND COUNTY OF DENVER, DENVER POLICE DEPT. CRIME LAB

Denver, Colorado. See project information on page 56.

COUNTY OF SAN DIEGO, CRIME LABORATORY

San Diego, California. See project information on page 60.

STATE OF SOUTH DAKOTA - DEPT. OF HEALTH, PUBLIC HEALTH LAB Pierre, South Dakota. See project information on page 64.

### DEFENSE POW/MIA ACCOUNTING AGENCY FORENSIC IDENTIFICATION LAB

Hickman AFB, Oahu, Hawaii. See project information on page 68.

TRAVIS COUNTY, MEDICAL EXAMINER'S OFFICE

Austin, Texas. See project information on page 72.

#### STATE OF NEW MEXICO, SCIENTIFIC LABORATORIES

Albuquerque, New Mexico. See project information on page 76.

### **U.S. GENERAL SERVICES ADMINISTRATION, FDA LABORATORY - DENVER**

Denver, Colorado. See project information on page 78.

### **CITY OF DETROIT, PUBLIC SAFETY HEADQUARTERS**

Detroit, Michigan. See project information on page 80.

### ADA COUNTY, CORONER'S OFFICE FACILITY

Meridian, Idaho. See project information on page 88.

### JOHNSON COUNTY, MEDICAL EXAMINER'S FACILITY

Olathe, Kansas. See project information on page 91.

EDUCATION

Bachelor of Architecture, University of Arizona

#### REGISTRATIONS

Registered Architect: Arizona LEED Accredited Professional BD+C

#### **PROFESSIONAL AFFILIATIONS**

American Institute of Architects (AIA), Member



## CHRIS KNORR, AIA, NCARB, LEED AP LAB PLANNER

Chris has been in the design field for 20 years and holds the position of Forensic Market Leader in the Science & Technology Studio with SmithGroup. His experience includes programming and design for forensic facilities across the country and excels at building client and contractor relationships by working through all project phases. Chris will work with Adam and lead the facility and space planning for the laboratory spaces in the facility.

#### HAMILTON COUNTY, CORONER AND CRIME LAB FACILITY

Blue Ash, Ohio. See project information on page 48.

#### STATE OF SOUTH DAKOTA - DEPT. OF HEALTH, PUBLIC HEALTH LAB

Pierre, South Dakota. See project information on page 64.

#### DEFENSE POW/MIA ACCOUNTING AGENCY FORENSIC IDENTIFICATION LAB

Hickman AFB, Oahu, Hawaii. See project information on page 68.

#### ADA COUNTY, CORONER'S OFFICE FACILITY

Meridian, Idaho. See project information on page 88.

#### JOHNSON COUNTY, MEDICAL EXAMINER'S FACILITY

Olathe, Kansas. See project information on page 91.

#### PIMA COUNTY, MEDICAL EXAMINER'S FACILITY

**Meridian, Idaho.** New 34,000 sf Medical Examiner facility along with a parking garage. The new facility will perform examinations for Pima and eight surrounding Counties while the parking garage will serve the entire Medical Campus.

#### PLACER COUNTY, CORONER'S FACILITY

**Roseville, California.** 20,000 sf building is a welcome addition to the existing County campus. With a total of six autopsy stations, the facility will allow for improved forensics services in the region, growth potential, and efficiency.

#### NATIONAL INSTITUTES OF HEALTH, ROCKY MOUNTAIN LABORATORIES BUILDING B

Hamilton, Montana. 50,000 sf, laboratory planning for the Concept Designs and Program of Requirements (POR) at NIH's Rocky Mountain Laboratories (RML). The RML is a unit of the National Institute of Allergies and Infectious Deceases (NIAID). Building B is planned to include a vivarium facility.

#### UNITED STATES ARMY CORE OF ENGINEERS, JAPAN DISTRICT, PUBLIC HEALTH LABORATORY RENOVATION AT CAMP ZAMA

**Camp Zama, Japan.** This laboratory serves a critical role in the identification of health threats to Soldiers, Army families, and civilian employees. Working collaboratively with the Camp Zama user team under an IPPD process allowed for the streamlined development of comprehensive planning for the facility.

#### EDUCATION

Bachelor of Architecture, with Honors, North Dakota State University Bachelor of Science, Environmental Design, North Dakota State University

#### REGISTRATIONS

Registered Architect: Arizona LEED Accredited Professional

#### **PROFESSIONAL AFFILIATIONS**

National Council of Architectural Registration Boards, Certified American Institute of Architects (AIA), Member

### PROJECT MANAGEMENT



## DOUG LIEB, AIA PROJECT MANAGER

Doug joined SmithGroup bringing 29 years of experience in planning, design and project management. Doug has a passion for working with a diverse array of clients to create innovative and socially dynamic environments that align your vision with transformative outcomes. His experience includes the design of projects encompassing workplace environments, science and technology, housing, facilities for the arts, and recreational facilities for developers, institutions and corporations. As an experienced team leader, Doug will be intimately involved in working with your stakeholders to facilitate a collaborative decision-making process that builds consensus and leverages the depth, breadth and diversity of every team member.

#### MOUNT ALOYSIUS COLLEGE, CENTER FOR HEALTH SCIENCE AND TECHNOLOGY\*

**Cambria County, Pennsylvania.** 35,000 sf renovation and 18,000 sf expansion to the School of Health Science. The project involved select interior renovation of existing Chemistry, Biology, Physics and Physiology labs. Facility expansion provided new state-of -the-art skills and simulation spaces for Surgery Technician, Nursing and Medical Imaging in addition to new Anatomy and Physiology laboratories in a collaborative, integrated learning environment.

## PRESBYTERIAN UNIVERSITY HOSPITAL OF UPMC, RADIOLOGY AND DIAGNOSTIC IMAGING RENOVATION\*

**Pittsburgh, Pennsylvania.** Phased renovation of a full spectrum of diagnostic imaging capabilities for Pittsburgh's largest tertiary care hospital. Renovations provide new facilities for x-ray, fluoroscopy, CT, Ultrasound and Interventional Radiology and provide more efficient patient check-in and dispersed sub-waiting accommodations.

#### SHADYSIDE HOSPITAL OF UPMC, RADIOLOGY AND DIAGNOSTIC IMAGING RENOVATIONS\*

**Pittsburgh, Pennsylvania.** Targeted renovation to upgrade both MRI and IR facilities for one of Pittsburgh's largest tertiary care hospitals. Project involved carefully coordinated planning and logistics to renovate select areas of the hospital's imaging facilities while maintaining operation off the department. Upgrades included expanding existing imaging suites to accommodate state off the art MRI and IR imaging technology with careful attention to providing an environmental experience that provided a comforting patient experience.

#### BUTLER HOSPITAL, COMPREHENSIVE EMERGENCY DEPARTMENT RENOVATION\*

**Butler, Pennsylvania.** Renovation of a thirty-bed Emergency Department. The project entailed a complete rethinking of patient arrival, patient flow clinical and support flow addressing multi-acuity arrivals as well as provisions for infectious and airborne isolation.

\*Work performed prior to SmithGroup

#### EDUCATION

Master of Architecture, Miami University Bachelor of Environmental Design, Miami University

REGISTRATIONS Registered Architect: Pennsylvania

#### **PROFESSIONAL AFFILIATIONS**

American Institute of Architects (AIA), Member

Society for College and University Planning (SCUP)

Association of Independent Colleges and Universities of PA

Association of College Unions International

National Association of College Auxiliary Services



## BRIAN ESTEP, AIA PROJECT MANAGER PARTNER

Brian is a senior project architect with over 30 years of experience serving a variety of building typologies, most notably within the law enforcement, courts, civic, and educational markets. He is primarily responsible for day-to-day project activities including programming, design, construction document production, and coordination of the architectural and engineering disciplines, supporting public agency projects with thoughtful, analytical, and responsive designs.

#### KANAWHA COUNTY PUBLIC LIBRARY

**Charleston, West Virginia.** Expansion and renovation of a downtown historic public library in association with HBM Architects. The project included a 20,000 sf modern addition and 80,000 sf of renovations, exterior restoration, and new exterior lighting. \*AIA WV Honor Award for Excellence in Architecture; AIA Cleveland Honor Award

#### **CHARLESTON PUBLIC SAFETY CENTER**

**Charleston, West Virginia.** Comprehensive feasibility study for a new consolidated public safety center for the City of Charleston in association with Architects Design Group. The new facility will include all police operations, municipal court and related clerk of courts, and fire department administration.

#### **RALEIGH COUNTY SHERIFF'S DEPARTMENT**

**Beckley, West Virginia.** Programming and design for a new 27,400 sf law enforcement headquarters. The new facility includes multi-purpose training/ community room, administrative space, intake and processing, evidence processing & storage, and fitness and tactical training room.

#### JOHN MARSHALL HIGH SCHOOL

**Glen Dale, West Virginia.** Multi-phased reimagining of an educational campus including over 235,000 sf of additions and renovations. The project features sweeping changes to address identity and safety, as well as teaching and learning spaces in both academic and social constructs.

#### WVSU D. STEPHEN & DIANE H. WALKER CONVOCATION CENTER

**Institute, West Virginia.** New 1,300-seat collegiate arena addition to an existing historic athletic and academic building. The project included 70,000 sf of additions and renovations to meet the needs of modern-day teaching, learning, recreation, and varsity competition.

#### EDUCATION

Bachelor of Architecture, University of Tennessee

REGISTRATIONS Registered Architect: West Virginia

#### **PROFESSIONAL AFFILIATIONS**

American Institute of Architects (AIA), Member

AIA Academy of Architecture for Justice

### **TECHNICAL DELIVERY**



EDUCATION Bachelor of Architecture, Virginia Tech

#### **REGISTRATIONS** Registered Architect: Pennsylvania, Illinois

LEED Accredited Professional

**PROFESSIONAL AFFILIATIONS** American Institute of

Architects (AIA), Member National Council of

Architectural Registration Boards, Certified

International Institute for Sustainable Laboratories (I2SL)

## **ABBY MCNEVIN,** AIA, NCARB, LEED AP **PROJECT ARCHITECT**

Abby is a project architect with comprehensive experience preparing architectural designs in all phases for the completion of commercial, public, and civic buildings. Over the last decade, she has honed her skills as a project architect and laboratory planner who specializes in institutional science and technology spaces. Abby is proficient in the planning of undergraduate teaching laboratories for civic and private institutions, and she has experience coordinating design decisions with clients, consultants, engineers, and contractors.

#### YALE UNIVERSITY, 101 COLLEGE BIOINFORMATICS, ENDOCRINOLOGY, NEPHROLOGY & VIVARIUM

**New Haven, Connecticut.** Yale School of Medicine will occupy 125,000 sf with space for Endocrinology, Nephrology, core vivarium, and a new Bioinformatics Institute.

## GSA, FDA SOUTHEAST QUADRANT, BUILDINGS 52 AND 72 LIFE SCIENCESBUILDING 2\*

White Oak, Maryland. Final major phase of the FDA Headquarters Consolidation at the White Oak Campus. The Quadrant is comprised of two office buildings, a large vivarium, and two five-story laboratory facilities.

\*Work performed prior to SmithGroup



EDUCATION Bachelor of Architecture, University of Tennessee

#### REGISTRATIONS

for Justice

Registered Architect: West Virginia, Kentucky, Virginia

PROFESSIONAL AFFILIATIONS American Institute of Architects (AIA), Member AIA Academy of Architecture

## JEREMY JONES, AIA, NCARB PROJECT ARCHITECT

Jeremy has nearly 20 years of experience in architectural planning and design with a primary focus on our firm's courts, law enforcement, corrections/detention, and public safety projects. As a senior project architect and security/AV designer, he provides valuable leadership in delivering high-quality, client-oriented services from initial planning through design and construction. Exceptional communication and technical skills allow him to effectively build consensus among project stakeholders.

#### **CABARRUS COUNTY COURTHOUSE**

**Concord, North Carolina.** New \$109 million courthouse featuring a combined 312,000 sf in new construction, renovations, and shell space.

#### **MONONGALIA COUNTY JUSTICE CENTER**

**Morgantown, West Virginia.** Adaptive reuse of a former GSA post office and office building, converting the 84,000 sf, four-level building into a new secure judicial facility.

#### **RANDOLPH COUNTY 911/OEM CENTER**

Elkins, West Virginia. An 11,800 sf 911/OEM facility featuring a 911 communications center, emergency operations center, and administrative support space.



## **GLENN SAVAGE,** ASSOCIATE AIA CONSTRUCTION ADMINISTRATOR

EDUCATION Bachelor of Science,

University of Charleston, Associate of Science, West Virginia State University

PROFESSIONAL AFFILIATIONS American Institute of Architects (AIA), Associate Member Glenn has more than 30 years of experience of inspecting and administering construction projects. His attention to detail and his thorough understanding of how buildings should go together give him strong construction administration abilities. He is responsible for maintaining the project schedule, facilitating pre-construction meetings to provide clear definition of project goals and owner expectations, contractor submittal reviews, product samples, and shop drawings for conformance to the contract drawings and specifications.

#### MARTINSBURG POLICE DEPARTMENT & MUNICIPAL COURT

**Martinsburg, West Virginia**. A new three-story, 36,000 sf law enforcement and municipal courts facility.

#### **KANAWHA COUNTY PUBLIC LIBRARY**

**Charleston, West Virginia**. Expansion and renovation of a downtown historic public library. The project included a 20,000 sf modern addition and 80,000 sf of renovations, exterior restoration, and new exterior lighting.

#### JOHN MARSHALL HIGH SCHOOL

Glen Dale, West Virginia. Multi-phased reimagining of an educational campus including over 235,000 sf of additions and renovations.



### **PROJECT INTERIORS**



## HOLLY DEZINSKI, NCIDQ, LEED AP INTERIOR DESIGNER

Holly has been designing interiors for over 10 years and her experience encompasses a variety of projects from forensic, municipal facilities, mixed-use developments, restaurant, and hospitality designs. As a Senior Designer, Holly works with the Science & Technology Studio on large scale projects across the country, creating impactful spaces for the end-user. Holly partners with the team from programming through construction administration, ensuring successful project deliveries.

#### HAMILTON COUNTY, CORONER AND CRIME LAB FACILITY

Blue Ash, Ohio. See project information on page 48.

#### STATE OF SOUTH DAKOTA - DEPT. OF HEALTH, PUBLIC HEALTH LAB

Pierre, South Dakota. See project information on page 64.

#### TRAVIS COUNTY, MEDICAL EXAMINER'S OFFICE

Austin, Texas. See project information on page 72.

#### **U.S. GENERAL SERVICES ADMINISTRATION, FDA LABORATORY - DENVER**

Denver, Colorado. See project information on page 78.

#### ADA COUNTY, CORONER'S OFFICE FACILITY

Meridian, Idaho. See project information on page 88.

#### PIMA COUNTY, MEDICAL EXAMINER'S FACILITY

**Meridian, Idaho.** New 34,000 sf Medical Examiner facility along with a parking garage. The new facility will perform examinations for Pima and eight surrounding Counties while the parking garage will serve the entire Medical Campus.

#### PLACER COUNTY, CORONER'S FACILITY

**Roseville, California.** 20,000 sf building is a welcome addition to the existing County campus. With a total of six autopsy stations, the facility will allow for improved forensics services in the region, growth potential, and efficiency.

## MILWAUKEE COUNTY, CENTER FOR FORENSIC SCIENCE & PROTECTIVE MEDICINE AND OFFICE FOR EMERGENCY MANAGEMENT

**Milwaukee, Wisconsin.** The new facility includes new spaces for the Milwaukee County Medical Examiner's (ME) office and the Office of Emergency Management (OEM) housed in a six-story building along with the Medical College of Wisconsin (MCW) and their partners. Priorities for this shared facility are to create building cost efficiencies, service-model efficiencies, and improve collaboration between institutions that are currently operationally constrained.

#### EDUCATION

Bachelor of Science in Design, Interior Design, Honors, Arizona State University

#### REGISTRATIONS

LEED Accredited Professional NCIDQ Certification

## **PROJECT INTERIORS**



#### EDUCATION Bachelor's of Science, Interior Design, The Art

## Institute of Pittsburgh \_\_\_\_\_\_REGISTRATIONS

WELL Accredited Professional Council for Interior Design Qualification

## JACQUELINE LINK, NCIDQ, WELL AP INTERIOR DESIGNER

Jacqueline has more than 12 years of commercial interior design experience. She strives to create beautiful, functional, and efficient spaces designed for longevity and human wellness. Her experience includes conceptual design, space planning, finish selection, 3D documentation, lighting selection, and furniture specification, and has been responsible for coordinating the design intent among architectural and engineering disciplines.

#### YALE UNIVERSITY, 101 COLLEGE BIOINFORMATICS, ENDOCRINOLOGY, NEPHROLOGY & VIVARIUM

**New Haven, Connecticut.** 125,000 sf facility for Endocrinology, Nephrology, core vivarium, and a new Bioinformatics Institute. This research hub will also be home to a number of biotech startups in New Haven.

#### GROVE CITY COLLEGE, ROCKWELL HALL 2.0 Renovation & Addition

**Grove City, Pennsylvania.** Design of 60,000 sf to support STEM teaching and undergraduate research across traditional STEM fields and an emerging new Exercise Science program.



## SUSAN MCLANE, ASSOCIATE AIA INTERIOR DESIGNER

EDUCATION Graduate of The Art Institute of Pittsburgh

PROFESSIONAL AFFILIATIONS American Institute of Architects (AIA), Associate Member As an Interior Designer, Susan utilizes her 30 years of commercial design knowledge, project experience and creative passion to develop physically and emotionally pleasing environments. She works diligently to understand her client's business functions, and ensures that their budget, goals and ultimate vision is met or exceeded. Susan also partners closely with our architectural staff, from the conceptual design, selecting appropriate building materials and colors, all the way through to the final stages of selecting and specifying furniture and fixtures that ultimately bring about a complete and cohesive building design.

#### **RALEIGH COUNTY SHERIFF'S DEPARTMENT**

**Beckley, West Virginia.** Programming and design for a new 27,400 sf law enforcement headquarters.

#### **CABARRUS COUNTY COURTHOUSE**

**Concord, North Carolina.** New \$109 million courthouse featuring a combined 312,000 sf in new construction, renovations, and shell space.

#### FRANKLIN COUNTY JUDICIAL CENTER

**Chambersburg, PA.** New 130,000 sf judicial center serving the County's Common Pleas, District, and Magistrate Courts, Clerk of Courts, Public Defender, Juvenile Probation, Adult Probation, Sheriff, and District Attorney.

### **ENGINEERING**



## **ROB THOMPSON**, PE LEAD MECHANICAL ENGINEER

Rob has more than 25 years of mechanical building system design experience and his design work seeks to optimize system designs by understanding the external environmental parameters that impact performance and the development of innovative solutions and strategies that result in energy use improvements. With extensive experience in forensic systems design, Rob is the lead mechanical engineer for the Science & Technology Studio in the Phoenix Office and the Mechanical Discipline Sustainable Design Leader with SmithGroup.

#### HAMILTON COUNTY, CORONER AND CRIME LAB FACILITY

Blue Ash, Ohio. See project information on page 48.

#### CITY AND COUNTY OF DENVER, DENVER POLICE DEPT. CRIME LAB

Denver, Colorado. See project information on page 56.

#### COUNTY OF SAN DIEGO, CRIME LABORATORY

San Diego, California. See project information on page 60.

## STATE OF SOUTH DAKOTA - DEPT. OF HEALTH, PUBLIC HEALTH LAB

Pierre, South Dakota. See project information on page 64.

#### DEFENSE POW/MIA ACCOUNTING AGENCY FORENSIC IDENTIFICATION LAB

Hickman AFB, Oahu, Hawaii. See project information on page 68.

#### TRAVIS COUNTY, MEDICAL EXAMINER'S OFFICE

Austin, Texas. See project information on page 72.

#### **U.S. GENERAL SERVICES ADMINISTRATION, FDA LABORATORY - DENVER**

Denver, Colorado. See project information on page 78.

#### ADA COUNTY, CORONER'S OFFICE FACILITY

Meridian, Idaho. See project information on page 88.

## U.S. DEPARTMENT OF AGRICULTURE, ARID-LAND AGRICULTURE RESEARCH CENTER

Pierre, South Dakota. See project information on page 89.

#### JOHNSON COUNTY, MEDICAL EXAMINER'S FACILITY

Olathe, Kansas. See project information on page 91.

#### PIMA COUNTY, MEDICAL EXAMINER'S FACILITY

**Tucson, Arizona.** New 34,000 sf Medical Examiner facility along with a parking garage. The new facility will perform examinations for Pima and eight surrounding Counties while the parking garage will serve the entire Medical Campus.

#### EDUCATION

Bachelor of Science, Mechanical Engineering, University of Arizona

#### REGISTRATIONS

Registered Professional Engineer: Arizona, Idaho, California, Colorado, Hawaii, Nevada, New Mexico, Texas, Utah, Virginia

#### PROFESSIONAL AFFILIATIONS ASHRAE

International Institute of Sustainable Laboratories (I2SL), Program Chair for Arizona Chapter

American Society of Plumbing Engineers (ASPE)



## BIANCA JIMENEZ, PE LEAD ELECTRICAL ENGINEER

Bianca is experienced designing electrical systems for science and technology, workplace, higher education, and healthcare projects. These projects including multiple forensic facilities, public, private, and government clients at a variety of levels and scopes. Bianca is also highly adept at project organization and team collaboration. From the beginning to the end of a project she remains engaged providing coordination of power, lighting, and low voltage systems. Concurrently, Bianca provides effective and beneficial sustainable engineering strategies.

#### HAMILTON COUNTY, CORONER AND CRIME LAB FACILITY

Blue Ash, Ohio. See project information on page 48.

#### COUNTY OF SAN DIEGO, CRIME LABORATORY

San Diego, California. See project information on page 60.

#### DEFENSE POW/MIA ACCOUNTING AGENCY FORENSIC IDENTIFICATION LAB

Hickman AFB, Oahu, Hawaii. See project information on page 68.

#### TRAVIS COUNTY, MEDICAL EXAMINER'S OFFICE

Austin, Texas. See project information on page 72.

#### **U.S. GENERAL SERVICES ADMINISTRATION, FDA LABORATORY - DENVER**

Denver, Colorado. See project information on page 78.

#### ADA COUNTY, CORONER'S OFFICE FACILITY

Meridian, Idaho. See project information on page 88.

#### JOHNSON COUNTY, MEDICAL EXAMINER'S FACILITY

Olathe, Kansas. See project information on page 91.

#### PIMA COUNTY, MEDICAL EXAMINER'S FACILITY

**Tucson, Arizona.** New 34,000 sf Medical Examiner facility along with a parking garage. The new facility will perform examinations for Pima and eight surrounding Counties while the parking garage will serve the entire Medical Campus.

#### FD STONEWATER - SOMERVILLE EMERGENCY SERVICES FACILITY

**Somerville, New Jersey.** The Somerville Emergency Services Facility combines and centralizes the Borough's four (4) Fire Companies, Police Headquarters, and Office of Emergency Management (OEM) in a new facility. The Borough Fire Department requires 6 pull-through apparatus bays that drive the site and first floor building planning; additional equipment storage and training spaces provide the mission critical performance needed for the facility.

#### EDUCATION

Bachelor of Engineering, Electrical, Arizona State University

#### REGISTRATIONS

Registered Professional Engineer: Arizona

### **ENGINEERING**



#### EDUCATION ITT Technical Institute

#### PROFESSIONAL AFFILIATIONS

American Legion American Society of Plumbing Engineers (ASPE) American Society of Sanitary Engineers (ASSE)

International Association of Plumbing and Mechanical Officials (IAPMO)

## LOWELL MANALO LEAD PLUMBING DESIGNER

Lowell boasts over 18 years of combined experience in plumbing engineering designing forensic facilities, healthcare facilities, retail offices, high rise buildings, data centers, biotech facilities, and educational facilities. He serves as SmithGroup's western U.S. discipline leader. Lowell aims to provide complete piping systems ranging from sanitary drainage and vent systems, domestic hot and cold water systems, laboratory gas piping systems for healthcare facilities, treatment of industrial waste, specialty piping systems and much more.

#### HAMILTON COUNTY, CORONER AND CRIME LAB FACILITY

**Blue Ash, Ohio.** See project information on page 48.

#### COUNTY OF SAN DIEGO, CRIME LABORATORY

San Diego, California. See project information on page 60.

## STATE OF SOUTH DAKOTA - DEPT. OF HEALTH, PUBLIC HEALTH LAB

Pierre, South Dakota. See project information on page 64.

#### U.S. GENERAL SERVICES ADMINISTRATION, FDA LABORATORY - DENVER

**Denver, Colorado.** See project information on page 78.



#### EDUCATION

Bachelor of Science, Mechanical Engineering, University of Pittsburgh Swanson School of Engineering

#### REGISTRATIONS

FE Mechanical Certification (EIT) Pennsylvania, NCEES

## COLIN POCOCK, EIT MECHANICAL DESIGNER

Colin is proficient in designing mechanical systems for a variety of facilities including science and technology, higher education and workplace. Colin's exceptional strength lies in cultivating trusting relationships with clients, contractors, and coworkers, driven by his extroverted communication skills. His commitment to sustainable solutions mirrors the dynamic shifts in the mechanical system design landscape, establishing him as a dedicated professional at the forefront of innovation.

#### YALE UNIVERSITY, 101 COLLEGE BIOINFORMATICS, ENDOCRINOLOGY, NEPHROLOGY & VIVARIUM

**New Haven, Connecticut.** 125,000 sf facility for Endocrinology, Nephrology, core vivarium, and a new Bioinformatics Institute. This research hub will also be home to a number of biotech startups in New Haven.

#### UNIVERSITY OF MICHIGAN, MED RESEARCH FACILITIES: MEDICAL SCIENCES I LEVEL 4 & 5

Ann Arbor, Michigan. Renovation of an outdated facility into an open and welcoming space for dry research, offices, and collaboration that prompted flexibility, density, and interaction.



#### EDUCATION Master of Science in Civil Engineering, Wayne State University

REGISTRATIONS Registered Professional Engineer: West Virginia

LEED Accredited Professional

PROFESSIONAL AFFILIATIONS National Council of Examiners for Engineering and Surveying Structural Exam Committee

Structural Engineers Association of MI; Structural Engineering Institute; Architectural Engineering Institute

## **ANDREA REYNOLDS,** SE, PE, MLSE, LEED AP **STRUCTURAL ENGINEER**

As Director of Structural Engineering, Andrea Reynolds leads the structural design of concrete, steel, masonry, and wood structures. Her experience includes working in all phases of design and preparing bridging and bid documents for design-build contracts. Andrea has been involved in a broad range of building types, including government buildings, museums, office buildings, university classroom structures, stadiums, industrial buildings, and laboratories.

#### **CITY OF DETROIT, PUBLIC SAFETY HEADQUARTERS**

**Detroit, Michigan.** See project information on page 80.

#### U.S. GSA, FEDERAL BUREAU OF INVESTIGTIONS (FBI) Detroit field office

**Detroit, Michigan.** A complete building systems upgrade, the delivery of 260,000 sf of office space within the existing facility (tenant re-stack), and a dedicated FBI entrance.

#### FD STONEWATER - SOMERVILLE EMERGENCY SERVICES FACILITY

**Somerville, New Jersey.** The new facility combines and centralizes the Borough's four (4) Fire Companies, Police Headquarters, and Office of Emergency Management (OEM) in a new building.



#### EDUCATION

Bachelor of Engineering in Electrical and Electronics Engineering, Birla Institute of Technology & Science, Pilani, Dubai Campus, United Arab Emirates

**REGISTRATIONS & AFFILIATIONS** 

Member, American Society of Civil Engineers (ASCE)

Chartered Engineer India, Institution of Engineers India (IEI)

## STEVE LOBO ELECTRICAL DESIGNER

Steve is a member of the Performance, Analytics & Climate-Impact Team (PACT) and is responsible for energy modeling and thought leadership. He is an enthusiastic and highly motivated Electrical Designer and is currently pursuing his Master's in Civil & Environmental Engineering at Carnegie Mellon University with a focus on Energy Infrastructure Systems. He has valuable exposure to dry utility infrastructure design, street lighting, urban utilities planning, wet utility infrastructure, and rail infrastructure design.

#### UNIVERSITY OF CALIFORNIA, MERCED UTILITY INFRASTRUCTURE PLAN

**Merced, California.** Provided a decarbonized utility infrastructure master plan for campus expansion while aligning with their overall 2040 carbon neutrality goals.

#### **CITY OF DANVILLE, COMPREHENSIVE PLAN**

**Danville, Virginia.** With a 2040 horizon, this City-Wide Comprehensive Plan will go beyond advising policy to share Danville's distinct story, outlining land use and housing, economy and businesses, transportation and mobility, and public services.

### **ENGINEERING**



EDUCATION Bachelor of Science, Mechanical Engineering, Penn State University

## DAN STANTON PLUMBING DESIGNER

Dan is a plumbing designer with experience in designing plumbing system for higher education, laboratory facilities, workplace, and combination buildings. Dan's responsibilities consists of designing new and efficient sanitary, storm, domestic water, and specialty piping for new construction, renovations, and tenant build-outs. His excellent communication skills with team members allows him to provide seamless plumbing coordination over the course of the project.

#### YALE UNIVERSITY, 101 COLLEGE BIOINFORMATICS, ENDOCRINOLOGY, NEPHROLOGY & VIVARIUM

**New Haven, Connecticut.** 125,000 sf facility for Endocrinology, Nephrology, core vivarium, and a new Bioinformatics Institute. This research hub will also be home to a number of biotech startups in New Haven.

## GROVE CITY COLLEGE, ROCKWELL HALL 2.0 RENOVATION & ADDITION

**Grove City, Pennsylvania.** Design of 60,000 sf to support STEM teaching and undergraduate research across traditional STEM fields and an emerging new Exercise Science program.

### **TECHNICAL RESOURCES**



#### EDUCATION

Bachelor of Science in Fire Protection and Safety Technology, Oklahoma State University

#### REGISTRATIONS

Certified Fire Protection Specialist (CFPS) National Fire Protection Association (NFPA)

#### PROFESSIONAL AFFILIATIONS

Society of Fire Protection Engineers (SFPE), Member

## KEVIN BURDA, CFPS FIRE & LIFE SAFETY ENGINEER

Kevin has five years of experience as a fire protection designer. His expertise allows him to seamlessly collaborate with SmithGroup's multi-disciplinary design teams. He provides fire protection and life safety coordination for new and existing structures. He is skilled in implementing National Fire Protection Association standards and International Building Codes related to fire protection and fire alarm system design. Previously, Kevin worked as a fire protection engineer in the nuclear industry.

#### PIMA COUNTY, MEDICAL EXAMINER'S FACILITY

**Tucson, Arizona.** New 34,000 sf Medical Examiner facility along with a parking garage. The new facility will perform examinations for Pima and eight surrounding Counties while the parking garage will serve the entire Medical Campus.

#### FD STONEWATER - SOMERVILLE EMERGENCY SERVICES FACILITY

**Somerville, New Jersey.** The new facility combines and centralizes the Borough's four (4) Fire Companies, Police Headquarters, and Office of Emergency Management (OEM) in a new building.



#### EDUCATION

PhD Comparative Energy Infrastructures and Institutions, University of Nottingham, Center for Interdisciplinary Studies

Master of Science in International Relations, Hult International Business School

#### **PROFESSIONAL AFFILIATIONS**

Royal Society of Arts, Fellow Women in Economics IEEE, Senior member American Society of Economics

## KATRINA KELLY-PITOU, PHD ENERGY ANALYSIS

Katrina is an expert in energy systems and urban development. As an economist and electrical specialist, Katrina works to bring together systemic visions of campus and city development. She has focused her life's work on understanding the connections between resilience, decarbonization, and infrastructure development. As a lecturer, practitioner, and urban designer Katrina has published extensively in IEEE Resilience and Smart Cities, Energy Policy, and the European Economic Review.

## NYPD, FORENSIC INVESTIGATIONS DIVISION FACILITY, SCOPE DEVELOPMENT STUDY

Jamaica, New York. Development of a program, scope, budget and concept design for the consolidation of the Forensic Investigation Division of the NYPD. The Department is comprised of a crime lab, criminal investigation division, evidence collection team, evidence control, facial recognition, computer crimes, training, and other supporting and administrative functions.

#### YALE UNIVERSITY, 101 COLLEGE BIOINFORMATICS, ENDOCRINOLOGY, NEPHROLOGY & VIVARIUM

**New Haven, Connecticut.** 125,000 sf facility for Endocrinology, Nephrology, core vivarium, and a new Bioinformatics Institute. This research hub will also be home to a number of biotech startups in New Haven.



#### EDUCATION

Bachelor of Science, Building Construction & Real Estate, Virginia Tech

#### REGISTRATIONS

Registered Communications Distribution Designer (RCDD)

Certified Technology Specialist - Design (CTS-D)

LEED Accredited Professional, BD+C

#### **PROFESSIONAL AFFILIATIONS**

Crestron Digital Media Certified Designer (DMC-D-4K); Extron Certified XTP Systems Design Engineer (XTP-E)

## **DAVID GLENN,** RCDD, CTS-D, LEED AP BD+C AV/IT/SECURITY

David is a well-regarded, results-driven national technology thought leader that approaches each project from a holistic perspective. David has personally managed, designed, and engineered complex technology and infrastructure for over 250 technology-rich projects for over 100 clients across the country with larger projects exceeding \$1.5 Billion in cost. David will work with the design and engineering team to integrate appropriate IT, telecommunications, building security, and audiovisual systems.

## U.S. DEPARTMENT OF STATE, BUILDING AUTOMATION SYSTEMS (BAS) REPLACEMENT

Warsaw, Poland; Tel Aviv, Israel; Sarajevo, Bosnia and Herzegovina. Design and Engineering services to for the demolition and full replacement of the existing Building Automation Systems (BAS) with new BAS systems.

#### HOWARD HUGHES MEDICAL INSTITUTE, VIVARIUM Master Plan

Ashburn, Virginia. In response to the growth of new research areas at HHMI the master plan provides requirements and implementation guidelines to achieve that new growth within the current landscape building.

### **SUBCONSULTANTS**



#### EDUCATION

Bachelor of Science Landscape Architecture,

West Virginia University Bachelor of Art, Geography (Planning), West Virginia University

#### REGISTRATIONS

Landscape Architect: West Virginia, Ohio, North Carolina, South Carolina, Pennsylvania, Virginia

LEED Accredited Professional

## **GREG FOX,** RLA, ASLA, LEED AP LANDSCAPE ARCHITECT

Greg oversees Terradon's Land Development Sector and has been responsible for hundreds of notable governmental, commercial, educational and recreational site development projects during his 25+ year career. During this time, Terradon has earned Engineering Excellence Awards from the West Virginia Association of Consulting Engineers, numerous Merit Awards from the American Society of Landscape Architects, and the Gold Award from the American Council of Engineering Companies



- WV Advanced Technology Center, South Charleston, West Virginia. Site development of a new higher education facility located within the WV Regional Technology Park.
- Building 2000 WV Regional Technology Park, South Charleston, West Virginia.
   Survey services and design on the project which included a new entrance and plaza.
- National Weather Services Building, South Charleston, West Virginia. Site design and preparation of civil construction drawings for the new building development within the WV Regional Technology Park.
- Martinsburg Police HQ & Municipal Court, Martinsburg, West Virginia
- Raleigh County Sheriff's Department, Beckley, West Virginia



#### EDUCATION

Bachelor of Art, Civil Engineering, West Virginia University

#### REGISTRATIONS

Registered Professional Engineer: West Virginia

## JIM NAGY, PE CIVIL ENGINEER

As a Senior Engineer at Terradon, Jim's primary focus is on designing civil engineering projects for public and private development projects throughout West Virginia. Jim specializes in the design of water distribution systems as well as sewage collection systems, and offers decades of hands-on experience and has previously provided design engineering services for state and local governments, commercial developments, residential developments, public utilities and more.



- WV Advanced Technology Center, South Charleston, West Virginia. Site development of a new higher education facility located within the WV Regional Technology Park.
- Building 2000 WV Regional Technology Park, South Charleston, West Virginia.
   Survey services and design on the project which included a new entrance and plaza.
- National Weather Services Building, South Charleston, West Virginia. Site design and preparation of civil construction drawings for the new building development within the WV Regional Technology Park.
- South Charleston Fire Station No. 3 & No.
   5, South Charleston, West Virginia

### **SUBCONSULTANTS**



#### EDUCATION

Bachelor of Science, Building Construction, Texas A&M

**REGISTRATIONS** LEED Accredited Professional

## **GREG EDWARDS,** LEED AP COST ESTIMATOR

Greg has 40 years of successful involvement in all phases of multimillion dollar projects, construction, and cost management. He is backed by strong credentials and proven history of successful project experience which includes forensics, medical, governmental, industrial, correctional, educational, commercial, and religious institutions. In addition, he also provides, scheduling, consulting services, overall project management and constructability review.

#### Project Cost Resources, Inc,

- Hamilton County, Coroner and Crime Lab Facility, Blue Ash, Ohio. See project information on page 48. (with SmithGroup)
- Travis County, Medical Examiner's Office, Austin, Texas. See project information on page 72. (with SmithGroup)
- Ada County, Coroner's Facility, Meridian, Idaho. See project information on page 88. (with SmithGroup)
- Pima County, Medical Examiner's Facility, Tucson, Arizona. New 34,000 sf Medical Examiner facility along with a parking garage. (with SmithGroup)



#### EDUCATION

Master of Science, Aerospace Engineering, Texas A&M University, College Station, Texas

Bachelor of Science, Aerospace Engineering, Texas A&M University, College Station, Texas

#### REGISTRATIONS

Registered Professional Engineer: California

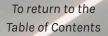
## STEPHEN JAEGER, PE VIBRATION/ACOUSTICS

Stephen has over 30 years of experience in noise control consulting and acoustics research and has been with Colin Gordon Associates (CGA) since 2003. Stephen is also a California-licensed Mechanical Engineer. His consulting activities at CGA have focused upon acoustical design, noise control, vibration control, vibration and noise measurements, and environmental acoustics for high-technology facilities including semiconductor fabs and laboratories .



- City and County of Denver, Denver Police Crime Lab, Denver, Colorado. See project information on page 56. (with SmithGroup)
- U.S. General Services Administration,
   FDA Laboratory Denver, Denver, Colorado.
   See project information on page 78. (with SmithGroup)
- National Institutes of Health (NIH), Surgery, Radiology & Lab Medicine Building, Bethesda, Maryland
- Maryland Economic Development
   Corporation, Baltimore, Maryland





**CLICK HERE** 

**SECTION 4** 

ACID

## RELEVANT PROJECT EXPERIENCE

## **RELEVANT PROJECT EXPERIENCE**

Inspired by our clients and guided by our experience, SmithGroup + Silling elevate work and research environments with unparalleled skill and elegance. Based on past work, we create designs that lean further into the future, address your most complex needs today, and prepare you with the tools to enable even greater innovation tomorrow. Our team has a history of completing projects on time and within budget, and our project success is solidified by our collective firm's repeat clients.

SmithGroup has planned and designed projects for federal and state laboratories, top-tier research universities, and institutes, including: the National Institutes of Health, the Environmental Protection Agency, the California Department of General Services, and the Food and Drug Administration. Through this experience, SmithGroup has developed extensive benchmarking and simulation tools that assist in forming comprehensive programs for regulatory, research, and clinical facilities. Combined with Sillings local knowledge and extensive regional portfolio, we offers a collective synergy between the broad individual talents of our designers, planners, architects, engineers, and laboratory specialists.

#### **IN-HOUSE AREAS OF EXPERTISE:**

- Biosciences
- Biomedical
- Biocontainment
- Environmental
- Forensics
- Life Sciences

- Medical Examiner
- Nanotechnology
- Physical Sciences
- Public Health
- Science Parks
- Vivaria

We have collected some of our best projects on the following pages that reflect similar goals to the State of West Virginia. They showcase the depth of SmithGroup's laboratory portfolio along with the local, government work of Silling, and reflect the opportunities for this exciting project.



#### **BIOSAFETY CONTAINMENT EXPERIENCE**

Our team has in-depth knowledge and experience in the design of laboratories for the examination of biologically hazardous materials. This includes a wide range of scientific and technological research and development functions such as agronomy, agriculture, biochemistry, chemistry, horticulture, molecular biology, biology, neuroscience microbiology, pharmacology, physiology, and toxicology, among others.

To meet the specific demands of these functions, the buildings have incorporated specialized areas such as bio-safety level (BSL) 2, 3 and 3+ containment rooms, barrier facilities, tissue and cell culture rooms, environmental rooms, radioisotope rooms, chemical and biological waste disposal and incineration facilities.

SmithGroup has implemented the NIH guidelines for BSL2, 3 and 3+ containment in more than 35 research and medical facilities nationwide. Our experience in the design of BSL facilities include projects for NIH, NASA, USAF, USDA, major university medical and dental schools, and major corporate biotechnology and pharmaceutical facilities. Our work is recognized for excellence because it transforms campuses, communities, industries, and most importantly, lives.

### **BSL/ABSL EXPERIENCE**

11

BSL-2 LAB BSL-3 LAB	ABSL-2 LAB	ABSL-3 LAB	ABSL-4 LAB
------------------------	------------	------------	------------

#### FEDERAL & STATE AGENCY CLIENTS

	(			
>	(			
		х	Х	х
>	(	Х	Х	Х
>	(			
>	(			
>	(			
	(			
>	(			
		х		
>	(			
>	(			
>	(			
		x x x x x x x x x x	X       X	X     X       X     X



## HAMILTON COUNTY CORONER & CRIME LABORATORY

LOCATION Blue Ash. Ohio **SIZE** 83,000 gsf

CONSTRUCTION COST \$38.3 Million

COMPLETION DATE March 2021 LEED CERTIFICATION

## This new facility propels Hamilton County to the forefront of forensic science and provides capacity to serve southwest Ohio for years to come.

To address the increasing demand on this facility in the heart of the opioid epidemic, 17,000 sf of space was incorporated for the morgue and autopsy, including a separate isolation suite. A Histology laboratory provides analytical support and a secure, enclosed sally port affords discrete delivery and pickup of the deceased. Office and operations spaces for the investigations group provides support for off-site field investigation and evidence gathering capabilities.

The crime laboratory supports the medicolegal death investigation section and contains five sections including Serology/DNA, Controlled Substances, Firearms/Toolmarks, Trace Evidence and Toxicology. The facility has a secured evidence receiving, processing and storage area and an on-site firing range supports ballistic analysis.

#### **PROJECT RELEVANCIES**

- Consolidation of Laboratory Divisions
- Regional Training Center
- Coroner/Medical Examiner
- Crime Laboratory
- Multiple Competitive Bid Packages
- Collaboration with Multiple Stakeholder Groups + Agencies
- Designed for Energy Efficiency
- Designed for Optimized Work Flow and Flexibility
- Recruitment and Retention Tool

## **SMITHGROUP**









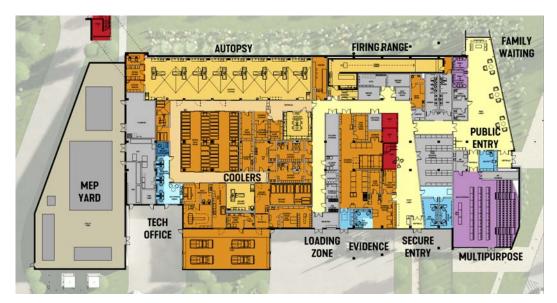
You all were great partners in this process and we feel incredibly fortunate to have been the recipients of all your inspiration. Thank you for being patient, listening, engaging, and implementing our dreams into reality.

- Lakshmi Kode Sammaco, M.D., Hamilton County Coroner

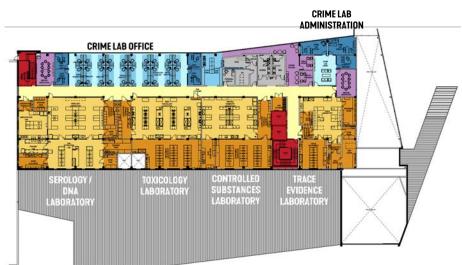
A modern office, conferencing, and collaboration space has been provided for the Coroner, lab, and administrative staff. Training and outreach is paramount to the success of the facility, supported by a 150-person flexible auditorium. The facility was designed to maintain National Association of Medical Examiners (NAME) and ISO/ IEC 17025 accreditation.



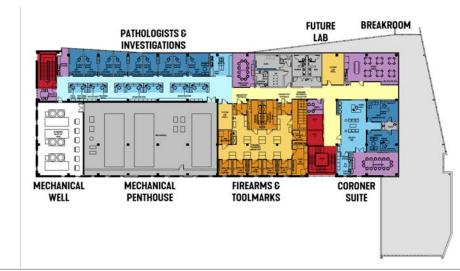
## HAMILTON COUNTY CORONER & CRIME LABORATORY



LEVEL 1



LEVEL 2



50

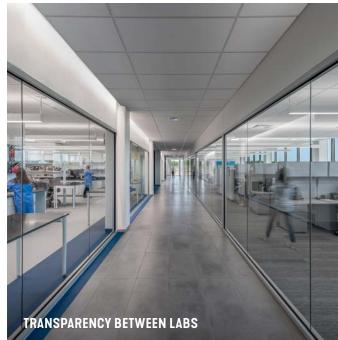
LEVEL 3

## **UNIQUE + SPECIALIZED ELEMENTS**













LOCATION Salt Lake City, Utah SIZE

72,000 gsf

CONSTRUCTION COST \$28 Million

COMPLETION DATE January 2010

#### Consolidating the labs to a single campus will promote closer interaction and sharing between the various departments and labs.

Module One of The Unified State Laboratory was Phase I of a three part project to create a Unified campus of State laboratories. The project was masterplanned to integrate Phase II (Dept. of Agriculture & Office of the Medical Examiner) and Phase III (Crime lab) into a Unified Campus.

Module One for the Department of Health consists of three bureaus: The Bureau of Microbiology, Bureau of Forensic Toxicology, and The Bureau of Chemical and Environmental Services. These departments play an integral role in the health and safety for the State. The project houses a state-ofthe-art BSL-3 suite consisting of six isolation laboratories. These labs helped to elevate and upgrade the previous lab conditions for the Health Department and the State of Utah. In addition to these highly sensitive labs, shared spaces were created consisting of training laboratories, classrooms, and conference space.

#### **PROJECT RELEVANCIES**

- Consolidation of Laboratory
- Regional Training Center
- Dept. of Public Health
- Weights & Measures Laboratories
- Crime Laboratory
- Multiple Competitive Bid **Packages**
- Stakeholder Groups + Agencies
- Designed for Energy Efficiency
- Designed for Optimized Work **Flow and Flexibility**
- Recruitment and Retention Tool



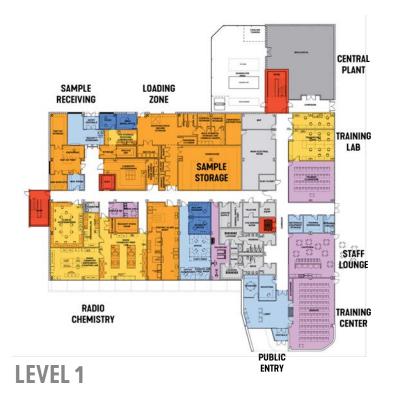


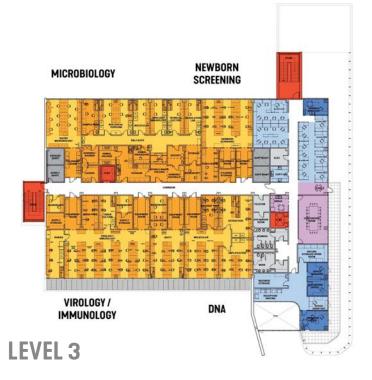


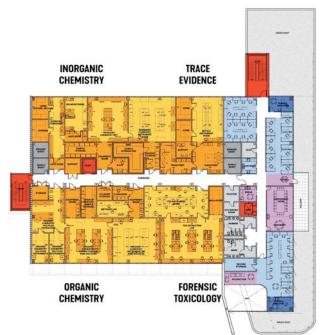




## STATE OF UTAH - DFCM UNIFIED STATE LABORATORY







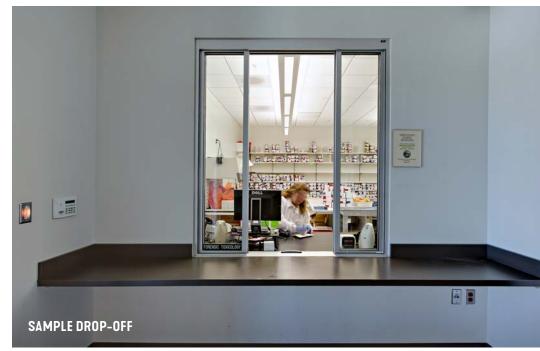
LEVEL 2



## UNIQUE + SPECIALIZED ELEMENTS











AIA/JFR, JUSTICE FACILITIES REVIEW AWARD

## CITY AND COUNTY OF DENVER DENVER POLICE DEPT. CRIME LAB

LOCATION Denver, Colorado **SIZE** 60,000 gsf CONSTRUCTION COST \$27.6 Million

**COMPLETION DATE** July 2012 LEED CERTIFICATION

Ĭ

#### **PROJECT RELEVANCIES**

- Consolidation of Laboratory Divisions
- Regional Training Center
- Dept. of Public Health
- Police Crime Laboratory
- Crime Laboratory
- Multiple Competitive Bid Packages
- Collaboration with Multiple Stakeholder Groups + Agencies
- Designed for Energy Efficiency
- Designed for Optimized Work Flow and Flexibility
- Recruitment and Retention Tool

## The Denver Police Department Crime Lab is conceived as a physical manifestation of the prominence, caliber, and mission of the civic institution it houses.

Prior to the completion of the new facility, the lab had long been recognized as a national leader in the forensic community in spite of substandard and aging facilities in downtown Denver. The design team was charged with creating a timeless, striking contemporary icon for the City and County of Denver, while also designing a state-of-the-art laboratory facility that would act as a recruitment tool for the world's best forensic scientists.

The new Crime Lab houses the Crime Laboratory Bureau's seven Units: Crime Scene Investigations Unit, Forensic Biology/DNA Unit, Firearms Unit, Photography Unit, Forensic Chemistry Unit, Trace Evidence Unit, and Latent Print Unit.

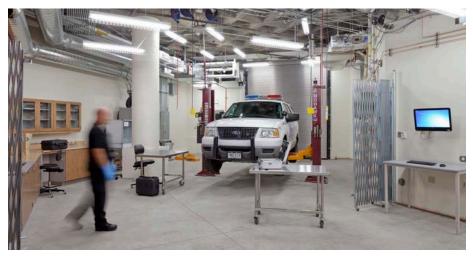
The facility has been an important tool for the Police Department in reducing crime for their community.











Since moving into the new crime laboratory many staff members have commented on how great the building is to work in and the improvement in lighting and air quality. This facility has transformed our working conditions and the impact was felt immediately by all.

- Greggory Laberge, Lab Director



# CITY AND COUNTY OF DENVER DENVER POLICE DEPT. CRIME LAB















## AIA/JFR, JUSTICE FACILITIES REVIEW AWARD



#### LOCATION San Diego, California

**SIZE** 158,000 gsf CONSTRUCTION COST \$60 Million

COMPLETION DATE

LEED CERTIFICATION

## The new crime lab moves the County of San Diego to a more connected County Operations Center.

This specialized laboratory provides state-of-the-art analysis while fitting into the fabric of the larger campus. Home to the Sheriff's Office divisions of Crime Laboratory, Property and Evidence and Central Investigations, the building is just paces away from the existing Medical Examiner's office on the existing County campus.

The San Diego Sheriff's Department is one of the largest departments in the U.S., with a service area that covers approximately 4,200 square miles, and provides forensic science services to over 30 law enforcement and criminal justice agencies in San Diego County, the District Attorney, State agencies, Sheriff's detectives and field deputies, and federal law enforcement. The lab provides specialized analysis in crime scene investigation, controlled substances, alcohol, forensic biology and DNA, trace evidence, latent fingerprint development and comparison, questioned documents and firearms and tool marks.

#### **PROJECT RELEVANCIES**

- Consolidation of Laboratory Divisions
- Regional Training Center
- Police Crime Laboratory
- Crime Laboratory
- Multiple Competitive Bid Packages
- Collaboration with Multiple
   Stakeholder Groups + Agencies
- Designed for Energy Efficiency
- Designed for Optimized Work Flow and Flexibility
- Recruitment and Retention Tool

## **SMITHGROUP**







Working with SmithGroup was an absolute pleasure. Their knowledge and expertise was invaluable.

- Mike Grubb, Lab Director





This project illustrates the integrated philosophy of SmithGroup. Management, design, laboratory planning, engineering, and construction management services created a seamless approach to the ongoing process. By pooling our resources we could offer the best thought leadership and integrate cutting-edge trends to the County of San Diego. The facility supports the existing functions of these San Diego Sheriff's Office departments while planning for future technology and departmental needs.

## COUNTY OF SAN DIEGO CRIME LABORATORY











## STATE OF SOUTH DAKOTA - DEPT. OF HEALTH PUBLIC HEALTH LAB

LOCATION Pierre, South Dakota **SIZE** 91,320 gsf CONSTRUCTION COST \$53 Million

# The South Dakota Department of Health Public Health Lab will be a significant contribution to the State of South Dakota Department of Health (DOH) campus by collocating DOH programs currently spread throughout Pierre.

The current lab has outgrown its existing space and can no longer support the needs required for laboratory operations. The facility only provides capacity for 50% of the space needs of DOH programs which has forced the DOH to disperse its programs throughout Pierre. The primary goal of the new facility is to collocate all DOH programs at the South Dakota Public Health Campus and modernize critical building systems and utility infrastructure to accommodate advancements in technology, and requirements for new or emerging testing procedures.

The new lab will act as a centralized state wide resource, as well as a scientific and economic catalyst for the region. The two-story facility will be shared between Microbiology, Virology, Chemistry, Drug Research, and an Administrative Suite.

**COMPLETION DATE** December 2025

#### **PROJECT RELEVANCIES**

 Consolidation of Laboratory Divisions

SOUTH DAKOTA DEPARTMEN

- Regional Training Center
- Department of Public Health
- Designed to Create Cohesive Public Health Campus
- Multiple Competitive Bid Packages
- Collaboration with Multiple Stakeholder Groups + Agencies
- Designed for Energy Efficiency
- Designed for Optimized Work Flow and Flexibility
- Recruitment and Retention Tool

#### **SMITHGROUP**









The project will be constructed in three phases. Phase I consists of parking along the east side of the site and all temporary construction to be used during future phases. Phase II includes construction of the new laboratory facility adjacent to the existing Public Health Laboratory.

Phase III is a renovation of the existing Public Health Laboratory to utilize for administrative services and training as well as a two-story addition for administrative office suites.

This solution allows the DOH to centralize all programs onto one campus on state owned land as well as space to train a pipeline for a future healthcare workforce including laboratory staff, infection control managers, clinical staff, disease prevention, and community nursing staff.

# STATE OF SOUTH DAKOTA - DEPT. OF HEALTH **PUBLIC HEALTH LAB**





#### LEVEL 2













LOCATION Hickman Air Force Base Pearl Harbor, Hawaii

**SIZE** 137,500 gsf CONSTRUCTION COST \$88 Million **COMPLETION DATE** June 2015 LEED CERTIFICATION

The mission of the Defense POW/MIA Accounting Agency (DPAA) is to achieve the fullest possible accounting of all Americans missing as a result of the nation's past conflicts.

The highest priority of the organization is the return of any living Americans who remain prisoners of war. The JPAC sequence of accounting for missing Americans includes Investigation & Analysis, Recovery, and Identification. The DPAA Central Identification Laboratory is the world's largest forensic anthropology laboratory.

Laboratory support spaces include a forensic DNA laboratory, morgue and autopsy spaces, and mass storage and deployment spaces for the deployment of groups of scientists to locations throughout the world. The forensic DNA laboratory includes spaces for the extraction of nuclear DNA, but relies a great extent on the extraction and processing of mitochondrial DNA. Designated rooms are programmed for Reagent Prep, Bone Processing, DNA Extraction, DNA Amplification, and Post-PCR.

- Consolidation of Laboratory Divisions
- World's Largest Forensic Facility
- Multiple Competitive Bid Packages
- Collaboration with Multiple Stakeholder Groups + Agencies
- Designed for Energy Efficiency
- Designed for Optimized Work Flow and Flexibility
- Recruitment and Retention Tool
- Chain of Custody Design

#### **SMITHGROUP**









Appreciate your support and hard work with all the challenges on the JPAC project. It been a very long journey, but I've met some truly talented architects and engineers that I can call colleagues and, more importantly, friends. You have truly designed a world class forensic facility. It has been a pleasure working with you and your hardworking, dedicated staff.

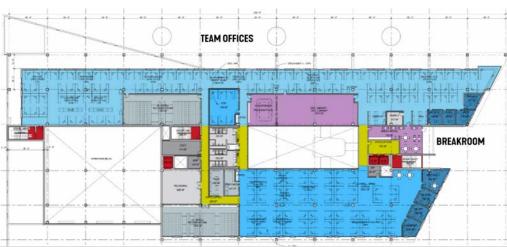
- James Low, PE, formerly Commander, NAVFAC Pacific



## DEFENSE POW/MIA ACCOUNTING AGENCY FORENSIC IDENTIFICATION LAB

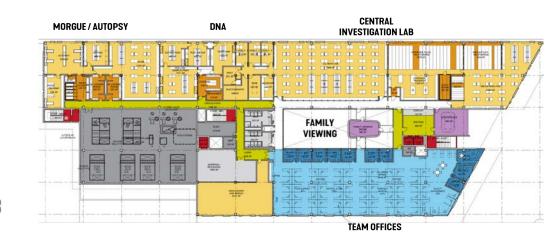


LEVEL 1

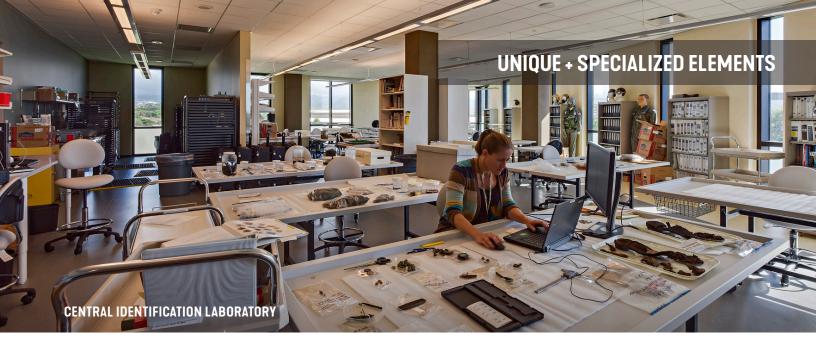


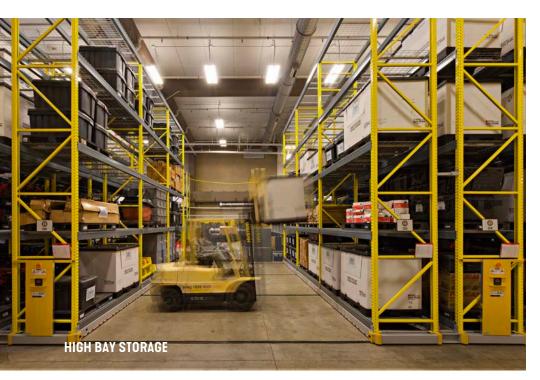
LEVEL 2

TEAM OFFICES



LEVEL 3









Number of the sector of the secto

#### AIA/JFR, JUSTICE FACILITIES REVIEW AWARD

## TRAVIS COUNTY MEDICAL EXAMINER'S OFFICE

LOCATION Austin, Texas **SIZE** 58,000 gsf

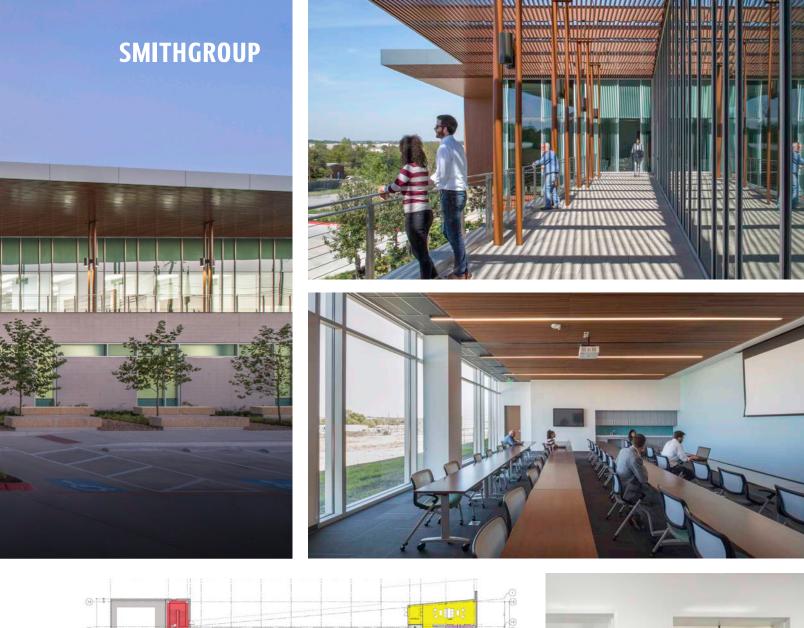
CONSTRUCTION COST \$27 Million COMPLETION DATE December 2017 LEED CERTIFICATION

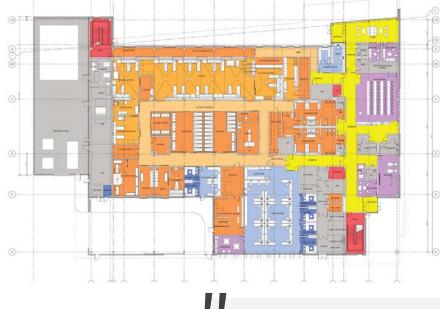
## The Travis County Medical Examiner's Office (TCME) is a nationally-accredited regional center of forensic medicolegal death investigation.

The new TCME merges a unique set of progressive sustainable and urban design strategies to create a modern center for forensic science. With a complex mix of state of the art autopsy, morgue, and laboratory spaces, the project is designed to put Travis County at the forefront nationally in the recruitment of forensic pathologists, toxicologists, investigators, and staff.

The design of the facility integrates a highly calibrated set of engineering and architectural design strategies that are uniquely tuned to the Austin, Texas climate. This sensitivity toward the design of the interior and exterior spaces and effort to minimize energy consumption creates a facility that enriches the staff who work in a highly stressful environment along with being operationally efficient for the County.

- Consolidation of Laboratory Divisions
- Regional Training Center
- Coroner/Medical Examiner
- Crime Laboratory
- Multiple Competitive Bid Packages
- Collaboration with Multiple Stakeholder Groups + Agencies
- Designed for Energy Efficiency
- Designed for Optimized Work Flow and Flexibility
- Recruitment and Retention Tool







This new facility allows us to be more efficient in providing peace of mind to families who have recently lost loved ones."

- J. Keith Pinckard, M.D., Ph.D., Chief Medical Examiner, Travis County

## TRAVIS COUNTY MEDICAL EXAMINER'S OFFICE

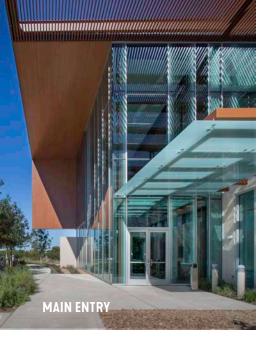














## STATE OF NEW MEXICO SCIENTIFIC LABORATORIES

NEW NEWCO SCIENTIFIC LABORATORIES

LOCATION Albuquerque, New Mexico **SIZE** 190,000 gsf CONSTRUCTION COST \$66.8 Million **COMPLETION DATE** February 2010

#### The new laboratory was designed to serve the New Mexico Department of Health - Scientific Laboratory Division (SLD), the New Mexico Department of Agriculture - Veterinary Diagnostics Services (VDS), and the New Mexico Office of the Medical Investigator (OMI).

Each of these departments contain a BSL-3 or agricultural bio-safety level three (AGBSL-3) suite. The forensic pathology BSL-3 suite in the Office of Medical Investigator was the first of its kind in the country. The building includes training facilities that allow these specialized agencies to provide clinical service, education, and research at the University of New Mexico.

The SLD provides analytical laboratory support services for agencies administering health and environmental programs for state citizens. It is comprised of three Bureaus (Biology, Chemistry, and Toxicology) which occupy a total of 41,000 sf. The Biology areas provide space for general microbiology, virology/serology, environmental biology, molecular biology, and BSL-3 space which will be shared with VDS for further isolation and analysis of pathogens.

- Consolidation of Laboratory Divisions
- Regional Training Center
- Department of Agriculture
- Department of Public Health
- Weights & Measures Laboratories
- Medical Examiner Facility
- Multiple Competitive Bid Packages
- Collaboration with Multiple Stakeholder Groups + Agencies
- Designed for Energy Efficiency
- Designed for Optimized Work Flow and Flexibility
- Recruitment and Retention Tool









## U.S. GENERAL SERVICES ADMINISTRATION FDA LABORATORY – DENVER

LOCATION Lakewood, Colorado **SIZE** 70,300 gsf

CONSTRUCTION COST \$85 Million COMPLETION DATE October 2025 LEED CERTIFICATION

#### PROJECT RELEVANCIES

- Consolidation of Laboratory Divisions
- Analytical Testing Laboratories
- BSL3 Suite & Systems
- Agricultural Testing Laboratories
- Multiple Competitive Bid Packages
- Collaboration with Multiple Stakeholder Groups + Agencies
- Designed for Energy Efficiency
- Designed for Optimized Work Flow and Flexibility
- Recruitment and Retention Tool
- Chain of Custody Design

The FDA Denver Laboratory will be a significant contribution to the Denver Federal Center (DFC) and will act as a regional showcase project for the GSA and FDA, as well as a scientific and economic catalyst for the region.

The three-story building will be shared between Microbiology, Chemistry, Animal Drug Research Center, and an Administrative Suite. The regulatory laboratory building will demonstrate how lab facilities can be aesthetically compelling, acquired at a competitive first-cost and lifecycle cost, and through integrated design, how buildings can reduce performance risks to the Owner and constructor, while not sacrificing laboratory function and design criteria.

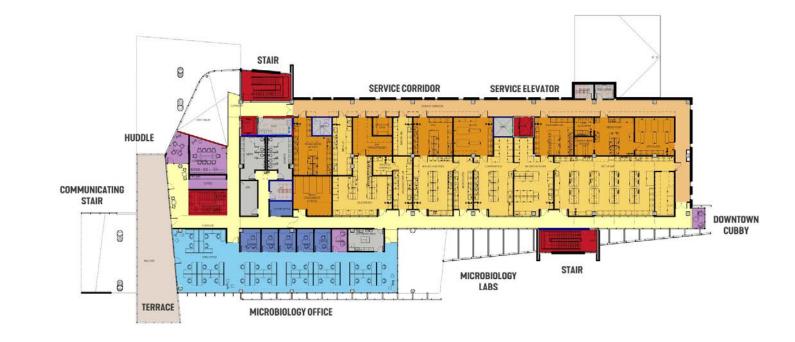
The completed building will foster creativity, collaboration and innovation for the scientific community on and around the DFC campus and will demonstrate the integration of high performance design features and practices, and showcase technology advances while satisfying the FDA's highly technical and specialized requirements of a regulatory lab facility.

### SMITHGROUP











LOCATION Detroit, Michigan **SIZE** 420,000 gsf CONSTRUCTION COST \$38.4 Million COMPLETION DATE September 2013 LEED CERTIFICATION

The building, originally designed as an IRS Data Center in the early 70s and then repositioned as a temporary casino for the MGM Grand Detroit in the late 90s, has been converted into the city's new state-of-the-art public safety headquarters housing police and fire administrative departments and a new forensics lab. This new facility promotes the effective and efficient delivery of public safety services.

The 76,000 sf former main casino floor, the largest of the seven levels, offers public access to the building and shared amenities for employees, such as a fitness center, media center, café, conference and training areas, polygraph, photography, and graphics studio. The fourth floor, with 53,000 sf houses the Michigan State Police - Metropolitan Detroit Forensics Science Laboratory. The fifth floor, approximately 51,000 sf, houses the Detroit Police Department's major crimes unit along with shell space for future occupancy. The sixth floor with 46,000 sf houses Detroit Fire Department administrative space and Detroit Police Department administrative space. The seventh floor provides space for police and fire leadership suites along with supporting departmental space.

SmithGroup transformed the former temporary casino exterior with a contemporary feel while dramatically improving energy efficiency, helping the Detroit Building Authority obtain an aggressive LEED Gold Certification, and making it the first city-owned LEED certified building in Detroit.

- Consolidation of Laboratory Divisions
- Regional Training Center
- Police Crime Laboratory
- Multiple Competitive Bid Packages
- Collaboration with Multiple
   Stakeholder Groups + Agencies
- Designed for Energy Efficiency
- Designed for Optimized Work Flow and Flexibility
- Recruitment and Retention Tool



## CHARLESTON PUBLIC SAFETY CENTER

LOCATION Charleston, West Virginia SIZE Confidential CONSTRUCTION COST Confidential COMPLETION DATE

SILLING

When Charleston's City Hall was built in 1922, it was designed to house all City operations. On opening day, City Hall had a fullyequipped fire station, police station, municipal court, as well as all of the general administrative departments of city government. Over time, Charleston's population, budget, and service offerings changed, resulting in a general expansion of government. City Hall continues to serve as the City's primary police station, but the architecture of the building, as well as its age, create substantial obstacles to efficient police and municipal court operations. While largely under one roof, the police department is physically segmented within the building.

The study's scope of services and tasks include: space needs assessment, planning, and programming; peer facility tour visits with City's representatives; identification of possible sites and site analysis; traffic study/analysis; security and technology needs assessment; conceptual design; grant funding identification and assistance; and project cost estimating.

Silling is providing planning, programming, site selection, and conceptual design services for a new, comprehensive Public Safety Center feasibility study. The proposed new facility will include all police operations, municipal court and related clerk functions, and fire department administration.

- Large, Complex Law Enforcement Center
- Planning & Design
   Collaboration
- Security & Technology Needs Assessment
- Site Selection & Analysis
- Local Project Management



## CABARRUS COUNTY BOARD OF COMMISSIONERS CABARRUS COUNTY COURTHOUSE

LOCATION Concord, North Carolina **SIZE** 312,000 gsf **CONSTRUCTION COST** \$109 Million

Representing a significant architectural development within the urban core of Concord, and expounding on the social and civic legacy of the courthouse site, the new Cabarrus County Courthouse will take a bold step in contributing to the continued revitalization of the downtown.

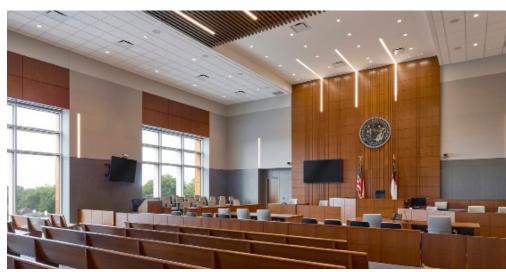
While the existing courthouse fronting Union Street will be completely renovated and continue to be utilized to serve and support the administrative functions of the court, a new addition and new public entry element will reshape the identity of the courthouse campus.

Overall the project includes 240,000 sf in new construction, 72,000 sf in existing facility renovations, four Superior Court jury-capable courtrooms, six District Court courtrooms, two future courtrooms, a 45,000 sf shell space for future expansion, and 14,000 sf of expansion space in the new facility. COMPLETION DATE May 2023

- Large, Complex Project
- Architect of Record & Design Architect
- Site Analysis
- High-Quality & High-Performance Building
- Complex Electronic, Physical Security & AV Design
- Project Delivered on Budget
- Enhanced CA Service
- Led Commissioning











## RALEIGH COUNTY COMMISSION RALEIGH COUNTY SHERIFF'S DEPARTN

LOCATION Beckley, West Virginia **SIZE** 27,400 gsf CONSTRUCTION COST \$9 Million COMPLETION DATE April 2023

### The Sheriff Department has outgrown its headquarters which was a former WV State Police detachment facility.

Silling worked closely with representatives from the County and Sheriff Department to perform programming services and developed a graphic test-fit in order to demonstrate how the program could fit in a new building located on the purchased property.

The single-story massing of the building is a result of the functional arrangement of the spaces within the building. A dual-purpose community and training room is located just off the access controlled main public lobby. The remainder of the building consists of a new in-custody intake, processing and holding area, locker rooms for officers, large evidence storage areas and other support spaces. Highlighted spaces to aid in officer mental and physical health are a large patrol room with a glass façade providing natural light for the officers' workstations and a fitness room with a glass façade with views to an outdoor space accessible by officers and staff.

- Law Enforcement Design
- Evidence Processing & Laboratory Design
- Site Analysis
- High-Quality & High-Performance Building
- Project Delivered on Budget











## MARTINSBURG POLICE DEPARIMENT AND MUNICIPAL COURT & MUNICIPAL COURT

LOCATION Martinsburg, West Virginia **SIZE** 36,000 gsf CONSTRUCTION COST \$11 Million

This new municipal court and police department headquarters navigates the complexities of modern architectural language within an historic district and the constraints and responsibilities of a small urban site while conveying a contemporary and relevant expression of civic justice.

The project includes a community room located on the first level just off of the main public lobby and security screening area. The remainder of the first level consists of a new multi-cell holding area, vehicular sallyport, locker rooms for police officers and other police support spaces. The Police Department is located on the second level with its own separate public waiting area and large squad room with glass façade that provides natural light and views down Race Street to the downtown and the adjacent public parking area that serves City Hall. The Municipal Courtroom and associated spaces are located on the third level with a spacious public waiting area with an easily visible courtroom entrance and private circulation for staff.

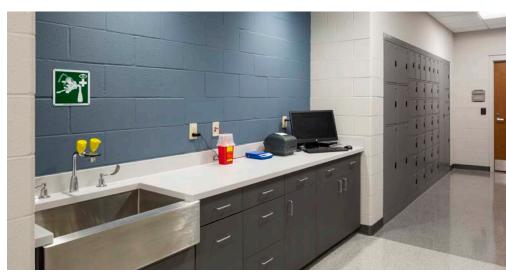
**COMPLETION DATE** 

October 2020

- Law Enforcement Design
- Evidence Processing & Laboratory Design
- Site Analysis
- High-Quality & High-Performance Building
- Project Delivered on Budget











LOCATION Meridian, Idaho SIZE 39,000 gsf CONSTRUCTION COST \$31.6 Million

With a significantly undersized and disjointed facility, the existing Ada County Coroner's Office was in desperate need of replacement.

The new Coroner's Office will provide state of the art morgue and naturally lit autopsy spaces to improve functionality and safety while affording opportunities to partner with law enforcement agencies and increase visibility to community partners. Decedent holding facilities accommodate segregated storage space and full-body X-ray equipment improves efficiency while reducing strain on staff.

Dedicated investigations staff offices and gear storage have been designed to create a naturally lit yet acoustically isolated working zone. Conference space for large groups is situated behind the building's secure public zone yet isolated from ongoing operations. Working and respite zones have been artfully integrated into this new structure in hopes that staff will work more effectively while improving opportunities for recruitment.

The means to safely conduct their work in a streamlined fashion will assist the Ada County Coroner's Office in meeting the critical public health and justice needs of this growing region of the country. COMPLETION DATE December 2023

- Consolidation of Laboratory Divisions
- Regional Training Center
- Coroner/Medical Examiner
- Multiple Competitive Bid Packages
- Collaboration with Multiple
   Stakeholder Groups + Agencies
- Designed for Energy Efficiency
- Designed for Optimized Work Flow and Flexibility
- Recruitment and Retention Tool



#### **SMITHGROUP**

## U.S. DEPARTMENT OF AGRICULTURE ARID-LAND AGRICULTURE RESEARCH CENTER

LOCATION Maricopa, Arizona

**SIZE** 110,000 gsf

CONSTRUCTION COST \$23.3 Million **COMPLETION DATE** July 2007

#### PROJECT RELEVANCIES

- Consolidation of Laboratory Divisions
- Agricultural Testing Laboratories
- Multiple Competitive Bid Packages
- Collaboration with Multiple
   Stakeholder Groups + Agencies
- Designed for Energy Efficiency
- Designed for Optimized Work Flow and Flexibility
- Recruitment and Retention Tool



The US Arid-Land Agricultural Research Center conducts research

on environmental stewardship and water conservation for the agricultural industry in the Southwest. Strategically sited adjacent to the University of Arizona's agricultural research farm, 25 miles south of Phoenix, the center's offices, labs, lab support spaces, greenhouses, outbuildings, and agricultural research plots are integrated into an existing campus plan. The research laboratory includes the U.S. Water Conservation Laboratory and the Western Cotton Research Laboratory.

SmithGroup arranged the 110,000 sf of programmatically disparate components as a collection of low-rise elements that formally represent their functions; finding inspiration for the center in the indigenous farm and ranch buildings found throughout Arizona. These native structures exploit the possibilities of orientation, locally manufactured materials, and serene, environmentally protective exterior courtyard spaces; their enduring presence points the way to a locally appropriate and sustainable architecture.

Corrugated galvanized steel roofs acoustically herald the occasional storm and demonstrate environmentally responsible water harvesting by collecting rainfall into a cistern, which will flow, via gravity to irrigation canals within the courtyard.



## WEST VIRGINIA DIVISION OF CORRECTIONS MULTIPLE DESIGN PROJECTS

LOCATION Various locations, West Virginia SIZE

1.2 Million gsf combined total

Silling Architects has served as a highly-trusted architect for the WV Division of Corrections for over 25 years, including a multitude of new construction, additions, renovations, and adaptive reuse projects totaling over 1.2 million sf and \$216 million in construction value. Some of the more notable State projects include:

- Mount Olive Correctional Complex (420,000 gsf; with Rosser Architects)
- Anthony Correctional Center (70,000 gsf; with DLR Group Architects)
- Huttonsville Correctional Center (102,000 gsf; with DLR Group Architects)
- Huttonsville Correctional Center (74,500 gsf; with DLR Group Architects)
- Stevens Correctional Facility (47,000 gsf)
- Industrial Home for Youth (115,000 gsf)
- Martinsburg Correctional Center (47,400 gsf)
- Charleston Correctional Center (40,000 gsf)
- Parkersburg Correctional Center (68,000 gsf)
- St. Marys Correctional Center (196,000 gsf)

**CONSTRUCTION COST** \$216 Million combined total construction value

- Large, Complex Projects
- State of West Virginia Government Projects
- Complex Electronic, Physical Security, and AV Design
- Local Project Mangement
- Project Delivered on Budget
- Design Collaboration with National Expert

#### SMITHGROUP

## MEDICAL EXAMINER'S FACILITY

L**OCATION** Olathe, Kansas

JOHNSON COUNTY

SIZE 33,910 gsf CONSTRUCTION COST \$17.8 Million

COMPLETION DATE June 2020 LEED CERTIFICATION

Paramount to the success of the project was to assist the County in their transition from an elected Coroner system which outsourced autopsy needs to an appointed Medical Examiner completing autopsies directly.

Providing Johnson County and the surrounding region with an exceptional level of service it deserves is the primary goal of the new Medical Examiner facility. The design reflects a reverence for life and provides an appropriate space for grief counseling.

The new Medical Examiner's facility will provide the citizens of Johnson County with an efficient, cost effective, and long term sustainable means of providing medicolegal autopsy services for a growing population. With this new resource, the County can provide impartial, professional and accurate death investigation and certification within a safe and light-filled working environment for the staff.

This community health resource will positively impact Johnson County resident's quality of life and be a significant asset to recruit and retain premier Medical Examiner staff.

- Consolidation of Laboratory Divisions
- Regional Training Center
- Coroner/Medical Examiner
- Multiple Competitive Bid Packages
- Collaboration with Multiple Stakeholder Groups + Agencies
- Designed for Energy Efficiency
- Designed for Optimized Work Flow and Flexibility
- Recruitment and Retention Tool



AIA WEST VIRGINIA, HONOR AWARD, EXCELLENCE IN ARCHITECTURE AIA CLEVELAND HONOR AWARD, EXCELLENCE IN ARCHITECTURE

# KANAWHA COUNTY PUBLIC LIBRARY

LOCATION Charleston, West Virginia **SIZE** 80,000 gsf

**CONSTRUCTION COST** \$25 Million

The "reimagined" Kanawha County historic downtown library provides a dynamic transformation that features fully renovated existing space. 20,000 sf of new space, and beautifully sculpted glass walls reaching to the sky, creating a 21st century library that will serve our region for decades to come.

The new library building features a total of 80,000 sf of space: 60,000 sf fully renovated and 20,000 sf of expanded space, two new additions including a three-story addition to what is now the rear of the library that serves as the new entrance to the building, as well as a two-story addition utilizing space along an alley between the library and the KB&T building. A third floor covered walkway above Quarrier Street will take library patrons from the Summers Street Parking Garage to the library. By renovating and expanding its century-old space, the Kanawha County Public Library will revive an iconic landmark in downtown Charleston and bring an exciting, fresh, new space to serve as the community's gathering place. **COMPLETION DATE** May 2022

- Large, Complex Project
- Site Analysis
- High-Quality & High-Performance Building
- Project Delivered on Budget
- Design Collaboration with National Expert









AIA WEST VIRGINIA, CITATION AWARD, RENOVATION

#### SILLING

# JOHN MARSHALL HIGH SCHOOL

LOCATION Glen Dale, West Virginia **SIZE** 238,000 gsf **CONSTRUCTION COST** \$36 Million

The multi-phase reimagining of the campus includes all of the original facility's 238,000 sf and features sweeping changes to address identity and safety as well as teaching and learning spaces in both academic and social constructs. Additions to the buildings include a new, three-story main entrance with relocated administrative offices providing visual and physical control for students and visitors, a new secondary entrance to serve the performing arts and athletics building, and a new, two-story circulation element bringing together the disconnected educational spaces.

Extensive interior renovations of the main academic building allow for a larger, singular cafeteria/social commons and a modern food court serving space adjacent to a new research and media center to become the nucleus of the primary building level, surrounded by fully renovated and departmentally reorganized classrooms. The upper floor's transformations include the reconstruction of new STEM lecture and laboratory spaces at the center core and supported by a perimeter of more traditional teaching spaces. A strong vocational and technology curriculum tailored to the region's workforce informs the renovations of the building's lower level. COMPLETION DATE

- Large, Complex Project
- Site Analysis
- High-Quality and High-Performance Building
- STEM Laboratory Design
- Project Delivered on Budget



AIA WEST VIRGINIA, HONOR AWARD, EXCELLENCE IN ARCHITECTURE

## CHESAPEAKE ENERGY CORP. **CHESAPEAKE ENERGY REGIONAL** HEADQUARTERS

LOCATION Charleston, West Virginia SIZE

121,000 gsf

CONSTRUCTION COST \$39 Million

COMPLETION DATE Unbuilt

LEED CERTIFICATION LEED Gold

This 121,000 sf building on a 32.7 square acre site was designed for West Virginia's temperate climate with a sincere desire to both respect and respond to the surrounding West Virginia landscape. The corporate regional headquarters includes over 350 offices, a large dining and kitchen space, multiple conference spaces, storage, and office support spaces, as well as a fitness suite with locker rooms and an exterior nature preserve and hiking trails. The project design engages the land in a way to minimize the building footprint by making use of a cantilevered building structure as well as following the line of the crown of the hill on which it is situated. With a projected track towards a LEED Gold rating, the project includes 296 total parking spaces with a concentric site design concept meant to encourage walking and enhance views to the surrounding landscape.

Other health related and LEED aspects of the design include high performance glazing and mechanical equipment to reduce CO2 emissions, use of recycled fly ash in concrete parking materials to reduce heat sink effect, storm water retention and grey water irrigation systems, operable windows and advanced lighting and thermostat controls, water conserving plumbing fixtures, and numerous recycled, recyclable and renewable materials throughout the building.

- High-Quality and High-**Performance Building**
- Design Collaboration with **National Expert**





## PROJECT UNDERSTANDING & APPROACH

**ENTER** 

**SECTION 5** 

.

To return to the Table of Contents

**CLICK HERE** 

# UNDERSTANDING AND APPROACHING THE NEW CONSOLIDATED STATE LAB

This consolidated facility is a unique opportunity for the State to bring multiple users into one location and it deserves a unique strategy of project execution for the greatest chance of success. Our team's approach is aligned with overcoming the greatest challenges to project success. We felt it is important to elaborate on the issues that are critical considerations as this project moves into design and construction. Key issues to consider include the design team makeup, user connectivity, maintaining the project schedule, and budget alignment.

#### **DESIGN TEAM MAKEUP – STRUCTURED FOR YOUR SUCCESS**

When the State of West Virginia released the Expression of Interest, it was clear to both SmithGroup and Silling that a creative and experienced design team would be required. It was also apparent that one of the potential obstacles to success would be a lack of design team integration necessary to complete the project successfully.

The design industry in the State of West Virginia is unique, just like in all states. Large and complex laboratory projects within the state are uncommon and therefore the experience gained by many firms can be limited. The Silling team distinguishes itself due to its broad portfolio across West Virginia and the country for large, complex public projects. SmithGroup has decades of national experience in the design of facilities that align with the user groups anticipated for this project.

This team has been structured to limit complexities and deficiencies caused in other teaming structures. The graphic below identifies issues with other design team structures and highlights benefits to the State.



#### **PROJECT UNDERSTANDING & APPROACH**

#### NATIONAL FIRMS LACK:

- Local market understanding
- Zoning and code understanding
- Deep experience in forensics
- Integrated team experience in program
- × Adjacency to the site
- × Presence in the State

#### **OUR TEAM EXCELS IN:**

- Understanding of the Department of Administration processes
- Jurisdiction connections
- Design excellence for your program
- ✓ Fully-integrated and experienced team
- ✓ Continuity of team
- ✓ Full-time Construction Administration capabilities

#### LOCAL FIRMS HIRING SPECIALISTS:

- Create complexities in scope division
- Instruction required for inexperienced
- 🗴 Lack of team integration
- Missing comprehensive experience in program elements
- ✗ Team members exit the project
- Lack Construction Administration participation

SmithGroup's interdisciplinary Science & Technology team has been planning and designing agricultural, environmental, public health, metrology, and forensic laboratories for decades. That experience is not held by individuals, rather a multidisciplinary, and collaborative group of professionals whose goal is to define emerging trends in the design of each of these laboratory types. Our dedicated team's collective experience and capabilities will be paramount to this challenging project and are unrivaled by any single firm in the country.

Silling brings an understanding of the specific needs and goals of this region that no national firm can possess. The firm's capabilities for delivering large, complex facility designs are unmatched in West Virginia. Availability throughout all stages of the project's development will be critical.

This partnership is unique and one that we believe provides the best value to the State and greatest opportunity for success.



**GOAL/OBJECTIVE 1:** The successful design team will program, design, competitively bid and build a new consolidated laboratory facility on a site at the WV Regional Technology Park in South Charleston, WV.

In Section 4, Relevant Project Experience, the team provided a brief description of several projects relevant to the specific program elements anticipated by the State of West Virginia. Due to the longevity of our firms, there are many examples of complex facilities that approach or exceed the anticipated 300,000 gross square feet identified. We are humbled to provide additional examples, and although the projects listed below are diverse in their scientific focus and client goals, the list is curated based on similarities to the project the state anticipates:

**1.** NYPD Forensic Investigations Division, New York, New York: 740,000 GSF Consolidation of lab and investigative services from multiple locations throughout the City of New York.

**2.** County of San Diego Crime Laboratory, San Diego, California: 158,000 GSF Consolidation of the Crime Lab, Central Investigations Division, and Central Property and Evidence.

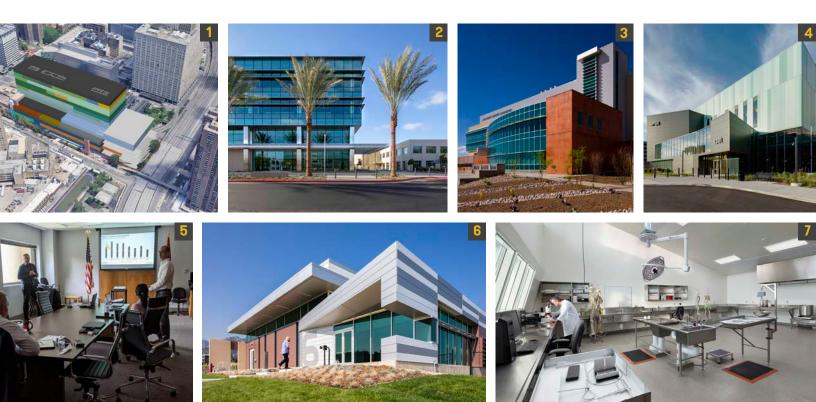
**3.** State of New Mexico Scientific Laboratories, Albuquerque, New Mexico: 190,000 GSF Consolidation of the State Department of Health, Department of Agriculture, and Office of the Medical Investigator. **4.** City of Detroit Public Safety Headquarters, Detroit, Michigan: 420,000 GSF Consolidation of the Michigan State Police Crime Lab, Detroit Forensic Science Lab, Detroit Police Department, Detroit Fire Department, and Detroit Emergency Operations Center.

**5.** State of Arkansas Crime Lab, Little Rock, Arkansas: 190,000 GSF Need assessment to accommodate growth in the State Crime Lab and Medical Examiner.

**6.** NIST Building One Renovation, Boulder, Colorado: 185,000 GSF Renovation and expansion of the historic metrology lab for the National Institute of Standards and Technology with the initial design package developed in 2-months.

7. Forensic Services and Coroner's Complex, Toronto, Canada: 650,000 GSF Planning, Design, and Compliance phase development for a new crime lab and coroner facility.

We are proud of the opportunities to work on such tremendous projects and we look forward to discussing how your consolidation will help the State be more efficient and effective in the delivery of service.



**GOAL/OBJECTIVE 2**: The successful design team will work with the Agency (i.e. as the potential facility administrator) in a collaborative effort with the WV Department of Health (Office of Laboratory Services and Office of the Chief Medical Examiner), the WV Department of Homeland Security (WV State Police Forensics Laboratory), the WV Department of Commerce (Division of Labor Weights and Measures Laboratory), the WV Department of Environmental Protection (Division of Air Quality's Laboratory), and stake holders from West Virginia University and Marshall University, to design, competitively bid and build a new consolidated laboratory facility to accommodate co-location and provide training and other laboratory activity opportunities for a variety of State of West Virginia entities.

# **USER CONNECTIVITY – PLANNING FOR INNOVATION**

We recognize the challenges to bringing disparate groups into a single facility and have helped many clients with programs at and over 300,000 gross square feet (GSF). Our team provides real-world solutions to maximize opportunities, minimize risk, and solve our clients' most vexing challenges. Just as projects come in all sizes, SmithGroup brings the expertise and resources of a large firm along with the personal attention you expect, collaborating to deliver a thoughtful, holistic design strategy that can transform not only the individual group's workplace, but State as a collective. Our process from strategic analysis to design framework is created to comprehensively reveal opportunities and challenges. Solving the right problems begins with asking the right questions. Collaborative and insightful, our process integrates strategy with design. Our approach provides a deep understanding of every client's organization and, along with the sharing of best practices and insights, informs a unique strategy for each. Interdisciplinary design thinking allows us to create solutions for today's evolving organizations. Working together, we blend performance, broad expertise, and security with the energy, curiosity, and service.

One of the clients where consolidation was part of their goals is the U.S. Environmental Protection Agency (EPA) where SmithGroup performed an overall laboratory assessment of their 34 facilities nationwide totaling over 3.6 million GSF. Our multidisciplinary teams collect data, analyze, and benchmark the current facilities - looking for opportunities for consolidations and co-locations without diminishing their scientific mission. The study focuses on the physical environment, facility utilization for research support, and capital cost and operation. The result arms the EPA with necessary information to determine which facilities to invest in today and into the future, but also brings alignment between different scientific groups.

Similar to the State of West Virginia, San Diego County saw benefits of bringing their Crime Lab, Investigations, and Central Property and Evidence groups into a common facility. All three groups were challenged to fulfill their role in improving the public health of the region. As identified in Section 4, Relevant Project Experience, this facility was successfully designed utilizing a collaborative structure that creates connections between the previously disparate groups.



# With our design philosophy – process and outcome are intertwined, and the process is inclusive, responsive, and focused on collaboration.

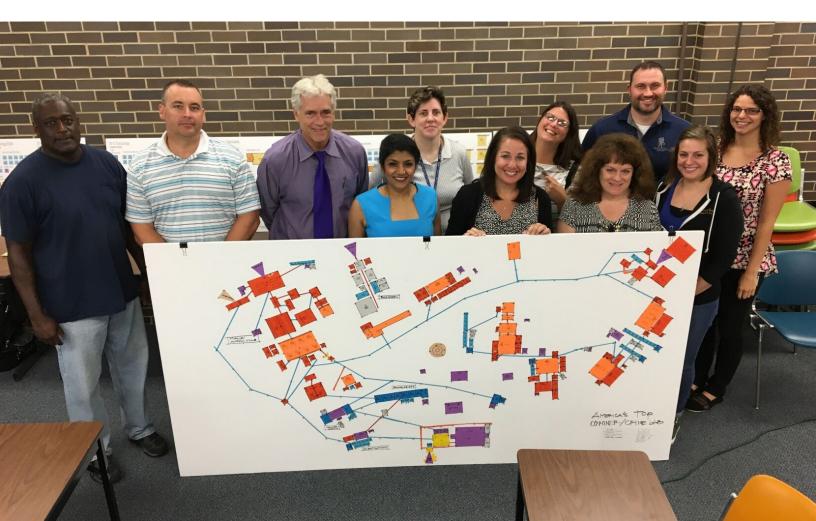
Our experience has shown that the best way to connect multiple users and gain acceptance of the design strategy is to involve them in the process. It must also be acknowledged that each laboratory section is different both within the facility and operates differently than peers across the country. Not capturing specific user needs and gaining buy-in from individuals is a significant risk that will impact both project schedule and budget. We acknowledge that buy-in from staff is imperative for overall project success and therefore institute a design process that is collaborative and leads to a solution that is tailored to the State of West Virginia.

### **ACHIEVING USER BUY-IN**

Our team's design process is prescriptive, leading to your solution, not past design solutions. Although it may appear counterintuitive, a regimented approach that prioritizes exploration with the State's team leads to a tailored result. This structure generates customization to the user team's needs and is our ultimate goal.

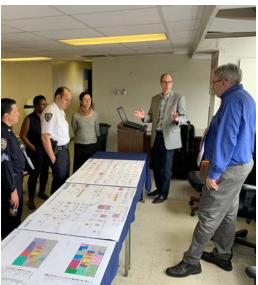
The Expression of Interest identifies that considerable work has been previously completed and will be valuable as the design phase begins. However, our team utilizes inclusive tools which build trust in the process and an awareness of critical success factors.

One of the tools we regularly utilize to build consensus is the **'The Perfect Diagram.'** This 'low-tech' exercise allows the State to see, touch, feel, and manipulate scaled color cutouts of the program elements. In this exercise the team gets to discuss their ideas for the project in terms of experience, service, adjacency and workflow issues unfettered by site constraints and the realities of a floorplan. 'The Perfect Diagram' (*pictured below and on the right*) is as much about the process that helps define a solution, as it is about the solution it precedes. This highly collaborative (and FUN!) activity results in a space adjacency and philosophical diagram that becomes a roadmap used to validate decisions.

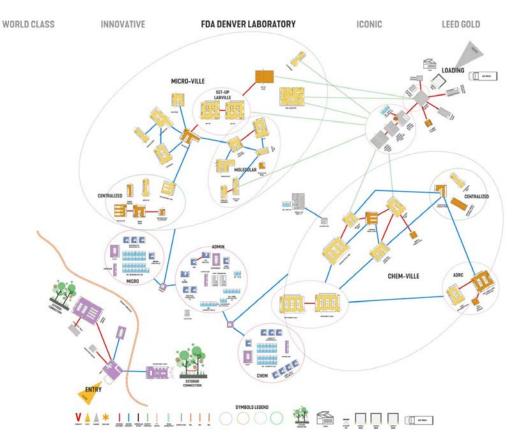




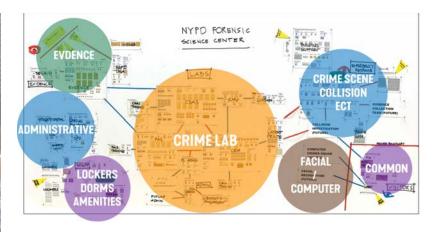












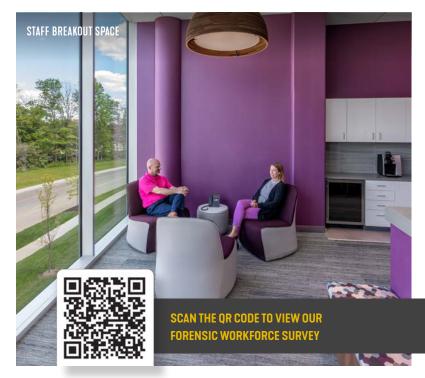


Moving into the Concept Design phase of the process, as ideas for the facility and layout first emerge, we use large-scale three-dimensional 'models' of the floor plans to help participants understand building stacking, layout and functional aspects. This can provide an opportunity for site area savings and allow the entire team to grasp the overall concept sooner to provide feedback and guidance. A concept plan layout helps to describe the vertical organization of spaces and mission-supporting features and helps to describe that vertical connections in floor plates may improve workflow versus being distributed at greater distances on a single floor.

Understanding the unique nature of your facility is essential – safety, security, and chain of custody are critical planning components. We look forward to exploring them together.

# STAFF RECRUITMENT AND RETENTION

The sciences anticipated for this consolidation are all challenging professions. Recruitment and retention are directly impacted by mental and physical strain, constant workload, public scrutiny, among other factors. However, for a facility as large as anticipated for the State of West Virginia it will be critical to ensure your team feels valued and connected. We believe aspirations can be addressed by appropriate design decisions that will help staff to see the tremendous positive impact their work has on public health, and that they are part of something larger than their individual contributions. Such a large facility could fall victim to extensive floor plates with little access to natural daylight, long distances between office and laboratory spaces, and lack of opportunities for interaction. Our team is uniquely suited to resolving these challenges due to the extensive history we have with the design of similar laboratory environments as indicated in the project experience section. Vertical and horizontal connections will be critical to the creation of neighborhoods within the overall footprint and are opportunities to create a diversity of areas for interaction and collaboration, supporting the ongoing needs of the staff.



# **PROJECT UNDERSTANDING & APPROACH**

SmithGroup feels passionately about being part of conversations within the science and technology spheres. Speaking directly to forensics, the SmithGroup team recently completed a survey of the forensic marketplace to better understand the aspects that are viewed as ongoing challenges (accessible via the QR code on the left-hand page).

By exploring together, we will better understand the State's team. This team is uniquely prepared to bring our considerable knowledge of challenges that other facilities across the country face and generate creative solutions to solve the problems of today and the future. As an experienced and integrated team of designers, we are ideally suited to assist the State in developing a facility that shows the staff and the public the importance value of the State team's work.

# STREAMLINING THE PROJECT SCHEDULE

The EOI referred to considerations for the project schedule and signifies the importance of maintaining that schedule for the State. To meet the suggested schedule, it will be critical to have considerable local staff support and national expertise for the planning and engineering of complex projects like that considered by the State.

## **DESIGN TEAM MAKEUP**

We have a team organized to undertake this very project, integrating architects, designers, engineers, and planners with a collective experience of working together on complex projects. This differs from the likely approach of other teams, where they may incorporate a planning only firm to assist the rest of the team in understanding what is important for each space. The State of West Virginia requires each design team member to have considerable experience to streamline the process and provide direct alignment with your needs.

## **EXPEDITED DESIGN SCHEDULE**

Traditional schedule streamlining processes that include breaking out packages to bid and construct independently (I.e. site grading, drainage, utilities, and access drives) will likely be necessary. However, that approach has limitations to schedule compression. For greater impact on the overall project schedule, we intend to utilize an intensive interactive process like the Department of Defense's Integrated Product and Process Development (IPPD). The process includes detailed and comprehensive discussions in a multiday workshop allowing the team to present strategies, develop content, test ideas, and present the findings to the State in an iterative manner. Experts from each laboratory section will be asked to engage with the team in short but regular periods allowing their input to be infused into the concept plan, along with affording them time for ongoing caseload.

By working collaboratively with the user groups, this strategy can shorten the decision-making timeline and advance the design to meet your schedule goals. This team has successfully utilized this process for previous projects such as the Defense POW/MIA Accounting Agency (DPAA) Forensic Identification Lab (pictured below).

The benefit of utilizing this process is that the design timeline can be shortened by up to three months on a complex project such as the State is envisioning. This approach is time-intensive for users across short periods as opposed to being spread across multiple months throughout the overall design schedule. To be successful, we believe that clear and regular communication will be of utmost importance. However, this process will advance design and ensure documents are developed in accordance with the needs of the State.



smithgroup.com | silling.com 105



### **CONSTRUCTION PROCESS OPPORTUNITIES**

As identified earlier, it is common for complex projects to include multiple bid packages that can be conducted as clearly defined scopes of work. Underground infrastructure and site improvements can become an early design package for release to bidding and construction. However, this approach has limitations when utilizing a Design/Bid/Build construction delivery method. It should also be acknowledged that constructing a sophisticated laboratory facility requires a General Contractor with sufficient experience and trades that have capacity to install the systems to support the science. Due to these factors, prefabrication should be strongly considered.

This design team has experience in prefabrication of building systems and understands that there may be perceived limitations on the design. However, prefabrication affords greater opportunity and alignment with the strategy of design for an adaptable and flexible laboratory. Large pieces of the building structure, envelope, and systems can be erected utilizing reduced onsite forces. It also expands the geographic area that the State can draw upon to find qualified and capable trades.

Prefabrication also has the perception of being more costly than traditional construction. General conditions can be saved due to the reduced construction schedule. Systems commissioning can be improved which can reduce future operational costs. Reductions in change orders due to greater digital coordination by experienced trades can reduce change orders. Improper installations can be avoided which may cause increased maintenance costs following construction.

By working with the SmithGroup + Silling team, we feel confident that we can collectively explore options for reducing the overall project schedule. The strategies that we develop together will allow the various user groups to move expeditiously into a new facility that both meets their needs and showcases the importance of their work.



**GOAL/OBJECTIVE 3**: It is anticipated that the project may require multiple competitive bid packages (e.g. an initial site development package, a separate equipment package, etc.) in order to remain on an expedited schedule.

# **BUDGET ALIGNMENT – DYNAMIC INVESTMENT STRATEGY**

Although there are a multitude of challenges in sophisticated facility designs, the ultimate challenge at this time of amplified escalation will be managing overall project cost. Due to the increasing material cost and diverse supply chain difficulties, complex projects that will support the State's team will need to be planned in an adaptable way.

Adaptation is important to provide flexibility for changes in scientific need and respond to market influences, going beyond outdated space-to-staff ratios. Our team intends to test design solutions in real time, working with a cost engineer that has extensive experience in projects designed by SmithGroup. A benefit of engaging cost modeling during the design process and not only at major design milestones is to align project cost while decisions are being made.

We intend to incorporate this real-time project check during Integrated Product and Process Development (IPPD) design meetings with users so there is no loss in time for transmitting information and allows our team to collectively understand the State's needs in a deeper way. This real time costing at the onset of design aligns the overall project budget with the user needs. We can then review cost considerations against priorities of the State's vision and goals to ensure alignment. Flexibility at the time of bidding is also a critical consideration. Because the project schedule cannot accommodate a rebidding process if over budget, it will be critical to identify elements that can be modified to allow for bid-day flexibility. SmithGroup utilized this process successfully for multiple clients, such as the National Institute of Standards and Technology (NIST), Building One Renovation on their Boulder, Colorado campus.

For the NIST project, project construction funding needed to be spent prior to an upcoming fiscal year and only allowed for a two-month design period. To capitalize on the available funding and allow for adjustments in the building façade to align with the budget, the team developed a panelized system that allowed for dynamic adjustments in the final construction cost when the bids were received. Unit pricing was requested for diverse sections of the building envelope which allowed for the project to adjust the exterior without the potential loss of value to the Client.

Although this is an atypical example for many Design/ Bid/Build projects, it allowed our client a greater chance of success and prevented a potential loss of capital for construction.



**GOAL/OBJECTIVE 4**: The intent is that the project will begin immediately upon award of contract and proceed expeditiously to its completion. Deficiencies in the facilities of the stakeholding agencies need to be addressed with great immediacy.

This team recognizes that the working conditions of the current stakeholders is impacting their ability to deliver efficient and effective services to the State. Our partnership structure and significant team presented in Section 3, Team Organization and Experience indicates our commitment to this project.

When the EOI was available for review, SmithGroup recognized that the State intends to move expeditiously in the design and construction phases. Partnering with Silling allows the team to benefit from the direct State and local jurisdiction experience gained over many years and having a reputable design advocate throughout the process. Compared to an out-of-state designer, Silling will have unmatched access to the site and commitment to the project throughout construction. Just as SmithGroup recognized the need for a strong local representation with a commitment in design excellence, Silling believed that the most successful team should lack complexity. SmithGroup's extensive experience in the design of medical examiner, crime lab, metrology, and environmental labs is unmatched and no other single firm can bring an integrated team of professionals to best position the State for success. As a national firm, the expertise for these programmatic elements is not distributed broadly across the company but held within a dedicated group of team members.

The synergy of this partnership reduces complexity for the State and allows the team to move expeditiously through design and construction administration.

**GOAL/OBJECTIVE 5**: The Vendor will be required to produce construction documents and administer construction in compliance with State of West Virginia purchasing regulations. The Agency's procurements are generally governed by the WV State Purchasing Division, incorporate American Institute of Architects (AIA) general conditions, supplementally amended by the State to bring them into compliance with WV State Code.

Within their proposal, Vendors should provide documentation of past projects in which they have adhered to standards such as these, and explain their approach to administering the construction of the project with the Agency.

Due to SmithGroup and Silling's experience working with many jurisdiction's across the country, our team is accustomed to working within the structure of the contract presented. We appreciate the State's attention to detail when discussing the contractual requirements and would like to elaborate on our combined team's approach to design and construction.

The best value our design team can provide the State would be to involve both SmithGroup and Silling throughout the design and construction process. Members who have greater participation during Construction Administration (CA) will benefit from being in the room when early design decisions are made.



# **PROJECT UNDERSTANDING & APPROACH**

## A successful project is one that effectively communicates expectations, and the construction delivery method is no different.

Laboratory facilities and specifically those dealing with autopsy are highly specialized and require tighter design and construction tolerances than typical projects. **"Industry standard" in construction will not be sufficient for this project. The State needs a design partner with an integrated team who have direct experience in the intended laboratory types.** A planning-only firm will need to "teach" other designers and engineers about past projects, but this team's approach is different in that each team member has the experience necessary to move in lock-step.

Heightened requirements that address temperature and humidity tolerances, hazard containment, air infiltration, odor control, cleaning and sterilization, critical systems infrastructure, and safety and security can challenge even the best in the construction community. Construction documents will be required to be robust and complete to capture the enhanced requirements, but also clear and understandable for the myriad of tradespeople working on the project. Design team involvement throughout the construction process will be critical to ensure the design intent and heightened construction requirements are properly followed.

The SmithGroup and Silling team have proven records of executing this type of project via numerous delivery methods, including recent design-bid-build examples. Our team was specifically formed to give the state the best of both national integrated expertise in this project type and unparalleled local experience and service. Due to the highly specialized nature of this facility, our team will use our deep bench of knowledge of laboratory design in each design discipline to assist with bidding and procurement of services. SmithGroup's integrated firm structure ensures that the design and documentation of this complex facility will be closely coordinated in a collaborative environment. Silling's extensive experience with the State and the local contracting market will ensure you have a quality partner in the execution and oversight of the construction process.





CLICK HERE

To return to the Table of Contents

# SECTION 6 REFERENCES & LICENSURE

# **REFERENCES & LICENSURE**

# REFERENCES













# **GIVE THEM A CALL!**

# 1. HAMILTON COUNTY CORONER & CRIME LABORATORY

**Dr. Lakshmi Kode Sammarco, MD** Hamilton County Coroner P | 513.946.8714 E | lakshmi.sammarco@hamilton-co.org

# 4. CABARRUS COUNTY COURTHOUSE

**Kyle Bilafer, Asst. County Manager** Cabarrus County Board of Commissioners P | 704.305.9723 E | kyle@fortiuscapitalpartners.com

# **2.** STATE OF SOUTH DAKOTA - DEPT. OF HEALTH PUBLIC HEALTH LAB

Dr. Tim Southern, MS, PhD, D (ABMM) Public Health Laboratory Director P | 605.773.3368

E | tim.southern@state.sd.us

## **5.** KANAWHA COUNTY PUBLIC LIBRARY

### Ben Thomas, President

Kanawha County Public Library Board P | 304.347.1121

E | bthomas@bowlesrice.com

# 3. DENVER POLICE DEPARTMENT CRIME LABORATORY

Dr. Greggory LaBerge, PhD Crime Lab Director P | 720.337.2010 E | greggory laberge@denverg

E | greggory.laberge@denvergov.org

# **6.** DELAWARE COUNTY COURTHOUSE

**Jon Melvin, Director of Facilities** Delaware County Facilities Management P | 740.833.2280

E | jmelvin@co.delaware.oh.us

# LICENSURE

# **PROFESSIONAL REGISTRATIONS AND LICENSES**

### **ARCHITECTURAL AND ENGINEERING LICENSES**

Jill Swensen, Principal-in-Charge | Registered Architect: WV #5716 Jody Driggs, Project Executive | Registered Architect: WV #3380 Mark Kranz, Design Director | Registered Architect: AZ #39876 Doug Lieb, Project Manager | Registered Architect: PA #403841 Brian Estep, Project Manager | Registered Architect: WV #3018 Adam Denmark, Lab Programmer | Registered Architect: AZ #41540 Chris Knorr, Lab Planner | Registered Architect: AZ #45841 Will McCroy, Project Designer | Registered Architect: AZ #52716 Wes Wright, Project Designer | Registered Architect: CT #0015208 Abby McNevin, Project Architect | Registered Architect: PA #410051 Jeremy Jones, Project Architect | Registered Architect: WV #4386 Rob Thompson, Mechanical Engineer | Professional Engineer: AZ #37921 Bianca Jimenez, Electrical Engineer | Professional Engineer: AZ #66074 Andrea Reynolds, Structural Engineer | Professional Engineer: WV #018567 Greg Fox, Landscape Architect (Terradon) | Registered Landscape Architect: WV #226 Jim Nagy, Civil Engineer (Terradon) | Professional Engineer: WV #008887 Stephen Jaeger, Vibration/Acoustics (Colin Gordon) | Professional Engineer: CA #30237

## NATIONAL COUNCIL FOR INTERIOR DESIGN QUALIFICATION (NCIDQ) CERTIFICATION

Holly Dezinski, Interior Designer | NCIDQ #31545 Jacqueline Link, Interior Designer | NCIDQ #32275

# **SMITHGROUP**

smithgroup.com 412.838.2868

One PPG Place Suite 2300 Pittsburgh, Pennsylvania 15222



silling.com 304.346.0565

405 Capitol Street Upper Atrium Charleston, West Virginia 25301