AGREEMENT # 18089
ARCHITECTURAL/ENGINEERING DESIGN SERVICES
For LAKE COUNTY

This Agreement is entered into by and between Lake County hereinafter ("County") and AECOM Services of Illinois, Inc. hereinafter ("Architect"), 303 East Wacker Drive, Chicago, IL 60601

RECITALS

WHEREAS, Lake County is seeking an Architect to provide Architectural/Engineering Design services.

WHEREAS, the Architect is a professional provider of Architectural/Engineering Design services; and

WHEREAS, Lake County Purchasing Division issued Statement of Interest Number 18089 in connection with this procurement; and

WHEREAS, the Purchasing Agent and the selection committee have determined that the Proposals submitted by the Architect on October 18, 2018 is the most advantageous proposal received, and best serves the interests of Lake County; and

WHEREAS, the Lake County Board has passed a resolution at its regular meeting on February 12, 2019 authorizing the Purchasing Agent to execute this Agreement;

NOW, THEREFORE, Lake County and the Architect AGREE AS FOLLOWS:

SECTION 1. AGREEMENT DOCUMENTS
The Agreement Documents that constitute the entire agreement between the County and the Architect are:

A. This Agreement
B. Architect's Scope of Work Proposal dated January 29, 2019 and noted herein as Exhibit A.
C. Architect's Fee Proposal dated January 29, 2019 and noted herein as Exhibit B
D. Statement of Interest (SOI) Number 18089 noted herein as Exhibit C
E. The Architect's Response to Statement of Interest 18089 dated October 18, 2018 noted herein as Exhibit D

In the event of conflict between or among the above Documents, the Documents listed above are in the order of precedence.

SECTION 2. SCOPE OF SERVICES
Work to be performed under this Agreement will include architect-of-record services for the design and construction of the Babcox Bridge and Associated Projects in Waukegan, Illinois. The Architect will provide complete services including but not limited to; program verification, design development, preparation of contract documents, bidding and construction administration phases of the project.

A detailed scope of services is outlined in Exhibit A, which is attached hereto.

Subsequent services will be negotiated, approved by the appropriate Lake County staff and/or the appropriate Lake County Board Committee, and executed as an Amendment to this Agreement. The parties agree to use the terms and conditions of this Agreement as a framework for any subsequent services.

SECTION 3. DURATION

This Agreement shall commence upon execution and shall be effective through December 31, 2019 or final acceptance of construction; whichever comes first. The Architect shall be responsible for performance through the construction period even if the actual construction time extends beyond the estimated completion date. The Architect shall submit a schedule for County approval of the work to be performed.

SECTION 4. INDEMNIFICATION

The Architect agrees to indemnify, save harmless and defend the County, its agents, servants, and employees, and each of them against and hold it and them harmless from any and all lawsuits, claims, demands, liabilities, losses and expenses, including court costs and attorney's fees, for or on account of any bodily injury to any person, or any death at any time resulting from such injury, or any damage to property, which may arise or which may be alleged to have arisen out of or in connection with the Architect's negligent acts or willful and wanton conduct in connection with the services covered by this Agreement. The foregoing indemnity shall apply except if such injury, death or damage is caused by the willful and wanton conduct of the Lake County, its agents, servants, or employees or any other person indemnified hereunder.

SECTION 5. INSURANCE

The Architect must obtain, for the Agreement term and any extension of it, insurance issued by a company or companies qualified to do business in the State of Illinois and provide the County with evidence of insurance. Insurance in the following types and amounts is necessary:
Worker's Compensation Insurance covering all liability of the Architect arising under the Worker's Compensation Act and Worker's Occupational Disease Act limits of liability not less than statutory requirements.

- Comprehensive General (Public) Liability in a broad form, to include coverage for the following where exposure exists: Premises/Operations, Independent Contractors, Products/Completed Operations, Personal Injury and Contractual Liability, limits of liability not less than:

  General Aggregate Limit $ 2,000,000
  Each Occurrence Limit $ 1,000,000

- Professional Liability to include, but not be limited to, coverage for Errors and Omissions to respond to claims for loss therefrom.

  General Aggregate Limit $ 2,000,000
  Each Occurrence Limit $ 1,000,000

- Comprehensive Automobile Liability to include, Bodily Injury, Property Damage:

  General Aggregate limit $ 2,000,000
  Each Occurrence Limit $ 1,000,000

Architect agrees that with respect to the above required insurance, Lake County shall:

- Be named as additional insured by endorsement as their interest may appear (except for Professional Liability and Worker's Compensation insurance);
- Be provided with thirty (30) days notice, in writing, of cancellation or material change;

Be provided with Certificates of Insurance evidencing the above-required insurance, prior to commencement of this Agreement and thereafter with certificates evidencing renewals or replacements of said policies of insurance at least fifteen (15) days prior to the expiration of cancellation of any such policies. Forward Notices and Certificates of Insurance to: Lake County Purchasing Division, 18 N. County St, Waukegan, IL 60085-4350

SECTION 6. AGREEMENT PRICE

Payment to the Architect, as summarized is not to exceed $229,415, inclusive of any reimbursable, as set forth in Exhibit B.

SECTION 7. INVOICES & PAYMENT

The Architect shall submit invoices detailing the services performed in accordance with the payment provisions of this Agreement. The Architect may submit invoices for work performed on a monthly basis up to the level of each deliverable less a 10% holdback until each deliverable is completed and accepted by the County. Holdback will be reduced from 10% to 5% at the County's acceptance on the Contract Documents (CD) Phase. Furthermore, the amount of retainage will be reduced from 5% to 0%, no later than 60 days from the date of substantial completion. Full payment shall be due upon final project acceptance by the County. Payments shall be made in accordance with the Local Government Prompt Payment Act.

SECTION 8. STATEMENT OF OWNERSHIP

The drawings, specifications and other documents prepared by the Architect for this Project shall become the property of the County upon full payment owed Architect under this Agreement in, accordance the holdback provisions in Section 7, and Architect may not use this information for any purpose not relating to the Project without the County's consent, except for the Architect's standard details and specifications. The County shall be furnished with the drawings via electronic format (PDF, AutoCAD and/or Revit formats), the specifications via electronic format (PDF and

Word formats) and with reproductions of drawings and specifications as the County may reasonably require. Upon completion of the Contractor's Work or any earlier termination of this Agreement, as provided for herein, the Architect will submit all report and plan information compiled to date. All such drawings and specifications shall be the property of the County who may use them without Architect's permission for any current or future related Lake County projects. The Lake County agrees that any use or reuse of Architect's work product for purposes other than anticipated in Architect's scope of work hereunder shall be at the County's sole risk and with no liability to the Architect.

SECTION 9. TERMINATION

The County reserves the right to terminate this Agreement, or any part of this Agreement, upon thirty (30) days written notice.

The County may, at any time, terminate the Agreement for the County's convenience and without cause. Upon receipt of written notice from the County of such termination for the County's convenience, the Architect shall:

- Cease operations as directed by the County in the notice;
- Take actions necessary, or that the County may direct, for the protection and preservation of the Work; and
- Except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing Subcontracts and purchase orders and enter into no further Subcontracts and Purchase orders.

In case of such termination for the County's convenience, the Architect shall be entitled to receive payment from the County for work completed to date in accordance with the terms and conditions of this Agreement.

In the event of an alleged default of the Agreement by the Architect, the County will provide a written notice to the Architect defining the default(s) and give seven days for the Architect to cure said defaults(s). If the default(s) is not cured, then the County will provide written notice of termination to the Architect.

In the event that this Agreement is terminated due to Architect's default, the County shall be entitled to purchase substitute items and/or services elsewhere and charge the Architect with any or all losses incurred, including attorney's fees and expenses.

SECTION 10. SCHEDULE

The Architect shall submit for the County's approval a schedule for the performance of the Architect's services which may be adjusted as the Project proceeds and shall include allowances for periods of time required for the County's review and for approval of submissions by authorities having jurisdiction over the Project. Time limits established by this schedule approved by the County shall not, except for reasonable cause, be exceeded by the Architect or County.

SECTION 11. OWNER'S REPRESENTATIVE

The County shall designate a representative authorized to act on the County's behalf with respect to the Project. The County or such authorized representative shall render decisions in a timely

manner pertaining to documents submitted by the Architect in order to avoid unreasonable delay in the orderly and sequential progress of the Architect's services.

SECTION 12. CONSTRUCTION COST

The Construction Cost shall be the total cost or estimated cost to the County of all elements of the Project designed or specified by the Architect.

The Construction Cost shall include the cost at current market rates of labor and materials furnished by the Contractor and equipment designed, specified, selected or specially provided for by the Agreement Documents, plus a reasonable allowance for the Contractor's overhead and profit. The Construction Cost shall include the cost of building code compliance, permits, and fees. In addition, a reasonable allowance for contingencies shall be included for market conditions at the time of bidding and for changes in the Work during construction.

Construction Cost does not include the compensation of the Architect and Architect's consultants, the costs of the land, rights-of-way, financing or other costs that are the responsibility of the County.

At the conclusion of the Design Development Phase if a fixed limit of Construction Cost is exceeded by the lowest bon a fide bid or negotiated proposal, the County shall:

- give written approval of an increase in such fixed limit;
- authorize re-bidding or renegotiating of the Project within a reasonable time;
- abandon project and terminate the Architect Agreement; or
- Cooperate with Architect in revising Project scope and quality as required to reduce Construction Cost.

If the County chooses to revise the project scope, the Architect, without additional charge, shall modify the Agreement Documents as necessary to comply with the fixed limit.

SECTION 13. JURISDICTION, VENUE, CHOICE OF LAW

This Agreement shall be governed by and construed according to the laws of the State of Illinois. Jurisdiction and venue shall be exclusively found in the 19th Judicial Circuit Court, State of Illinois.

SECTION 14. INDEPENDENT CONTRACTOR

The Architect is an independent contractor and no employee or agent of the Architect shall be deemed for any reason to be an employee or agent of the County.

SECTION 15. WARRANTS

The Architect represents and warrants to the County that none of the work included in this Agreement will in any way infringe upon the property rights of others. The Architect shall defend all suits or claims for infringement of any patent, copyright or trademark rights and shall hold the County harmless from loss on account thereof.

SECTION 16. ASSIGNMENT, ALTERATIONS AND MODIFICATIONS

Except as otherwise provided herein, this Agreement shall not be assigned or altered without the express written consent of both parties. This Agreement supersedes any and all other agreements, oral or written, between the parties hereto with respect to the subject matter hereof.

This Agreement may be amended or supplemented only by an instrument in writing executed by the party against whom enforcement is sought.

SECTION 17. DISPUTE RESOLUTION

Each party shall make good faith effort to resolve any contract disputes prior to either party pursuing remedies at law. Direct negotiation, as defined below, will be the initial process utilized by the parties.

Either the Owner or the Architect may make a request for Direct Negotiation as an initial attempt to resolve any claim, dispute, or other matter arising out of this agreement.
Direct Negotiation Representatives of the parties shall be the Owner's designated Representative and the Architects designated Representative.
Direct Negotiation will take place at the project worksite or at a location as agreed to by Owner's and Architects designated Representative.

Issues, claims, or disputes arising out of this Agreement unable to be resolved by Direct Negotiations shall then be resolved in accordance with the Appeals and Remedies Provisions in Article 9 of the Lake County Purchasing Ordinance.

SECTION 18. NO IMPLIED WAIVERS

The failure of either party at any time to require performance by the other party of any provision of this Agreement shall not affect in any way the full right to require such performance at any time thereafter. Nor shall the waiver by either party of a breach of any provision of this Agreement be taken or held to be a waiver of the provision itself.

SECTION 19. NOTICES AND COMMUNICATIONS

All notices and communications which may be given by the Architect to Lake County relative to this Agreement shall be addressed to: Lake County Purchasing Division, 18 North County Street, Waukegan, Illinois 60085-4350; Attention: Purchasing Agent.

SECTION 20. SEVERABILITY

If any part of this Agreement shall be held to be invalid for any reason, the remainder of this Agreement shall be valid to the fullest extent permitted by law.

IN WITNESS HEREOF, the undersigned have caused this Agreement to be executed in their respective names on the dates hereinafter enumerated.

Lake County:

RuthAnne Hall
Purchasing Agent
Lake County
Date: 2/13/19

Architect:

Print Name: Bane Gaiser
Print Title: Vice President
Print Firm: AECOM Services of Illinois, Inc.
Date: 02/12/2019

Exhibit A

AECOM
303 East Wacker Drive
Suite 1400
Chicago, Illinois 60601
www.aecom.com

312 373 7754 tel
312 373 6800 fax

January 29, 2019

Architectural and Engineering Services Proposal for Babcox Justice Center – 20 S. County, Waukegan, IL Interior and Infrastructure Renovation - # 18089

We are pleased to submit our proposal to provide Architectural and MEP/FP/FA (Mechanical, Electrical, Plumbing/Fire Protection/Fire Alarm) Engineering services for the interior and infrastructure renovation project at the Babcox Justice Center.

I. Scope of Project

We understand the projects are located the Lake County Babcox Justice Center located in Waukegan, Illinois. The following is our understanding of the scope related to each project based on drawing documents sent via email 1/21/19 and 1/23/19.

A. Code and Life Safety Evaluation:
   i. Evaluate and existing exit paths and capacities.
   ii. Provide an updated life safety plan indicating revised exit paths and requirements for program use for renovation work design documents. Confirm revised doorways and stairway exit capacities.
   iii. Review new stairway drawings for code compliance.

B. Conversion of the Sherriff's Office Gym into a new training room:
   i. Demo of existing gym space on 2nd Floor
   ii. Create new training room and secure corridor around training room.
   iii. Enlarge existing window height openings under existing structural openings with new glazing.
   iv. Construct new ramp run, set on existing floor slab in secure corridor.
   v. Construct new non-structural metal deck cap over detention rated secure corridor.
   vi. Provide acoustical treatment wall panel design, new suspended ceiling system, floor finish, furniture layout for owner supplied furniture.
   vii. Existing single user restrooms to be demolished for a new break room area with counter and sink.
   viii. Base study of AHU serving training room.
   ix. Total renovated area is approximately 4,400 SF.

C. Sheriff's Business Office
   i. Build-out of previously infilled area on 2nd floor.
   ii. Space will serve as future Sheriff's business office.
   iii. Space will include private office, open office workstations, conference room, and IDF closet.
   iv. Existing detention windows facing previous atrium to remain, to be covered over with studs and gypsum.
   v. Total renovated area is approximately 2,200 SF

D. Flooring replacement in 2nd Floor Courtrooms
   i. Replacement of existing carpet flooring in courtrooms.
   ii. Installation details for setting owner supplied seating at existing jury platforms.
   iii. Material selections per previous designs and specifications. Colors as selected by Lake County.
   iv. Refresh of existing restrooms, with signage directing to new ADA compliant facilities in

Exhibit B

AECOM

Lake County - Babcox - Sheriff Training & Offices

Description	Project Manager George Geldis		Sr. Architect George Geldis		Structural Terry Refai		Security Kevin Eagan		Telecom/AV Peter Vitone		Interiors Steph Townsend		Detention Steve Loomis		Tech/Cad Ziying Zhang	
		Hours		Hours		Hours		Hours		Hours				Hours		Hours
Area 1 - Code Review																
Total Labor		-		24		4		-		-				-		16
Total		-		24		4		-		-		-		-		16
2019 Bill Rates		160.00		160.00		210.00		185.00		185.00		115.00		185.00		100.00
AECOM Subtask Budget		$ -		$ 3,840.00		$ 840.00		$ -		$ -		$ -		$ -		$ 1,600.00
Total AECOM Labor		**$ 6,280.00**														
SYSKA MEP		**$ -**														
TOTAL		**$ 6,280.00**														
Area 2 & 3 Permit Set - Option 1: JOC																
Total Labor		8		220		56		48		56		40		12		180
Total		8		220		56		48		56		40		12		180
AECOM Subtask Budget		$ 1,280.00		$ 35,200.00		$ 11,760.00		$ 8,880.00		$ 10,360.00		$ 4,600.00		$ 2,220.00		$ 18,000.00
Total AECOM Labor		**$ 92,300.00**														
SYSKA MEP		**$ 21,500.00**														
TOTAL		**$ 113,800.00**														
Area 2 & 3 Public Bid Set - Option 2: BID																
Total Labor		10		275		70		60		70		50		15		225
Total		10		275		70		60		70		50		15		225
AECOM Subtask Budget		$ 1,600.00		$ 44,000.00		$ 14,700.00		$ 11,100.00		$ 12,950.00		$ 5,750.00		$ 2,775.00		$ 22,500.00
Total AECOM Labor				**$ 115,375.00**												
SYSKA MEP				**$ 26,875.00**												
TOTAL				**$ 142,250.00**												
Area 4 - Refresh																
Total Labor		-		72		-		-		-		-				52
Total		-		72		-		-		-		-				52
AECOM Subtask Budget		$ -		$ 11,520.00		$ -		$ -		$ -		$ -		$ -		$ 9,600.00
Total AECOM Labor		**$ 21,120.00**														
SYSKA MEP		**$ 4,850.00**														
TOTAL		**$ 25,970.00**														
Area 5 AHU replacement																
Total Labor		-		16		8		-		-						16
Total		-		16		8		-		-		-				16
AECOM Subtask Budget		$ -		$ 2,560.00		$ 1,680.00		$ -		$ -		$ -		$ -		$ 4,400.00
Total AECOM Labor		**$ 8,640.00**														
SYSKA MEP		**$ 28,500.00**														
TOTAL		**$ 37,140.00**														
Area 6 Basement Corridor																
Total Labor		-		38		-		-		7						44
Total		-		38		-		-		7		-		-		44
AECOM Subtask Budget		$ -		$ 6,080.00		$ -		$ -		$ 1,295.00		$ -		$ -		$ 4,400.00
Total AECOM Labor		**$ 11,775.00**														
SYSKA MEP		**$ 5,250.00**														
TOTAL		**$ 17,025.00**														

TOTALS (OPTION 1 - TRAINING RM W/JOC)		TOTALS (OPTION 2 - TRAINING RM W/ PUBLIC BID)	
Total Labor	$ 140,115.00	Total Labor	$ 163,190.00
ODC	$ 1,000.00	ODC	$ 750.00
MEP Services (SYSKA)	$ 60,100.00	MEP Services (SYSKA)	$ 65,475.00
TOTAL	**$ 201,215.00**	**TOTAL**	**$ 229,415.00**

courtroom tower.

E. Ceiling replacement in 2nd Floor Judge's Chambers
   i. Replacement of existing ceiling in Judge's Chambers on second floor east of courtroom spaces.
   ii. Replacement of existing carpet flooring in courtrooms.
   iii. Repainting of all partitions. Existing walls to remain.
   iv. Existing ceiling will be removed and replaced with new.
   v. New diffusers, sprinkler heads, and lighting will be provided and coordinated with new ceiling layout. Provide updated mechanical, electrical lighting, and fire protection plans for this area.
   vi. Total renovated area is approximately 2,300 SF per concept plans.

F. Basement service corridor
   i. New janitorial corridor per revised emailed graphic will be created in the basement level to link corridors on the north end with the south end.
   ii. The corridor will route through the existing storage space and photo lab.
   iii. Existing MEP systems in the storage and photo lab areas will be modified as required.

G. AHU Replacement
   i. Remove and reinstall louvers for access to air handling units.
   ii. Remove and replace two existing air handling units located in the west mechanical room on the 2nd floor, per revised emailed graphic.
   iii. AHU-9 is a constant volume unit currently serving the Sheriff's gym.
   iv. AHU-12 is a constant volume unit serving storage and laundry areas on the 1st floor.
   v. Evaluate the operation and capacity of each unit and make a recommendation on the size and type of unit so that it will serve the future needs of the space.
   vi. Provide Construction Documents and specifications including temperature control sequence of operation to allow the project to be Permitted and Bid. We assume one document package for the AHU replacement which will be issued separately from the interior renovation scope.
   vii. We assume any required Div. 25 specifications will be provided by others.
   viii. Telecom drop design for BAS controls connection to existing Johnson control panels.
   ix. MEP Commissioning support of new systems if required.
   x. We assume existing structural floor system to require modification for any penetrations or new equipment support.
   xi. No CA services or permitting.

II. Design Phase Services

A. AECOM will survey the existing conditions and installed systems. We assume existing design drawings will be provided for our use and that the building engineer will be available to answer our questions during our survey, PDF format.

B. We will use existing as-built drawings provided by the facility manager as a baseline for the survey; however, we will not update the existing drawings under the scope of work.

C. We will coordinate BAS control requirements with the County controls consultant.

D. We will coordinate all work associated with this project with Lake County Facilities.

E. We will undertake a visual survey each area of the project.

F. We will prepare Architectural, Structural, Telecom, Security, Mechanical, Electrical, Plumbing, Fire Protection and Fire Alarm demolition and construction documents associated with this series of interior renovations.

G. Unless noted otherwise, all mechanical, electrical, plumbing and fire protection services are provided at the building core from central systems provided by the building Owner.

H. We will design the electrical system for the floor distribution of lighting and power terminating at a floor panel, Telephone and data outlet boxes will be provided as indicated on Architectural drawings. Empty conduit will be specified as required. All power and conduit requirements will be coordinated as required.

I. We will provide a circuiting and switching design for the lighting system to meet the requirements of the new space.

J. Provide interior finish schedules based on previous color and finish selections made for other similar spaces in the new courthouse tower and Babcox construction project at level 1 below.

K. Design the mechanical distribution to coordinate with the new layouts. We anticipate utilizing and reworking the existing mechanical ductwork as much as possible.

L. Locate fire alarm devices: speakers and strobes as required and indicate interface with a code compliant Fire Alarm system by the building.

M. Design the fire protection system for the new architectural layout. The design shall indicate a new sprinkler head layout as required.

N. We have valued for up to a total of four (4) project meetings for each project (interiors renovation and AHU replacement): project kick-off, construction drawing review, one construction kick-off meeting, and project close-out.

O. For the AHU project, we have valued for two monthly site observation visits in addition to the final punch list.

P. Monthly visits during the duration of project will be provided by AECOM. Punchlist visits at end of project with public procurement.

Q. Under public bid option, provide specifications, including front end for bidding purposes. Attend initial bid meetings answer bid questions under public bid procurement.

R. The following work is excluded from our services, however, is available upon request:

S. Analysis of other building MEP systems, except those noted in the Scope of Projects.
   i. Creation of As-Built Drawings.
   ii. Extensive verification of existing systems and systems' components (if we need to obtain information for systems hidden above the ceiling).
   iii. On site supervision of any work activity or trade.
   iv. Additional site visits and field observation reports.
   v. More than one construction bid package.
   vi. Work beyond what is noted in the above scope of work.

VI. Fee

A. Based on the scope of work indicated above, please see **exhibit B** with a breakdown of the

lump sum fee.

B. Invoicing will be provided on a monthly basis against the progress associated with each respective task and milestone.

C. Compensation for Changes:
It is understood that where there are approved changes to work already completed, we shall be paid additional compensation, based on a negotiated lump sum amount.

D. Additional Services
Additional services must have prior authorization before proceeding. An estimated fee and scope letter will be submitted for signed authorization. Authorized additional services will be invoiced to you based on the following billing rate schedule.

VII. Hourly Rate Schedule for Add Services

AECOM Classification	***Billing Rate***
Project Manager	$160.00
Project Architect	$160.00
Security / Telecom Engineer	$185.00
Structural Engineer	$210.00
Security Designer	$185.00
Interior Designer	$115.00
BIM/CADD Operator / Administrator	$115.00
Syska Hennessey Classification	***Billing Rate***
Principal-in-Charge	$270.00
Project Manager/ Supervising Engineer	$215.00
Project Engineer	$210.00
Engineer	$145.00
BIM/CADD Operator / Administrator	$110.00

The above rates are applicable through December 31, 2019. We would anticipate an average increase in technical salary cost (and therefore Hourly Billing rates) of approximately five percent (5%) per annum.

VIII. Additional Services

The following will be considered Additional Services and are not included in basic fee:

A. Design and construction meeting attendance, except as noted elsewhere. Field observation walk beyond the allowance stated above.

B. Utility rebates requiring special studies.

C. Lighting design.

D. Services resulting from changes in the scope of the Project or its design from that described in above.

E. Services to reflect changes by the Client, Owner or Architect, including evaluation and incorporation of substitutions, value engineering proposed by Contractors, and change orders to previously approved work.

F. Services to prepare documents out of sequence or for out of sequence installation work

G. Services to prepare documents for alternate bids or value engineering items, as requested by Owner, and/or for Contractor's work which is not executed.

H. Services to revise documents required by the enactment of revisions of codes, laws, or regulations after the preparation of such documents, or due to other causes outside the control of the Engineer.

I. Services made necessary by the default or deficiencies of a Contractor or Construction Manager.

J. Consultation concerning replacement of any work damaged by fire or other cause during construction, and furnishing services as may be required in the replacement of such work.

K. Services relative to the design and implementation of future facilities, systems, and equipment which are not intended to be constructed during the Construction Phase.

L. Investigations involving detailed consideration of operations, maintenance and overhead expenses; preparation of feasibility and energy studies, cash flow and economic evaluations, rate schedules and appraisals.

M. Services resulting from the award of more than one prime contractor.

N. Services or consultation after completion of the Construction Phase.

O. Additional or extended services during the Construction Phase, including full-time field observation.

P. Preparation of Record Drawings.

Q. Survey of As-Built conditions for the preparation of AutoCAD Record Drawing files.

R. Preparing to serve or serving as a consultant or witness for the Client or Owner in any litigation, arbitration, mediation, public hearing or other legal or administrative proceeding involving the Project.

S. Life Cycle Cost analysis and reports.

T. Basic and enhanced commissioning services.

U. New Pre-action or gaseous fire suppression systems designs.

V. Filing with authorities having jurisdiction (we assume a separate consultant will be engaged for this service).

W. CFD Modeling and Analysis.

X. Testing and metering.

AECOM

Y. Circuit tracing.
Z. On site supervision of any work activity or trade.
AA. O&M Review and Analysis.
BB. Factory Witness Testing.
CC. Potential M&V systems design / plan.
DD. Long lead item packages.
EE. Acoustical design.
FF. Short Circuit Coordination Studies and Arc Flash Hazard analysis
GG. Technology Design Services
HH. UPS and Generator Designs
II. Daylight Simulation

Thank you for this opportunity to present our fee proposal for the referenced project. We would be delighted to address any questions which you may have. You can reach out to George Geldis from our Chicago office at 312.373.7754.

Very truly yours,

Bane Gaiser
Vice President

Exhibit C

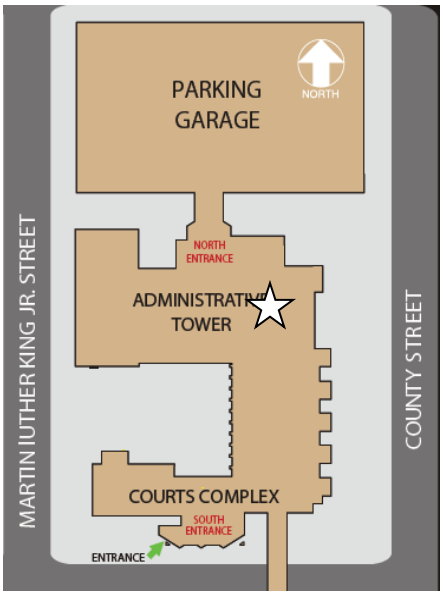
LakeCounty

Purchasing Division

http://doingbusiness.lakecountyil.gov/

Please note the submission location is:

Waukegan Campus



Lake County
Attn: Purchasing Division
18 N. County Street – 9th Floor
Waukegan, IL 60085

Contact information for Lake County Purchasing is:

Purchasing Division
Phone 847-377-2992
Fax 847-984-5889
Email: purchasing@lakecountyil.gov

ALL SUBMITTALS SHOULD BE LABELED ACCORDINGLY. PLEASE USE BELOW LABEL FOR YOUR CONVENIENCE.

✂----------✂

SOI No. 18089	Deliver to: Lake County **ATTN: PURCHASING DIVISION** 18 N. County Street – 9th Floor Waukegan, IL 60085
Buyer: Michael Schieve	
SOI Description Professional Architectural and Engineering Services for Lake County	
SOI Due Date* August 30, 2018 at 2:00 p.m.	

***Please note: Responses are due at the 9th floor reception desk and shall be time stamped by 2:00 p.m. local time on the required due date. Please allow sufficient time for parking, passing through security and arriving at the 9th floor.**

STATEMENT OF INTEREST # 18089

STATE OF ILLINOIS
Professional Architectural and Engineering Services
for Lake County

Notice is hereby given that Statements of Interest (SOI) (one original and one electronic unprotected copy) will be received from qualified, professional architectural and engineering firms interested in providing the services, as described herein. Firms are encouraged to submit as much information as necessary to indicate their interest, experience, and qualifications to perform the work described for any project, service, or combination thereof. **To Lake County Purchasing, 18 N. County St., 9th Floor, Waukegan, IL 60085 until August 30, 2018 at 2:00 p.m.**

CONTACT / QUESTIONS: Please submit questions on our website at http://lakecountypurchasingportal.com by selecting the SOI number and addendum link. Questions may also be submitted via email to purchasing@lakecountyil.gov. All questions shall be submitted no less than seven (7) days prior to the SOI opening date. No interpretation of the meaning of the plans, specifications or other Contract documents will be made orally. Failure to request an interpretation constitutes a waiver to later claim that ambiguities or misunderstandings caused a firm to improperly submit a proposal. Lake County will review submissions and conduct negotiations in accordance with the Local Government Professional Services Selection Act (50 ILCS 510/).

LAKE COUNTY

Lake County is located in northeast Illinois, between the Chicago and Milwaukee metropolitan areas. Lake County is home to about 703,000 residents. Lake County is committed to open government and transparency, and the County board's conservative fiscal policies have allowed the County to maintain fiscal stability and achieve AAA bond rating from Standard & Poor's and Moody's. Lake County is governed by a 21-member board and managed by a County Administrator.

PROJECT BACKGROUND

The County maintains nearly 1.4 million square feet of real estate in support of a diverse range of government services. The County has made significant investments in both rehabilitation and new construction over the past decade. Major capital projects anticipated for the foreseeable future have been identified and simple estimates of all currently foreseen future major projects is over $250 million of potential construction. To plan for future projects, the County hired Schmidt Associates in 2017, and VFA Facility in 2018 to help create and refresh a Strategic Facility Assessment Improvement Plan, and Facility Master Plan for Lake County. The intent of the plan is to develop a strategic facility plan, including a detailed five-year capital improvement plan as well as a long-term view that considers projects projected beyond five years.

GENERAL QUALIFICATIONS

The statement of interest must provide your firm's qualifications, including ability of professional staff, its past record and experience, performance data on file, willingness to meet time and budget requirements, location, workload of the firm, work on similar projects, past performance with Lake County and financial stability related to design, bidding, and construction inspection for the following projects. Please indicate, by Professional Services Trade, the trade(s) listed for which your firm is interested in providing Professional Architectural and Engineering Services.

Project and Construction Management Services

Professional A&E or PMP to manage and execute capital projects. Projects can be highly complex facility improvements with complex coordination sequencing with one or many internal departments to maintain their operational needs before, during and after a rehabilitation project A Project and/or a Construction manager will act as Lake County's principal agent in the management of administrative duties of project management or

providing construction management like a project superintendent.

HVAC Engineering Design and Commissioning
Preparation of plans, specifications and cost estimates for various mechanical improvements at Lake County facilities including, but not limited to, the replacement of air handling units, variable air volume boxes, ductwork, chillers, piping and appurtenances, independent temperature control systems and direct digital controls. Preparation of specifications and implementation protocol to transition independent project closeout documentation to Lake County Facilities' building information modeling (BIM) data archives.

Electrical Engineering Design and Commissioning
Preparation of plans, specifications, and cost estimates for various electrical improvements at Lake County facilities including, but not limited to, the replacement of electrical switchgears, automatic transfer switches, transformers, main distribution panels, local panels, stand-by generators and direct digital controls. Preparation of specifications and implementation protocol to transition independent project closeout documentation to Lake County Facilities' building information modeling (BIM) data archives.

Elevator Modernization Design and Commissioning
Preparation of plans, specifications, and cost estimates for various elevator modernizations improvements at Lake County facilities including, but not limited to, traction elevators, hydraulic elevators, screw lifts, escalators and direct digital controls. Preparation of specifications and implementation protocol to transition independent project closeout documentation to Lake County Facilities' building information modeling (BIM) data archives.

Security System Design and Commissioning
Preparation of plans, specifications, and cost estimates for various security improvements at Lake County facilities including, but not limited to, IP-wireless duress alarm systems, access control systems, high definition security camera systems, and enterprise security automation systems. Preparation of specifications and implementation protocol to transition independent project closeout documentation to Lake County Facilities' building information modeling (BIM) data archives.

Fire Alarm System Design and Commissioning
Preparation of plans, specifications, and cost estimates for various fire alarm improvements at Lake County facilities including, but not limited to, control panels, initiating devices, notification devices, networking and integration. Preparation of specifications and implementation protocol to transition independent project closeout documentation to Lake County Facilities' building information modeling (BIM) data archives.

Fire Protection System Design and Commissioning
Preparation of plans, specifications, and cost estimates for various fire protection systems improvements at Lake County facilities including, but not limited to, fire suppression systems, fire barriers, smoke barriers, smoke control, smoke evacuation, space planning and risk analysis. Preparation of specifications and implementation protocol to transition independent project closeout documentation to Lake County Facilities' building information modeling (BIM) data archives.

Landscape Architecture Design
Preparation of plans, specifications, and cost estimates for various landscape architectural improvements at Lake County facilities including, but not limited to, site planning, stormwater management, environmental restoration and green infrastructure planning.

Native Grassland, Prairie and Wetlands Management Services
Monitor, document written progress reports and provide guidance for the best management practices for our native grassland, prairie and wetland installations.

Civil Engineering Design
Preparation of plans, specifications, and cost estimates for various civil engineering improvements at Lake County facilities including, but not limited to, site planning, sewerage systems, potable water pipeline systems, stormwater management, site hardening, and structural analysis.

Detention Facility Design
Preparation of plans, specifications, and cost estimates for various detention facility improvements at Lake County facilities including, but not limited to, inmate housing, inmate management, inmate welfare, life support, accessibility, support services, surveillance, security and physical plant functionality.

Courthouse Facility Design
Preparation of plans, specifications, and cost estimates for various courthouse facility improvements at Lake County facilities including, but not limited to, accessibility, security, life safety concerns, health concerns, aesthetics, acoustics, interior finishes, signage, technology and automation.

Building Automation Design and Commissioning
Preparation of plans, specifications, and cost estimates for various building automation improvements at Lake County facilities including, but not limited to, geographical representation of mechanical equipment, geographical representation of electrical equipment, HVAC controls and monitoring, electrical system monitoring, lighting system controls and monitoring, fire alarm system monitoring, life safety controls and monitoring, equipment run conditions, energy usages, and e-mail alarming. Lake County currently incorporates usage of multiple building automation systems: TRACER ES, Metasys, and WebCTRL, with all data from equipment brought back to Lake County's server farm using the ASHRAE BACnet communications protocol.

Environmental Services
Preparation of plans, specifications, and cost estimates to monitor, document, develop abatement monitoring and a hazardous material exploration plan. This may include assistance with site remediation and cleanup.

1. SUBMISSION REQUIREMENTS

Where appropriate, the responses provided under this section shall include a brief description of examples of outcome based accomplishments that have measurable success factors to demonstrate a firm's qualifications and expertise. All examples should include owner name and contact information.

Section 1.0 – Executive Summary

Provide a brief summary, which describes and highlights your interest, experience and qualifications for these projects. Submit documentation to establish the professional licensing necessary to be eligible for these projects.

Section 2.0 – Relevant Experience

Relevant Experience shall clearly indicate the firm and which member on the project team participated in all relevant experience submitted. All experience submitted for a team member while in the employment of a different firm shall include their title and role on the project as well as the firm name that held the contract for all work submitted for relevant experience.

Section 3.0 – Project Management Team

Describe your approach relative to the delegation of responsibility and assignment of authority and interaction points with the County. Include a listing of key personnel and/or sub consultants proposed for the project team. Include a resume and/or relevant experience of each key team member and a brief description of the tenure or work history among team members.

Provide an organization chart graphically illustrating how your firm would staff and structure your proposed team to perform these projects. Include delegation of responsibility and assignment of authority and interaction points with the County.

List specific personnel (including sub consultants) proposed for the project team, including the project assignment and role or area of responsibility of each individual. State the current assignments for personnel proposed for the project, and their percentage of involvement at Various stages. Provide a resume for each proposed team member, specifically stating tenure or experience with your firm, experience and qualifications of each individual. The above list Represents a minimum submittal for key personnel from the Owner's Representative and Project Manager Team.

Section 4.0 – Budget

Describe your firm's methods to maximize and maintain quality project management and project image while maintaining tight budget constraints. Cite examples of specific things that you have done on other projects to meet this objective.

Describe your firm's approach to value engineering and what contribution does the firm typically provide during each phase of design and construction. Value engineering should include the ability of the proposer to evaluate cost saving opportunities in the construction project and add value to the project by applying a creative approach to optimize lifecycle, energy consumption and operational costs resulting from the design.

Section 5.0 - Quality of Documents

List the steps and describe the quality control processes we can expect from the firm during each phase of the design process to assure careful coordination of all disciplines and a high quality of design and contract documents.

2. EVALUATION PROCESS

Lake County will review submissions and conduct negotiations in accordance with the Local Government Professional Services Selection Act (50 ILCS 510/). The following qualifications will be considered by the County:

A. Proven experience in design and successful implementation of similar projects.
B. The evaluation of examples of outcome based accomplishments that have measurable success factors to demonstrate a firm's qualifications and expertise including the testimonials of owners or owner's agents.
C. The depth of talent and staffing experienced in the execution of similar projects.
D. The ability of the proposer to work with the Architect/Engineer and other consultants to maximize a design solution while maintaining budgetary discipline.
E. Design quality and the ability to understand and translate the client's design goals.
F. Quality and time availability of key project team members.
G. A proven consistent engineer team leader that listens to the client and appropriately manages and directs the team's efforts.
H. Familiarity with applicable codes and regulations including experience with the local authorities having jurisdiction.
I. The ability, capacity and skill of the proposer to perform the contract or provide the service required.
J. Whether the proposer can perform the contract or provide service promptly, or within the time specified, without delay or interference.
K. The character, integrity, reputation, judgment, experience and efficiency of the proposer.
L. The quality of performance of previous contracts or services.
M. Experience and quality performance with other Lake County projects, contracts, or services.
N. The previous and existing compliance by the proposer with laws and ordinances relating to the contract or services.

As part of its evaluation process the County may seek additional information from firms found to have resources and methodologies best suited to this project.

3. TERM OF AWARDED CONTRACTS

The term of awarded contracts shall be in effect for a one (1) year period from the date of award (initial term) or other period as indicated in each Project Description. Lake County reserves the right to renew the contract for one (1) additional one (1) year period, or as indicated in each project description, subject to acceptable performance by the Contractor. At the end of any contract term, Lake County reserves the right to extend the contract for a period of up to sixty (60) days for the purpose of getting a new contract in place. For any year beyond the initial year, the contract is contingent on the appropriation of sufficient funds. No charges shall be assessed for failure of the County to appropriate funds in future contract years.

General Information Sheet

AUTHORIZED NEGOTIATORS:

Name: _____ Phone #_____ Email:_____

Name: _____ Phone #_____ Email:_____

RECEIPT OF ADDENDA: The receipt of the following addenda is hereby acknowledged:

Addendum No._____, Dated_____

Addendum No._____, Dated_____

In submitting this statement of interest, it is understood that the County reserves the right to reject any or all submittals, to accept an alternate submittals, and to waive any informalities in any submittal.

BUSINESS ORGANIZATION: (check one only)

____ Sole Proprietor: An individual whose signature is affixed to this proposal.

____ Partnership: State full names, titles, and addresses of all responsible principals and/or partners on attached sheet.

____ Corporation: State of Incorporation:_____

____ Non-profit Corporation

____ 501c3-- U.S. Internal Revenue Code

By signing this proposal document, the proposer hereby certifies that it is not barred from bidding on a contract as a result of a violation of either Section 33E-3 or 33E-4 of the Illinois Criminal Code of 1961, as amended.

_____
Business Name

_____ _____
Signature Print or Type Name

_____ _____
Title Date

References

Provide FIVE (5) references for projects. Governmental references are preferred over others. (Attach additional pages as needed)

Entity: _____

Address: _____

City, State, Zip Code: _____

Name of Contact Person _____

Email Address: _____

Telephone Number: _____

Description of Services Provided: _____

_____

Date of Service: ____/_____/_____ To _____/_____/_____

Entity: _____

Address: _____

City, State, Zip Code: _____

Name of Contact Person _____

Email Address: _____

Telephone Number: _____

Description of Services Provided: _____

_____

Date of Service: ____/_____/_____ To _____/_____/_____

Entity: _____

Address: _____

City, State, Zip Code: _____

Name of Contact Person _____

Email Address: _____

Telephone Number: _____

Description of Services Provided: _____

_____

Date of Service: ____/_____/_____ To _____/_____/_____

Entity: _____

Address: _____

City, State, Zip Code: _____

Name of Contact Person _____

Email Address: _____

Telephone Number: _____

Description of Services Provided: _____

_____

Date of Service: ____/_____/_____ To _____/_____/_____

Entity: _____

Address: _____

City, State, Zip Code: _____

Name of Contact Person _____

Email Address: _____

Telephone Number: _____

Description of Services Provided: _____

_____

Date of Service: ____/_____/_____ To _____/_____/_____

COMPANY NAME _____

AUTHORIZED SIGNATURE _____

TITLE _____

DATE _____

FIRM QUALIFICATIONS

Name and Address of Office from which this contract will be administered
(ATTACH ADDITIONAL PAGES AS NEEDED)

Name: _____

Address: _____

_____

Phone:_____ Fax: _____

Email Address _____

Project Manager: _____

 # Years in Business: _____ **Number of Employees**: _____

Annual Sales: $ _____ **Dunn & Bradstreet #:** _____

Indicate if firm is a certified M/W/DBE and attach certification: _____

List employees who will be dedicated to the Project: (Attach additional pages as necessary)

NAME	POSITION TITLE	NUMBER OF YEARS	AREA OF RESPONSIBILITY/TASK EXPERIENCE
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

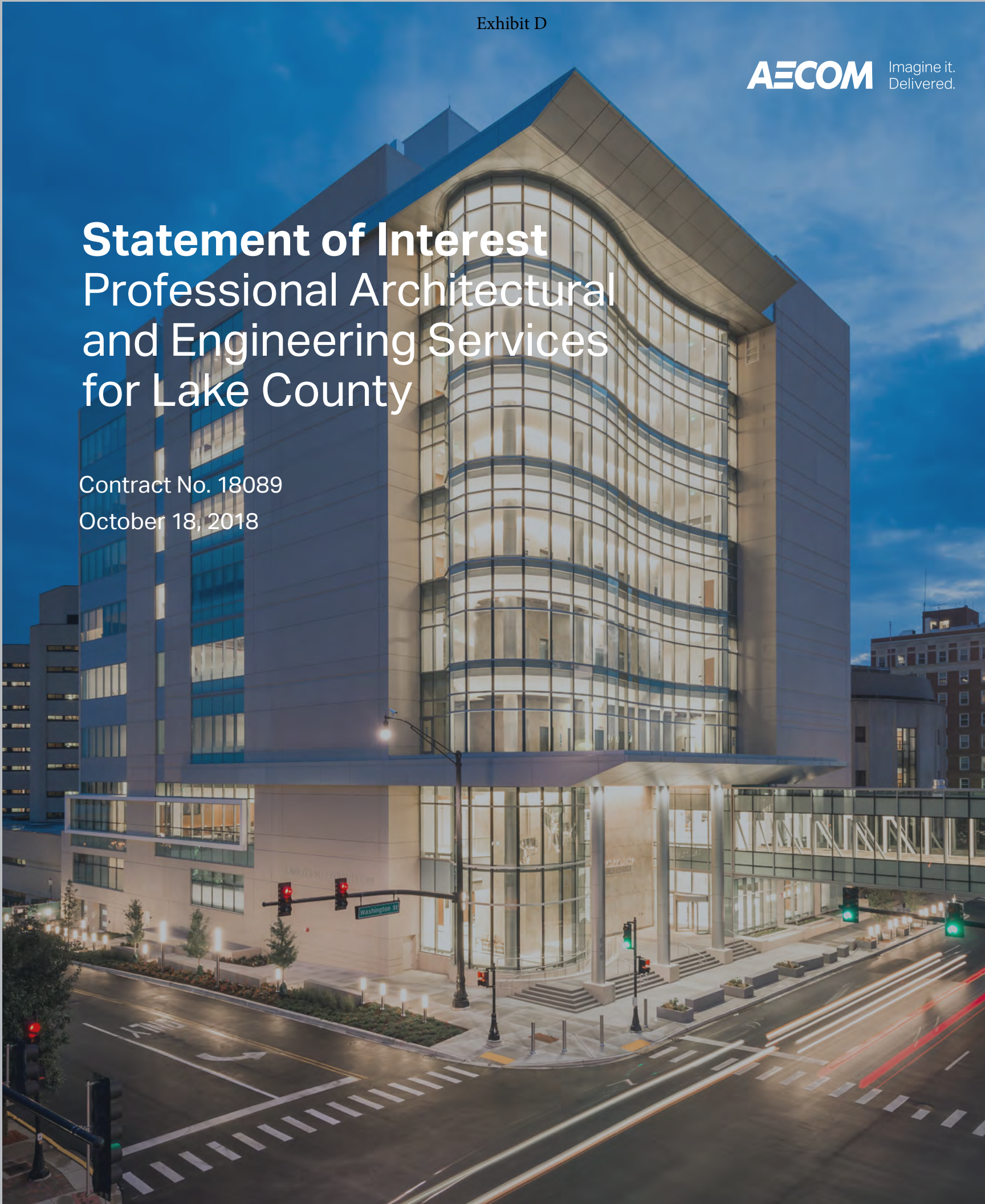
Exhibit D

AECOM Imagine it. Delivered.

Statement of Interest
Professional Architectural and Engineering Services for Lake County

Contract No. 18089

October 18, 2018



AECOM
303 E Wacker Drive
Suite 1400
Chicago, IL 60601
www.aecom.com

312 373 7700 tel
312 373 6800 fax

October 18, 2018

Michael Schieve
Lake County
Attn: Purchasing Division
18 N. County Street, 9th Floor
Waukegan, IL 60085

RE: Professional Architectural and Engineering Services for Lake County

Dear Mr. Schieve:

We are pleased to submit this Statement of Interest for professional architectural and engineering services for Lake County. AECOM will provide the following professional services:

- Security System Design and Commissioning
- Fire Alarm System Design and Commissioning
- Fire Protection System Design and Commissioning
- Landscape Architecture Design
- Detention Facility Design
- Courthouse Facility Design

Our team is fully committed to working closely with Lake County to provide projects that are completed on-time and within budget. AECOM is particularly qualified to perform the scope of services listed in the SOI for the following reasons:

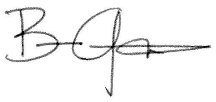
- **Local Presence, Knowledge, and Capacity:** Our Team draws from a strong local presence, backed by over 200 AECOM employees in Illinois. Our Team has worked extensively throughout the State of Illinois and understands the regulatory issues and challenges associated with both rehabilitation and new construction projects. Many of our proposed team members have recent experience in working for and with Lake County in the delivery of the Lake County Criminal Court Tower providing first hand knowledge of your county and its stakeholders.
- **Comprehensive Services:** The AECOM Team offers a full range of locally-based architectural, interior design, engineering, planning, transportation, environmental, scientific and technical expertise required to address the varying needs of Lake County and our team is backed by the resources of one of the world's largest architectural, engineering, environmental, and construction firms.
- **Bench Strength:** The AECOM Team is supported by national experts with similar and unique expertise that can be brought to any unique challenge. This bench strength provides Lake County with the option to look at alternatives on an as-needed basis without engaging other firms. The ability to bring in this experience from other systems throughout the country will provide the ability to share ideas across businesses and markets allowing for innovative and high value solutions.

The enclosed Statement of Interest provides the Lake County selection committee with an overview of our team's experience and qualifications. We look forward to the opportunity to continue collaborating with and servicing Lake County in addressing its future design needs.

Should you have any questions, please do not hesitate to reach out to George or myself.

Sincerely,

AECOM Services of Illinois, Inc.



Bane Gaiser, AIA, LEED AP, NCARB
Vice President
Bane.Gaiser@aecom.com
312-373-6644

George Geldis, AIA
Project Manager
George.Geldis@aecom.com
312-373-7754

01

Executive Summary

Executive Summary

As a full-service firm operating in over 150 countries, AECOM is a new and progressive consultancy with more than 87,000 staff worldwide. Our collaborative approach unites creativity with technical expertise to address complex challenges at all scales. Our best practice solutions achieve notable commercial and investment value success. With proven strength across a very wide range of disciplines, AECOM emphasizes the integration of market analysis, urban design, infrastructure engineering, and delivery strategy in the preparation of our master plans, concepts and architecture.

Formed from many of the world's finest design, engineering, and construction companies, AECOM's professionals combine technical expertise and creative excellence to deliver fully integrated planning, design, construction, finance, and operations management across our markets and our industry. AECOM has completed numerous contracts as the designer, builder, planner, advisor, manager, and design-builder. We are experienced in leading complex teams, and managing overall construction quality, cost, and schedule.

Our integrated delivery platform:

- AECOM's **Design and Consulting Services** group provides design and planning for buildings, civil infrastructure and environment.
- AECOM's **Construction Services** group provides design-build, construction, and project management services to a wide range of clients.
- **AECOM Capital,** the firm's investment division, is a sponsor, developer, and equity investor supporting clients to deliver a range of real estate and infrastructure projects.
- Our **Management Services** group provides operations and maintenance services to clients around the world.

AECOM is an international planning, design and engineering company with extensive experience across all markets and building types. We believe in the power of community, and recognize the extraordinary contributions projects can make to cities, regions and states and their economic, social, and cultural values.

AECOM is interested in providing Professional Architecture and Engineering Services for the following trades listed below:

- Security System Design and Commissioning
- Fire Alarm System Design and Commissioning
- Fire Protection System Design and Commissioning
- Landscape Architecture Design
- Detention Facility Design
- Courthouse Facility Design

SECURITY, FIRE ALARM AND FIRE PROTECTION SYSTEM DESIGN AND COMMISSIONING

Our staff is comprised of certified commissioning professionals, engineers and technicians with experience in security system design, fire alarm system design and fire protection system design.

AECOM offers independent commissioning services to verify that building systems and elements are planned, designed, installed, calibrated and tested to operate efficiently and effectively. The AECOM commissioning staff is comprised of certified commissioning professionals, engineers and technicians with expertise in building system design, installation, start-up, troubleshooting, testing and balancing.

Security System Design

We specialize in the design of security systems for critical facilities. We focus on full protection of critical assets so that redundant electrical and mechanical systems are not affected after experiencing an event. Our structural and mechanical designs guard against natural and man-made hazards for the protection of critical assets and people. AECOM has implemented layered security design for existing buildings converted for large-scale, mission-critical operations as well as for new complexes on greenfield sites.

Below is a partial list of services:

- Physical security information management (PSIM)
- Biometric technology
- Internet protocol closed circuit television (IP CCTV)
- DVR/NVR over Synchronous Optical Networking (SONET) infrastructure
- Threat risk vulnerability (TRV) assessments
- Integrated electronic security systems (IESS)
- Direct digital control (DDC) systems
- Multi-level security systems

Fire Alarm System Design

AECOM will coordinate with Lake County on fire alarm projects to determine if project buildings are under the jurisdiction of the State Bureau of Fire Services (require compliance of NFPA 101 and 72) or if they are exempt from BFS and are instead under the Illinois Building Code requirements. Design standards will be applied per the type of building usage classification. AECOM will follow the County's preferences for manufacturers of fire alarm systems. The fire alarm designs will be complete and will be coordinated with the selected system vendor. All designs will be discussed and coordinated with Lake County prior to issuance for owner's review. Designs for special smoke evacuation systems and more complicated fire alarm systems will be coordinated with Inspectors prior to issuance.

Fire Protection System Design

AECOM will evaluate the necessary sprinkler systems required in a building and design systems based on the appropriate codes. The design will also be coordinated with the architectural design and fire alarm system. The incoming water source is always a key element in a fire protection system and our efforts will verify and size the water supply to meet the design requirements. All designs will be reviewed by AECOM for compliance with NFPA 13, NFPA 20 (fire pump) and other applicable NFPA codes as may apply to building usage. Fire pump selections and power to the pumps will be part of the AECOM design. Designs will be coordinated with Inspectors prior to issuance.

University Medical Center of Louisiana, New Orleans, Louisiana
Systems commissioned included: mechanical systems, building automation systems, electrical systems, plumbing systems, low voltage systems, life safety systems and lighting controls.

LANDSCAPE ARCHITECTURE DESIGN

Essential infrastructure can be great design.

Our landscape architecture practice creates, restores and stewards urban and natural environments. Whether concepts, detailed designs, or broad policy frameworks, we offer implementable solutions that promote sustainable use of resources and enhance quality of life. We design the systems of spaces that render places vibrant, healthy and sustainable—namely the greenways, streets, squares, parks, waterfronts and plazas that typically comprise more than half the land area in any given city. Our landscape architecture practice seeks to positively impact communities through the design of artful social spaces combining sustainable infrastructure with cultural relevance and expression. We believe that urban infrastructure has enormous untapped capacity to become placemaking—and vice versa—especially as related to the integration of flood control, green stormwater, active mobility and natural habitats that advance urban resiliency. We measure landscape performance to ensure that the long-term viability of landscapes we design can be accomplished. We work at all scales, from park systems and corporate campuses to intimate courtyards, across the Americas and the globe.

Some of our services include:

- Placemaking
- Complete streets and green infrastructure
- Urban public realm
- Trails and recreation areas
- Restoration planning and design
- Parks planning and design
- Brownfield design
- Roof gardens and extensive roof design
- Landscape performance
- Waterfronts
- Cultural landscapes
- Green walls
- Custom furnishing
- Design prototypes and research

31st Street Harbor, Chicago, Illinois
AECOM facilitated a new harbor with a 1,000-slip (floating dockage) recreational marina constructed in a new park, melding high-tech engineering with thoughtful place-making.

DETENTION + COURTHOUSE FACILITY DESIGN

AECOM is a leader in the design of justice projects.

In most jurisdictions, designing a courthouse or detention center is a once-in-a lifetime opportunity. As such, it is important to build consensus and establish an environment of trust, respect, and communication among all stakeholders, and establish a partnership with the client to develop an appropriate design within budget.

AECOM is devoted to designing safe, functional and attractive justice facilities throughout the country; we therefore have a market segment devoted entirely to justice work. We have an innovative approach and specialized experience in the design of various large- and small-scale justice facilities and the state-of-the-art systems that support each facility. Whether the project entails highly advanced security systems or the latest courtroom technology, our design professionals are skilled in designing and administering the construction of courts, correctional/detention facilities, emergency communication centers, and municipal buildings.

Pima County Justice Facility Expansion, Tucson, Arizona
In addition to 384 new beds in low to medium custody units, this project included 107 beds in new acute and chronic mental health units and 19 infirmary beds. The facility is fast becoming a local, regional, and national resource showcasing how operations and design can come together to create an environment that affects behavior of inmates and staff alike.

District Court of Maryland, Rockville, Maryland
AECOM, in joint venture, designed this 159,725-square foot judicial facility located in the new town center. Finishes in courtrooms and lobbies are warm, welcoming, and durable.

Berkeley County Judicial Center, Martinsburg, West Virginia
AECOM's building evaluation process provided the basis for forecasting the future needs of the judicial and governmental systems, and our design for the adaptive reuse of a 1920s woolen mill as a new judicial center celebrates the local character of the city.

PROFESSIONAL LICENSING

AECOM is a premier, fully integrated professional and technical services firm positioned to design, build, finance, and operate infrastructure assets around the world for public- and private-sector clients. The firm's global staff—including architects, engineers, designers, planners, scientists, management and construction services professionals—serves clients in more than 150 countries around the world.

The nature of licenses and certifications are on an individual basis. AECOM has over 80,000 employees globally, many of whom have earned professional licensure.

AECOM's key technical disciplines are led by registered staff members who have the necessary licenses, education, training, and experience required for this contract. Individual licenses can be provided upon request.

We have also provided a copy of our certificate of good standing in the State of Illinois and our State of Illinois professional license for architecture and engineering. Also included is our firm commissioning certificate.

File Number 5801-696-9

STATE OF ILLINOIS
OFFICE OF
THE SECRETARY OF STATE

To all to whom these Presents Shall Come, Greeting:

I, Jesse White, Secretary of State of the State of Illinois, do hereby certify that I am the keeper of the records of the Department of Business Services. I certify that

AECOM SERVICES OF ILLINOIS, INC., A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON OCTOBER 07, 1994, APPEARS TO HAVE COMPLIED WITH ALL THE PROVISIONS OF THE BUSINESS CORPORATION ACT OF THIS STATE RELATING TO THE PAYMENT OF FRANCHISE TAXES, AND AS OF THIS DATE, IS IN GOOD STANDING AS A DOMESTIC CORPORATION IN THE STATE OF ILLINOIS.

In Testimony Whereof, *I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, this* 5TH *day of* MAY *A.D.* 2017 .

Jesse White

SECRETARY OF STATE

Authentication #: 1712501610 verifiable until 05/05/2018
Authenticate at: http://www.cyberdriveillinois.com


State of Illinois
Department of Financial and Professional Regulation
Division of Professional Regulation
LICENSE NO.
184.001654-0007
001.012508
The person, firm, or corporation whose name appears on this certificate has complied with the provisions of the Illinois Statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.
EXPIRES:
04/30/2019
DESIGN FIRM - ARC/PE/SE
AECOM SERVICES OF ILLINOIS INC
120 S CENTRAL AVE STE 400
CLAYTON, MO 63105-1705
BRYAN A. SCHNEIDER
SECRETARY
JESSICA BAER
DIRECTOR
The official status of this license can be verified at www.idfpr.com
11596808

For future reference, IDFPR is now providing each person/business a unique identification number, 'Access ID', which may be used in lieu of a social security number, date of birth or FEIN number when contacting the IDFPR. Your Access ID is: 986133


acg
AABC Commissioning Group

Annual Membership Certificate

Awarded to

AECOM

as a member in good standing of the AABC Commissioning Group for the year

2018

This company has met all requirements for membership and is entitled to all rights and privileges thereof. This certificate is renewable on an annual basis and expires December 31, 2018.

02

Relevant Experience

Relevant Experience

Lake County Criminal Court Tower
Waukegan, Illinois

Client
Lake County

Cost
$110M

Size
215,000 square feet (CCT)
45,000 square feet (renovation)

Completed
2018

Services
Architecture, Building Engineering

Team Members
Bane Gaiser
George Geldis
Kevin Eagan
Michelle Inouye
Roger S. Lichtman
Kristine Bishop Johnson

Through a phased study, the Lake County courts expansion project will increase the efficiency of the justice system and support growth of its agencies to 2030 and beyond.

Following Phases 1 and 2, AECOM was hired to plan, design and implement Phase 3, development of a master plan to address the need for additional courtrooms and justice support space for Lake County. As Architect of Record, services continued into Phase 4, the execution of an 8-story courthouse tower, tunnel and bridge connector, and renovation of an existing court/administration building.

The master plan focused on improvements necessary for reducing operational costs, fostering collaboration among justice agencies and other justice stakeholders, and providing modern spaces that encourage the early resolution of cases. Three distinct components were identified for implementation, which will be complete in May 2018:

Criminal Courts Tower (CCT): A new 8-story, 215,000-square foot building with 17 new courtrooms and an unfinished space for three future courtrooms. The CCT will also have court agency support space to accommodate the growth of Lake County justice agencies.

Washington Street Tunnel: A new tunnel connecting the jail and courthouse for secure and efficient in-custody transfers and allow for secure staff access between the two facilities.

Babcox Justice Center Renovation: Remodeling of the courts, jail intake and booking and jail kitchen areas (approximately 45,000 square feet) will provide a functional early disposition court system, thereby relieving pressure, both operational and capital requirements, on the Lake County Jail.

Broward County Judicial Complex
Fort Lauderdale, Florida

Client
Board of County Commissioners Broward County

Cost
$212 M

Size
740,000 square feet

Completed
2017 Phase 1
2019 (est.) Phase 2

Services
Architecture, Interior Design, Court Consultant, Structural, Mechanical & Security Engineering, Construction Administration

Awards
Merit Award, AIA Academy of Architecture for Justice, Justice Facilities Review, 2011

Team Members
Kristine Bishop Johnson
Kevin Eagan

This 18-acre campus will serve the civic needs of Ft. Lauderdale through 2030 and beyond.

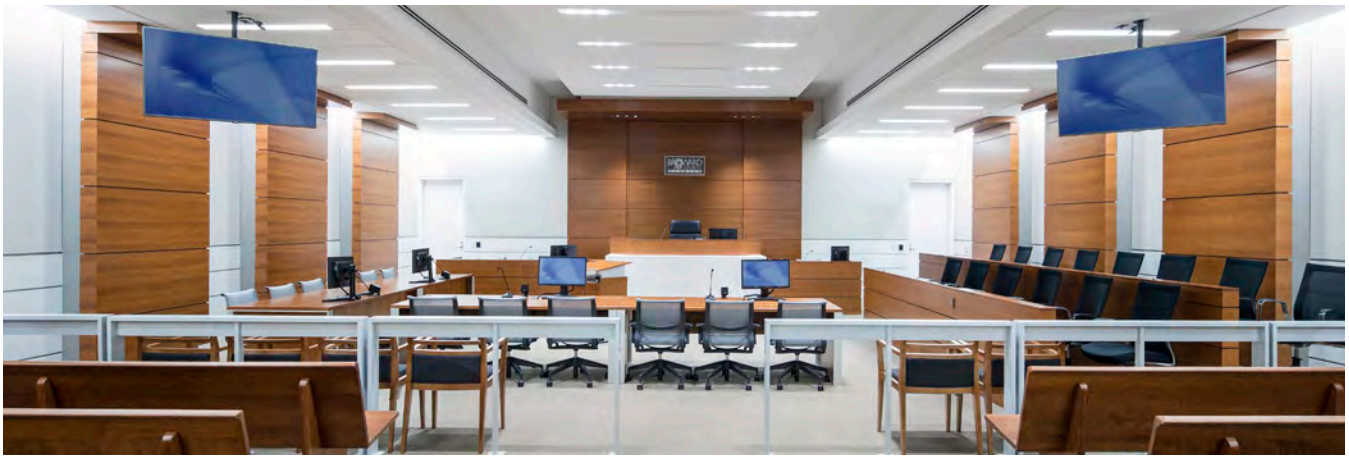
An AECOM joint venture team provided master planning and design services for the Broward County Judicial Complex in Ft. Lauderdale, Florida. Planned to accommodate growth through the year 2030 and beyond, the 18-acre campus includes a county office building, the county jail, three courthouse buildings, energy center, and parking garage. A series of pedestrian parks, plazas, and a riverfront promenade will create a new civic campus.

The new 740,000-square foot courts building occupies a 1.55-acre portion of the campus, standing tall as a 20-story high-rise structure with courtrooms and office space. The building includes 355,000 square feet of administrative office space for several government agencies including the State Attorney, Clerk of Court and Court Administration. The building houses 74 courtrooms and hearing rooms for the County Criminal, Domestic Relations, Family Courts, Magistrates, Probate, County Civil, and Circuit Civil courts components. The litigation spaces are specifically designed to meet the unique needs of each court department, and include a mixture of 500 to 700-square foot hearing rooms and courtrooms ranging in size from 1,600 to 2,200 square feet.

Support space for the building includes extensive areas for the Clerk of Court, State Attorney, Court Administration, and Sheriff. A series of bridges connect the new building to the existing campus. These include secure bridges for prisoner and judges circulation, as well as a public connector between the new building and the existing East and North wings of the courthouse. A 34,000-square foot shell floor is provided for future expansion.

The courthouse features state-of-the-art technology, including extensive audio-visual and evidence presentation systems for the courtrooms and office spaces. Security is enhanced through the use of CCTV, card access, duress devices (push buttons), and entry screening security systems. The new courthouse incorporates many sustainability elements and is designed to be LEED Silver certified. Sustainable features include energy reductions of up to 25%, water use savings of up to 35%, on site rain harvesting and water retention, recycling of up to 75% of construction waste, utilization of a green roof, the use of low emitting materials and finishes, and providing a sustainable educational program.

Phase 2 of the project includes a 500-car garage with secure parking for staff and judges linking several buildings on the campus.



Montgomery County Judicial Center and Annex
Rockville, Maryland

Client
Montgomery County Department of Public Works

Cost
$88 M

Size
191,000 square feet (new)
327,000 square feet (renovation)

Services
Architecture, Interior Design, Building Engineering, Fire Protection, LEED Consulting, Construction Administration, Commissioning

Awards
Merit Award, AIA Academy of Architecture for Justice, Justice Facilities Review, 2017

Peerless Rockville, 2015

Retrospective of Courthouse Design, National Center for State Courts, 2001-2010

Team Members
Kristine Bishop Johnson

AECOM's design of the new annex for MCJC allows for flexibility and efficiency in the renovation of the existing courthouse.

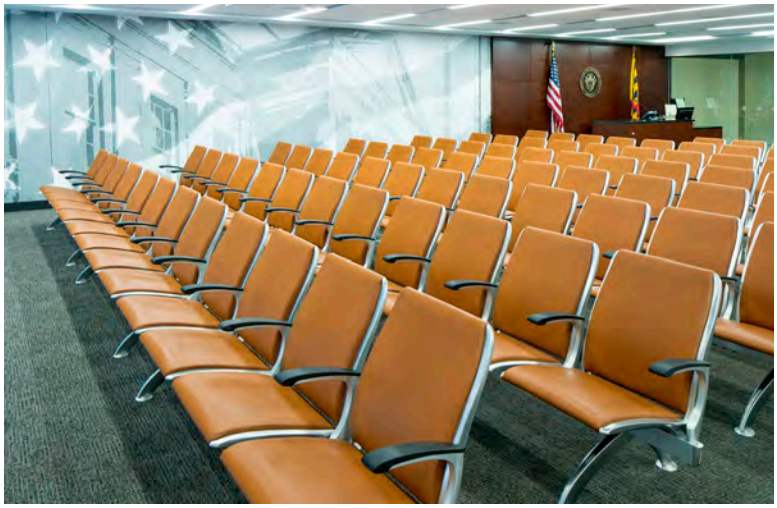
The Montgomery County Judicial Center (MCJC) is the eastern anchor for a revitalized government center and a symbol of the court's important role in the community. This project consists of a new 191,000-square foot courts annex and renovation of the existing 327,000-square foot courthouse. Juvenile and other related family court functions were relocated to the annex, leaving vacant spaces in the existing judicial center for future development.

Seven new courtrooms and associated spaces were constructed, with three courtrooms shelled for fitout at a later time, for a total of 10 courtrooms in the annex. Efficient use of space was achieved through the four-court-per-floor planning module organized around a north-south corridor facing the plaza and landscaped park.

Each of the four sets of stacked courtrooms features elements such as powerful pillars, copper with bronze and brass accents, traditional wood paneling, and glass lanterns. Highlighting the importance and neutrality of the bench is a wall of simply detailed white stone located directly behind.

The courtrooms provide a warm counterpoint to the crisp glass curtainwall and pre-cast panels of the exterior façade of the building. The annex is designed with three separate circulation systems for the public, judiciary, and prisoners. Public access occurs through the existing entries, corridors, and the new annex elevators. Through dedicated elevators, judicial access is provided from the new judges parking level directly to private corridors in the chamber areas. Prisoners use the new and existing vehicular sallyports, dedicated secure corridors, and prisoner elevators to access the court floor holding cells.

The annex features energy efficient and sustainable design. These features include vegetative or green roofs; energy efficient mechanical systems; and use of regional materials and environmentally friendly products. The project achieved LEED Gold certification.



Joint Courts Complex for Pima County and City of Tucson, Tucson, Arizona

Client
Pima County/City of Tucson

Cost
$80 M

Size
250,000 square feet

Services
Architecture, Interior Design, Master Planning, Courts Planning, Security/ Telecommunications, Construction Administration

Awards
International Interior Design Association, Southwest Chapter, P.R.I.D.E Award, "On the Boards", 2008

Team Members
Kristine Bishop Johnson

By consolidating county and city courts functions, the joint courts complex serves the community in one downtown location.

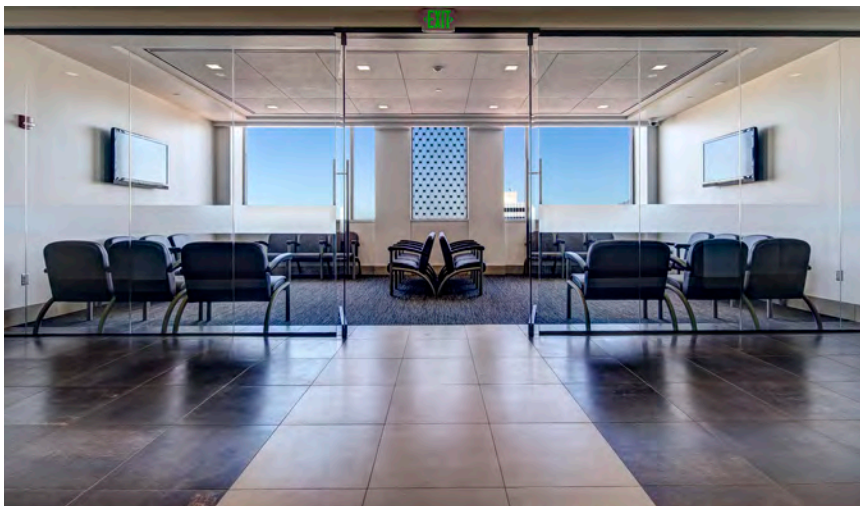
This new courthouse complex, which consolidates judicial functions formerly housed in multiple locations into a single venue, was designed as a joint facility serving Pima County and the City of Tucson. Pima County departments accommodated by the new facility include the consolidated justice courts and associated court administration offices, constable's office, the office of the court-appointed counsel, and public defender's offices. For the City of Tucson, the facility houses the city court, court administration, and offices for the city prosecutor and public defender.

Additional project goals included the development of a master plan that would accommodate growth over a 20-year period, and creation of a facility that would complement the city's downtown core and serve as both an anchor in the revitalization of the adjacent Rio Nuevo district and a bridge to the nearby warehouse arts district.

The construction of the project was completed in two phases. Phase one included 250,000 square feet of space to accommodate the County Justice Courts, Tucson City Courts, administrative offices, and other county needs. Also included in the first phase was a parking structure to accommodate 826 cars. Phase two added 150,000 square feet of additional courts and administrative space, the constable's offices, and training spaces.

AECOM provided a full range of services, including needs assessment studies, master planning, courts programming and planning services, urban design, architecture and interior design, vertical transportation, security/telecommunications design, and construction administration.

The complex opened in February 2015.



Kane County Adult Justice Center
Geneva, Illinois

Client
Kane County

Cost
$46 M

Size
170,000 square feet,
740 beds

Services
Mechanical/electrical/plumbing engineering, fire protection, physical and electronic security

Architecture, design (Lichtman Associates - Roger's previous firm)

Team Members
Roger Lichtman

Our engineering evaluation and design focused on efficiency and security for both the existing County jail and the new jail.

Kane County's inmate population had grown at twice the rate of its entire population, resulting in an overcrowded jail. With 400 beds available for an average daily population of 550 inmates, officials relied on other County facilities to house inmates.

The new jail alleviated crowded conditions by providing 740 beds and 170,000 square feet of space. In addition, our design corrected inefficiencies found during our site investigation and evaluation of the mechanical systems. Our design addressed such conditions as the need to replace boiler systems and other equipment, inefficient exterior and interior lighting, inability of the central control room to operate the security control system during an emergency, and inadequate kitchen space and laundry washing equipment.

As with any correctional facility, building security is necessary to protect the safety of personnel and inmates. Our electrical and security system design for the new jail incorporated programmable logic controllers; stand-alone fire alarms; and touchscreen control, hard panel control, closed-circuit television (CCTV), digital video recording, and cell intercom systems. An emergency generator also was provided.

Kane County requires watch-tours to be performed during inmate lockdown when housing pods are not staffed. To this end, our team worked with officials to develop procedures for monitoring staff movement during watch-tours through the use of key-operated stations in the jail's dayrooms.

AECOM was selected by Kane County to evaluate mechanical systems at the County jail. Subsequently, AECOM provided mechanical and electrical engineering, as well as plumbing, fire protection, and security design services for the jurisdiction's new adult jail. Lichtman Associates, P.C., acted as the Associate Architect and Detention Designer.

Pima County Justice Facility Expansion
Tucson, Arizona

Client
Pima County Sheriff's Department Facilities Management

Cost
$29 M

Size
134,000 square feet, 519 beds (addition)

Services
Conceptual design, architecture, programming, master planning, mechanical/electrical/plumbing engineering, physical and electronic security, QA/QC

Awards
Kemper Goodwin Award–Architectural Collaboration, American Institute of Architects Arizona, 2005

Certificate of Merit, Justice Facilities Review, American Institute of Architects, 2006

Team Members
Kevin Eagan

This expansion was conducted in two major phases over three years, requiring a considerable degree of study, analysis, and planning for construction during the operation of the 24-hour essential facility.

The expansion of the Pima County Justice Complex added more than 134,000 square feet to an existing facility housing 1,500 detainees. This project provides a total of 519 new beds including 384 beds in low to medium custody units of 64 beds arranged in eight-man cell clusters; 116 beds in new acute and chronic mental health units; and 19 infirmary beds.

A new booking/intake area and outpatient medical area replaced the existing cramped and inefficient areas. Designed around an open pit waiting area, the new booking area provides extensive use of video arraignment and other efficiency enhancing features.

The project was constructed in two phases over a three-year period. Phasing and construction required a considerable analysis and planning to minimize operational impacts on the facility. Each aspect was evaluated and addressed in the development of the construction documents. In addition to the new beds, the completed project includes a new centralized public entry and video visitation facility, a staff services area, and new kitchen.

The project scope also included upgrading and consolidating the life safety and electronic security systems that report to the new central control room. AECOM provided comprehensive security system design to combine the intricate systems of three separate control areas into one new central command center. The system design included full CCTV coverage of the facility as well as correction office man-down locators, inmate and staff tracking system, intercom, door control, and localized water and electrical control. These upgrades included new fire alarms, surveillance cameras, duress alarm systems, an inmate tracking system, and Programmable Logic Controller head-end gear for the existing security controls.

San Mateo Maple Street County Jail
Redwood City, California

Client
San Mateo County Sheriff's Office

Cost
$165 M

Size
768 beds

Services
Programming and planning in partnership with Liebert and Associates

Team Members
Roger Lichtman

Working with the County for more than seven years, Roger Lichtman (and now AECOM) provides project continuity from early planning to implementation.

As part of a commission while with another firm, Roger Lichtman participated in the development of a functional program, conceptual design, and master plan for a new replacement jail. The master plan details the secure direct-supervision housing units for males and females. Up to 680 secure beds are planned, plus 88 non-secure transitional/work furlough beds, for a total of 768 beds.

The program includes functional areas that will be needed in the new jail, including a processing/transport area, medical/mental health clinic, public lobby/video visitation, facility administration, staff support, master control, support services, and food service. The overall facility includes three stories of housing units adjacent to a two-story program/activity administration building. The intent is to construct the administration building to commercial standards while individual components within are secure, as opposed to designing the entire building to institutional standards. Expansion is also planned.

AECOM was later hired to develop a comprehensive justice system for the jail which included an overall logistics plan to make the best use of all of the present facilities utilizing the existing inmate classification system. Paying special attention to the behavioral health aspects required in modern detention design, this effort consolidated the overall system, including the renovation of the old Maguire facility. By centralizing the receiving and release of inmates, property storage, food preparation, and other system-wide functional elements, the County can take advantage of economies of scale and appropriate operational efficiencies.

Image courtesy of HOK, Architect of Record

1685 North Throop Relocation
Chicago, Illinois

Client
Chicago Infrastructure Trust and 2FM

Cost
$40.2 M

Services
Architecture, Engineering, Design, Construction, Permitting, Sustainability

Completed
2019 (est.)

Team Members
Bane Gaiser
George Geldis

AECOM has partnered with the Chicago Infrastructure Trust (CIT) and the Department of Fleet and Facility Management (2FM) in a fast track and collaborative design-build process for the delivery of three new facilities.

AECOM is providing design and construction services for the relocation of the existing vehicle maintenance 2FM facilities to three sites within the City to disperse services and improve operations.

The new facilities will consist of the following:

- Main Shop: new construction of a 150,000 square foot, two-story, heavy-duty municipal vehicle maintenance repair shop, and administrative headquarters for 2FM.
- Satellite Shop: new construction of a 30,000 square foot heavy-duty municipal vehicle maintenance and repair shop.
- Fueling Station: relocation of the existing fuel station function; requires demolition of the existing Department of Street and Sanitation building and the construction of a new fuel station.

The project will provide over 180,000 square feet of fleet maintenance and support facilities in a period of less than 18 months, allowing the City of Chicago to capture value from underutilized City property and to re-invest in neighborhood infrastructure.

AECOM successfully employed it's integrated delivery model to provide a state-of-the-art, sustainable and custom facility that has improved operations and reduced costs.

31st Street Harbor
Chicago, Illinois

Client
Chicago Park District

Cost
$1 M

Services
Coastal engineering, Wave climate and transformation study, Physical design, Breakwater design, Bid documents, Construction administration

Awards
Illinois Society of Professional Engineering, Chicago Chapter 2012 Award for Engineering Excellence

2012 AIA Chicago Design Excellence Awards: Sustainability Leadership Award

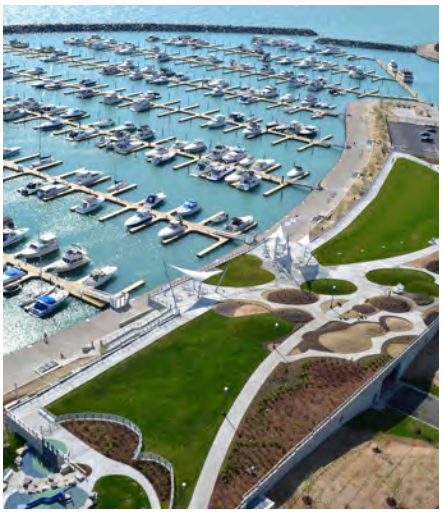
International Superyacht Society (ISS) Fabien Cousteau Blue Award

Completed
2014

Team Members
Michelle Inouye

AECOM facilitated a new harbor with a 1,000-slip (floating dockage) recreational marina constructed in a new park, melding high-tech engineering with thoughtful place-making.

31st Street Harbor includes a new harbor with a 1,000-slip (floating dockage) recreational marina constructed in a new park, melding high-tech engineering with thoughtful place-making. Landside development includes a harbor services building and parking structure with a 63,000-SF accessible green roof, replete with sculptural shade structures and a great lawn. The slips accommodate boats between 35 and 75 feet in length; the new utilities include water, electric, sanitary, cable TV/internet, and a fuel dock. A 3-lane launch ramp with trailer parking was also provided. The AECOM team was responsible for all the aspects of Master Planning, final design, permitting and construction administration for this $125M+ project. The coastal development includes a ½ mile-long stone breakwater, designed to shelter the new 1000 floating docks as well as a fishing pier, covered winter boat storage, fuel dock, marina store, shower facilities and the public access boat launch. A water quality flushing tunnel was incorporated into the breakwater for marina water quality. Peninsula Park, a newly created, triangle-shaped park built with construction fill at the meeting point of the breakwater and the 31st Street pier. Sustainability was a key component of the design effort. This is the first harbor development in Chicago to achieve LEED Gold Certification, highlighted by the following: accessible green roof covers the parking garage structure; Stormwater Outfall BMP's; Geothermal heat exchange medium. The harbor has a 3-lane boat ramp with parking spaces for 14 trailers. Indoor heated and outdoor winter storage is available November-April.



South Branch Riverwalk Implementation Plan
Chicago, Illinois

Client
Chicago Department of Transportation

Cost
$500K

Services
Planning, Urban Design, Landscape Architecture, Coastal Engineering, Civil Engineering

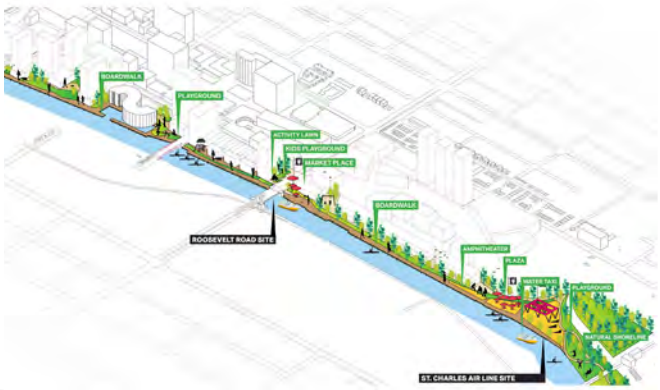
Completed
2018

Team Members
Michelle Inouye

AECOM is performing a planning, design and engineering evaluation for the Chicago Department of Transportation (CDOT) to develop an implementation plan for a proposed riverfront trail along the South Branch of the Chicago River.

The implementation plan will evaluate options and propose feasible recommendations for short, medium and long-term capital improvements along the east bank of the South Branch from the Chicago Riverwalk at Lake Street to Ping Tom Park at 16th Street.

For this evaluation, we are mobilizing a coordinated effort between urban designers, landscape architects, architects and engineers to most effectively consider past, recent and proposed plans; consider existing and emerging design concepts; and coordinate with stakeholders. Through our efforts, we will develop an exhaustive "toolbox" of potential solutions and assess each for applicability and engineering/ regulatory feasibility. The end product will be an executable plan for a new riverfront trail that identifies the path forward on a block-by-block basis through public or private efforts.



03

Project Management Team

Project Management Team

AECOM structures its individual project teams to deliver optimal service to our clients. We strongly believe in consistency among team members to ensure continuity and quality control from project conception to execution. To this end, we carefully organize teams at the start of each project so that they are comprised of individuals with strengths in design, technical coordination and management.

A listing of our key personnel includes:

- Bane Gaiser, Principal in Charge
- George Geldis, Project Manager
- NAME, Security & Fire Alarm System Design and Commissioning
- Daniel Kascak, Fire Protection System Design and Commissioning
- Michelle Inouye, Landscape Architecture Design
- Roger Lichtman, Detention Facility Design
- Kristine Bishop Johnson, Courthouse Facility Design

Each project team will be overseen by the project principal in charge (PIC), **Bane Gaiser.** Bane oversees the design effort, ensuring the highest quality of the overall project design. He will ensure that the design solution directly responds to Lake County's goals, and that this solution remains consistent throughout the design and construction process. In addition, Bane is responsible for setting a distinct strategy for the entire process so that project progress moves forward efficiently and cost-effectively.

Working directly with the principal in charge is the project manager, **George Geldis**, who is assigned to manage all project under this contract. George will oversee the day-to-day progress of each project, acting as the primary point of communication and coordination throughout the process. In addition, he is responsible for managing the flow of information between the architectural and consultant teams, and is charged with keeping the projects on schedule and on budget.

The team we put forth in this qualifications package is **available, committed and ready**. Each team member's current workload allows them to commit the time necessary to satisfactorily fulfill their roles on future projects with Lake County.

Kevin Eagan, Daniel Kascak, Michelle Inouye, Roger Lichtman and Kristine Bishop Johnson will be the design principals depending on the type of project. They will work directly with Lake County to determine the conceptual direction of the project based on project economics and image goals. The design principals will lead the architectural team in developing conceptual alternatives for the project and ultimately in setting the direction of the project. During the design development, the design principals will review major form, materials, and detail directions and decisions working closely with the senior designer.

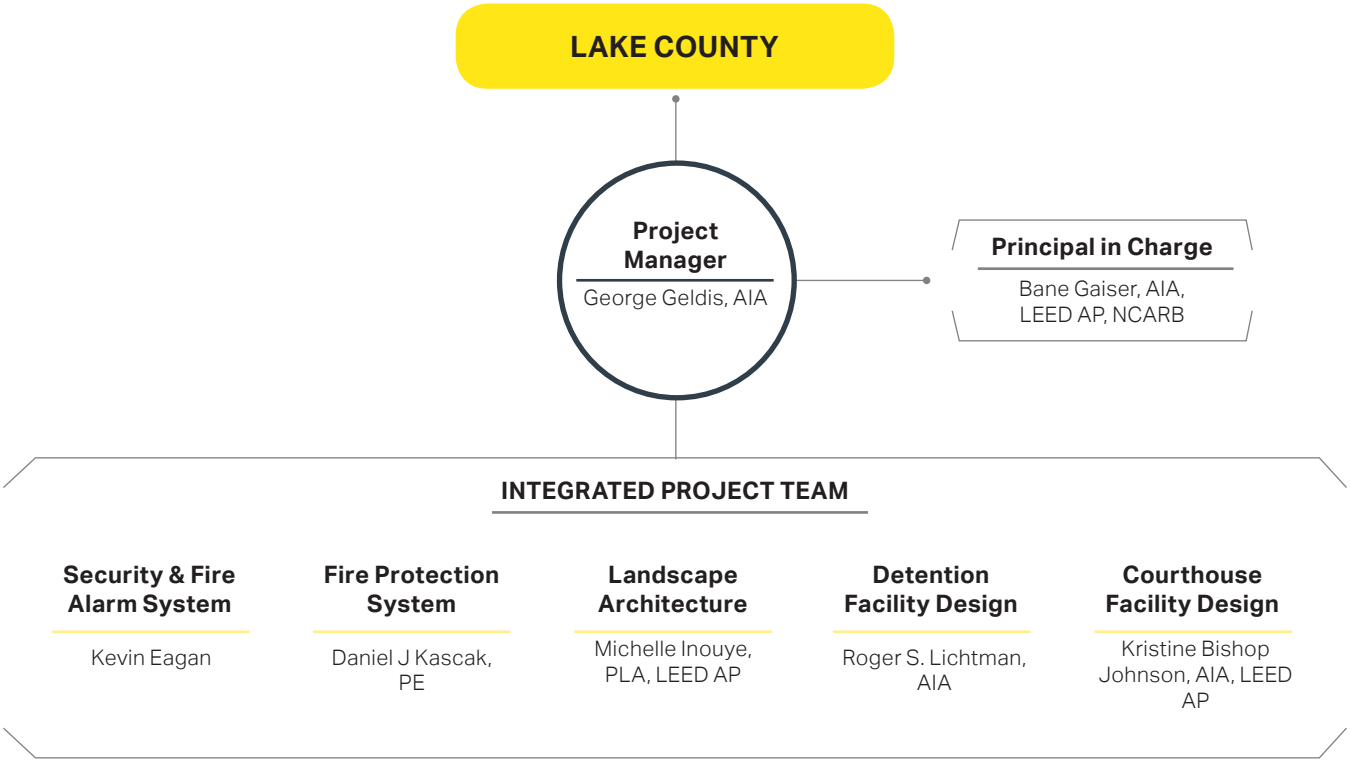
Each member of our core teams brings extensive experience to their identified roles, and unique technical competencies specific to those roles, many times complimentary to their core competencies.

Bane Gaiser, George Geldis, Kevin Eagan, Michelle Inouye, Roger Lichtman and Kristine Bishop Johnson have all worked very closely on the Lake County Criminal Court Tower.

Bane, George and Michelle have experience working on many City of Chicago opportunities together. In addition,

Roger and Kristine are a part of AECOM's leadership in correctional/courthouse planning and design. They routinely partner on criminal justice projects throughout the United States.

We bring a team with the right people who possess the knowledge, skills, experience and attitude to work in partnership with Lake County and its stakeholders to deliver successful projects.



Subconsultants

We have worked closely with subconsultants and routinely partner with them on a variety of projects. To confirm appropriate project team capacity to meet all project milestones and efficiently manage project tasks, the project manager will develop a Project Execution/Management Plan (PXP) that is tied to the project schedule.

This approach identifies the personnel needed per project phase so that multiple and potentially critical project phase assignments can be effectively managed. The PXP will also include Subcontracting Management, which specifies the subcontractor's roles and responsibilities, safety and health expectations, schedule and milestone dates, quality performance metrics including cost control, contract terms compliance, and other project specifics.

Based on each project need, AECOM will determine what suboncsultants we will partner with.

BANE GAISER, AIA, NCARB, LEED AP
PRINCIPAL IN CHARGE

Mr. Gaiser has 26 years of experience and is responsible for the acquisition, management, leadership, and development of a team of technical professionals for the Buildings and Places business line in the Midwest Region.

BACKGROUND

Mr. Gaiser works with project teams to assign staff to projects to ensure technical work is completed in accordance with the client scope of work and budget. His foresight enables him to anticipate and solve both routine and unusual project delivery, technical, and client challenges. Mr. Gaiser determines technical objectives and requirements, organizes programs and projects, and develops standards and guidelines for expertise activities and applications. He is an advisor to clients and other departments on technical practice and business line issues, stays abreast of industry standards and approaches, and implements best practices.

TOTAL YEARS EXPERIENCE
26

EDUCATION
MSAAD, Advanced Architecture, Columbia University

B Arch, Architecture, University of Kansas

REGISTRATIONS/ACCREDITATION
Registered Architect, Illinois, Indiana, Michigan, Minnesota, Mississippi, New Jersey, North Carolina, Ohio

LEED Accredited Professional

NCARB Certificate

PROFESSIONAL AFFILIATIONS
American Institute of Architects

National Council of Architectural Registration Boards

EXPERIENCE HIGHLIGHTS

Lake County Courthouse Expansion, Waukegan, Illinois. Principal in Charge for the architectural and engineering design services for the expansion of the existing county courthouse facility with a $110 million construction budget. Expansion includes the construction of a new eight-story high rise courthouse tower, with a new underground tunnel connection to the existing facility, a reconstruction of the existing bridge connection and renovation of various existing spaces.

City Infrastructure Trust and 2FM, Relocation of 1685 North Throop, Chicago, Illinois. Principal in Charge. AECOM has partnered with 2FM in a fast track and collaborative design/build process for the delivery of three new facilities for 2FM; mainly the delivery of a new primary heavy duty vehicle maintenance garage, a satellite garage, and a fueling station for the fleet vehicles. The project will provide over 200,000 square feet of fleet maintenance and support facilities in a period of less than 14 months.

DePaul University, Wintrust Arena, Chicago, Illinois. Project Executive. Located a short drive from downtown Chicago, Wintrust Arena is a new 10,000-seat arena that expands the existing McCormick Place Exhibition Complex. The arena is the home venue of DePaul University men's and women's basketball programs, and also regularly hosts a variety of concerts, graduations, assemblies and conventions.

University of Illinois, Urbana-Champaign, State Farm Center, Champaign, Illinois. Project Executive. AECOM provided planning and design services for the renovation of the University of Illinois' State Farm Center, the historic home venue of the Fighting Illinois. The project began with defining the optimal plan for boosting revenue from the landmark 16,500-seat arena, and developing a business strategy to match valuable premium seating to the demand for sports and entertainment in central Illinois. Our scope of services included planning, architecture, interior design, geotechnical engineering, security design and information technology design.

Chicago Transit Authority, New Wilson Station, Chicago, Illinois. Principal in charge for a new station, platform, and canopy at Wilson Avenue on the north side of Chicago. The project includes the renovation of the existing Gerber building which sits below the tracks and currently serves as the primary access point to the existing station platform. [Prior to AECOM]

Bane Gaiser (cont.)

US Army Corps of Engineers - Middle East District, Multiple Award Task Order Contract for A-E Services. Principal in charge for the USACE Middle East District MATOC for A-E Services. [Prior to AECOM]

US Army Corps of Engineers, Fort Hood Tactical Equipment Maintenance Facility, Fort Hood, Texas. Principal in charge for the design-build project with a construction company for a medium Tactical Equipment Maintenance Facility at Fort Hood, Texas. The 40,000-square-foot facility consists of a high-bay pre-engineered metal building structure containing areas for maintenance of vehicles and a two-story administrative area. [Prior to AECOM]

US General Services Administration, Land Ports of Entry IDIQ, Washington, District of Columbia. Principal in charge for the GSA Land Port of Entry (LPOE) indefinite delivery, indefinite quantity contract. This national IDIQ is part of the GSA's Design Excellence program, which seeks to plan and design new or expanded federal facilities as well as repair and alteration of facilities to provide outstanding quality, value, and operational design. [Prior to AECOM]

US General Services Administration, Mary E. Switzer Building Modernization, Washington, District of Columbia. Principal in charge for the GSA Design Excellence Modernization of the historic Mary E. Switzer Building, which houses the headquarters for the Department of Education and a portion of the Department of Health and Human Services. [Prior to AECOM]

US Naval Facilities Engineering Commmand, Camp Lejeune Battalion Operations Complexes, Camp Leueune, North Carolina. Principal in charge for the new Camp Lejeune Battalion Operations Complexes for NAVFAC. The project consists of two separately funded projects merged as a single contract to design and build the facilities and infrastructure necessary to support the 2D Intelligence Battalion and the 2D ANGLICO Company at Camp Lejeune. [Prior to AECOM]

Missile Defense Agency of the US Army Corps of Engineers – Mobile District, Von Braun IV Missile Defense Office Building, Redstone Arsenal, Alabama. Principal in charge for a 225,000-square-foot building which includes administrative space, computer operations, sensitive compartmentalized information facilities (SCIF), special access areas, meeting rooms, break rooms, and storage areas. The project is being designed for LEED Silver certification. [Prior to AECOM]

US Department of Energy National Nuclear Security Administration, National Security Complex, Kansas City, Missouri. Principal in charge for a design-build project that encompasses 1,629,950 gross square feet of office, electrical assembly, laboratory, and manufacturing space for the DOE's NNSA. The project is LEED Gold certified, and the multi-disciplined design-build team utilized building information modeling (BIM) for design, construction, and management. Year completed: May 2013; Contract Value: $780 million [Prior to AECOM]

New Hampshire Department of Transportation, Portsmouth Memorial Bridge, Portsmouth, New Hampshire. Principal in charge for relocation analysis and architectural design of a new operator control house, machinery house, and gate tenders structures located at this 100-year historic lift bridge. [Prior to AECOM]

City of Wichita, Wichita Dwight D. Eisenhower National Airport - Terminal Planning, Wichita, Kansas. Principal in charge for airport planning, terminal planning, and design for a new $147.5 million, 12-gate airport terminal and related parking facilities. The project includes a new ticketing concourse, airside concourse, rental car facility, food venues, and aviation exhibits. Incorporated into this project are various sustainable design elements which led to this building being designed to LEED Silver standards. [Prior to AECOM]

City and County of Denver Department of Aviation, Denver International Airport - Terminal and Landside Area Redevelopment Program - Program Management Services, Denver, Colorado. Principal in charge for the $1.3 billion expansion that will include a change of use for major portions of the terminal, expansion of the terminal curbside areas, addition of a train station for FasTracks, expansion of the existing terminal with connecting bridges, airport hotel, landside roadway Improvements/ expansions, Federal Inspection Service facility expansion, all security checkpoint reconfiguration, and FasTracks/Pena Boulevard bridges. [Prior to AECOM]

GEORGE GELDIS, AIA
PROJECT MANAGER

Mr. Geldis is a project architect and project manager with experience in architectural design, planning, preparation of proposals, as well as a background in design-build construction management.

BACKGROUND

Mr. Geldis' responsibilities include client contact, consultant engineering coordination, architectural design, construction documents, shop drawing review, construction cost studies, and construction observation. He oversees quality control reviews for projects prepared by the architectural department. Mr. Geldis' experience includes code review services for the city of Chicago and has been involved in bringing multiple existing facilities and structures in compliance with accessibility requirements. He introduces sustainable design into every project, with a number of his projects receiving LEED Gold and Silver certification.

TOTAL YEARS EXPERIENCE
25

EDUCATION
Bachelor of Science, Architecture, University of Illinois, Chicago

REGISTRATIONS/ACCREDITATION
Registered Architect, Illinois, Wisconsin

NCARB Certificate

PROFESSIONAL AFFILIATIONS
American Institute of Architects

EXPERIENCE HIGHLIGHTS

Lake County Courthouse Expansion, Waukegan, Illinois. Project architect for the architectural and engineering design services for the expansion of the existing county courthouse facility with a $110 million construction budget. Expansion included the construction of a new eight-story high rise courthouse tower, with a new underground tunnel connection to the existing facility, a reconstruction of the existing bridge connection and renovation of various existing spaces. Performed construction observation services including weekly reports to the county.

City Infrastructure Trust and 2FM, Relocation of 1685 North Throop, Chicago, Illinois. Project Architect. AECOM has partnered with 2FM in a fast track and collaborative design/build process for the delivery of three new facilities for 2FM; mainly the delivery of a new primary heavy duty vehicle maintenance garage, a satellite garage, and a fueling station for the fleet vehicles. The project will provide over 180,000 square feet of fleet maintenance and support facilities in a period of less than 14 months. The project has been submitted for LEED certification from the USGBC for the 2 main building sites.

Jardine Water Purification Plant Laboratory, Chicago, Illinois. Jardine Water Purification Plant is the largest facility of its kind and purifies water for Chicago and the surrounding metropolitan region. Presently leading the effort to design a new laboratory that provides water sample testing for the facility to ensure Chicago's drinking water meets EPA and IDPH requirements. Testing includes microbiology, organic and inorganic chemistry. 13,500 SF.

City of Chicago, Chicago Police Forensic Laboratory, Chicago, Illinois. Project architect and project manager for renovation and conversion of existing 15,000 square foot space to relocate city forensic staff into a new larger modern facility to meet their current requirements. New buildout included the planning of various forensic laboratory spaces, including evidence evaluation, firearm ballistics including shooting range, photography, fingerprinting, photography and administrative spaces. Engineering services were included to reconfigure and supplement existing mechanical and electrical services for new equipment.

Sigma Aldrich Distribution Center Expansion, Xerem, Duque de Caxias, RJ, Brazil. Project architect overseeing the schematic design of a proposed new warehouse facility and corporate offices for pharmaceutical company for site located in Brazil. Fully developed warehouse design

George Geldis (cont.)

incorporated storage racks, walk in coolers and freezers, flammable storage, loading dock, staff lockers and showers. Design incorporated components and strategies to achieve up to a LEED gold rating with USGBC. 3D renderings were developed as part of the design along with complete plans, elevations, and sections as well as cost estimate for different levels of LEED certifications. Engineers provided a complete design narrative for civil, structural, and MEP.

Roosevelt University, Student Laboratories, Chicago, Illinois. Project manager for lab planning services provided to the university for their new biology, physics, and chemistry labs, built out as part of a new high rise construction project in the downtown south loop district of Chicago. Additional services included the review of construction documents for conformance to specifications and safety standards, review of equipment and test data submittals with site inspections of installations for the university.

Chicago State University, Physics Classroom, Chicago, Illinois. Project manager and architect of record for renovation of existing classroom space for new physics classroom integrating new finishes throughout, classroom furniture and lab equipment and audio/visual technologies. Provided construction documents, design services, reviewed submittals.

USAID, Central Warehouse Distribution Facility, Haiti. Architect for the design of a new 50,000 square foot facility, providing a main distribution for pharmaceutical supplies for the country of Haiti. Facility incorporated truck docks for incoming bulk shipments from the boat docks and outgoing packaged shipments to the countryside. Unsprinklered facility incorporated fire rated compartmentalization to address code requirements. Features included staging areas, high rack pallet storage, cooled storage, forklift storage / maintenance, as well as a two story office space. Site included facilities for flammable storage, incineration, fuel station, vehicle service, outdoor pallet storage, care takers quarters, and security fencing.

Cook County Sheriff, Air Conditioning Upgrade and Generator Installation, Chicago, Illinois. Project manager for engineering design services for the installation of a complete new central air conditioning system in the existing three stories building housing the offices of the Cook County Sheriff. Existing air conditioning was provided by window units that were removed for significant energy savings. Structural openings were designed in existing floors to accommodate the new ductwork. A second phase project was also incorporating for a new generator serving the entire building set on a sloped site.

Chicago Department of Fleet & Facilities Management (2FM), Maxwell Street Permit Center, Chicago, Illinois. Project manager and architect for architectural and engineering services to completely renovation an existing abandoned structure to house a city permit center for the historic Maxwell Street Market. Implementation of a rain screen façade, green roof, recycled materials, energy-efficient lighting and plumbing fixtures, low VOC paints were some of the features implemented. Project achieved LEED Gold certification in 2009.

Chicago Department of Fleet & Facilities Management (2FM), Office Building Renovation, Chicago, Illinois. Project manager for architectural and engineering design services for the 2350 West Ogden facility for the City of Chicago. This project included complete interior gut and rehabilitation of the entire first floor (18,000 SF) of the current facility, which contains office space, public main lobby, public waiting areas and service counters, testing room, and public and employee restrooms. The renovated space house the Department of Consumer Services, Public Vehicle Division and Investigators. Complete redesign of the buildings mechanical and lighting systems were designed to improve the comfort of the space and dramatically enhance energy efficiency. Newly renovated and expanded restrooms provide improved handicap accessibility and include high efficiency plumbing fixtures. Materials with recycled content are used extensively. The project has received a LEED silver rating from the USGBC.

Chicago Department of Fleet & Facilities Management (2FM), Office Building Renovation, Chicago, Illinois. Project manager for architectural and engineering design services for the 2350 West Ogden facility for the City of Chicago. This project included complete interior gut and rehabilitation of the entire first floor (18,000 SF) of the current facility, which contains office space, public main lobby, public waiting areas and service counters, testing room, and public and employee restrooms. The renovated space house the Department of Consumer Services, Public Vehicle Division and Investigators. Complete redesign of the buildings mechanical and lighting systems were designed to improve the comfort of the space and dramatically enhance energy efficiency. Newly renovated and expanded restrooms provide improved handicap accessibility and include high efficiency plumbing fixtures. Materials with recycled content are used extensively. The project has received a LEED silver rating from the USGBC.

Schaumburg Public Works and Fire Station #5, Schaumburg, Illinois. Project architect for $15 million expansion of existing public works facility and construction of new fire station for suburban facility. Prepared architectural construction documents and coordinated engineering drawings. The new facility included new offices, workshops, locker rooms, exercise room, two bay fire station, fire station hose tower, vehicle storage area. Site improvement included a new salt dome, retention pond, material storage bins, precast concrete screen fencing, and extensive landscaping improvements.

KEVIN EAGAN

SECURITY & FIRE ALARM SYSTEM DESIGN

Mr. Eagan has 22 years of experience in commercial and industrial security systems design and manufacturing.

BACKGROUND

Mr. Eagan is responsible for electronic surveillance, monitoring, communication, and security and control system engineering. He provides design services for justice projects, specializing in aspects of physical and electronic security. Responsibilities include providing design for the project security electronics system; attending key client meetings; monitoring project performance; generating construction documents that reflect the design intent; and interacting with a wide variety of clients, user groups, and members of the construction industry. Mr. Eagan also reviews system submittals to ensure design compliance with contract plans and specifications.

TOTAL YEARS EXPERIENCE
22

EDUCATION
Certificate in Revit Architecture, Red Rocks Community College, Lakeview, CO 2012

Certificate in Drafting and Design, Red Rocks Community College, Lakeview, CO 1995

EXPERIENCE HIGHLIGHTS

Lake County Courthouse, Waukegan, Illinois. Security Systems Specialist. Designed the door control, access control, intercom, duress, UPS, and CCTV surveillance systems using touch screen and programmable logic controllers.

Santa Clara County Main Jail South Bridging Documents, Santa Clara California. Security Systems Specialist. Designed the door control, access control, intercom, duress, UPS, and CCTV surveillance systems using touch screen and programmable logic controllers.

Coral Gables Public Safety Building, Coral Gables Florida. Security Systems Specialist. Designed the access control, intercom, duress, UPS, and CCTV surveillance systems.

James A Musick, Orange County California (OCSD) Phase 1 and 2. Security Systems Specialist. Designed the door control, access control, intercom, duress, UPS, and CCTV surveillance systems using touch screen and programmable logic controllers.

Broward County Courthouse, Ft. Lauderdale, Florida. Security Systems Specialist. Designed the door control, access control, intercom, duress, UPS, and CCTV surveillance systems using touch screen and programmable logic controllers.

Department of Corrections, CUCF Perimeter Security Upgrade, Gunnison, Utah. Security Systems Specialist. Designed the perimeter security intelligent CCTV surveillance system. System included the use of thermal cameras, analytics, and fence detection system.

Department of Corrections, CUCF W1/INTAKE Facility Addition, Gunnison, Utah. Security Systems Specialist. Designed the door control, intercom/paging, duress, UPS, and CCTV surveillance systems for a 288-bed addition, using touch screen and programmable logic controllers.

Central Prison of Muscat, Muscat, Oman. Security Systems Specialist. Designed the card access, biometric identification, video surveillance, door control, intercom and paging, personal duress, under vehicle surveillance, perimeter detection (stun fence), microwave detection, and underground sensor and utility control systems, using touch screen and programmable logic controllers and UPS systems.

Kevin Eagan (cont.)

Baltimore County Detention Center, Towson, Maryland. Security Systems Specialist. Assisted in the design of the door control, lighting control, intercom, card access, video surveillance, inmate management, watch tour, duress alarm, vehicle control, perimeter detection, and communications systems for an 1100-bed addition to the existing detention center.

Big Muddy Correctional Center, Ina, Illinois. Security Systems Specialist. Designed the door control, intercom, paging, and utility control systems.

Adams County Detention Facility, Adams County, Colorado. Security Systems Specialist. Assisted in the design for manufacturing of the door control, intercom, and CCTV system upgrade.

Boulder County Detention Center, Boulder, Colorado. Security Systems Specialist. Assisted in the design for manufacturing of the door control, intercom, and CCTV system upgrade.

Department of Corrections, CUCF N3 Facility Addition, Gunnison, Utah. Security Systems Specialist. Designed the door control, intercom/paging, duress, UPS, and CCTV surveillance systems for a 288-bed addition, using touch screen and programmable logic controllers.

Department of Corrections, CUCF N4 Facility Addition, Gunnison, Utah. Security Systems Specialist. Designed the door control, intercom/paging, duress, UPS, and CCTV surveillance systems for a 288-bed addition, using touch screen and programmable logic controllers.

Department of Corrections, CUCF Facility Security Improvements, Gunnison, Utah. Security Systems Specialist. Designed the CCTV surveillance and water tank security systems.

CDCR, RJ Donovan Level 2 Dorms Infill Project. Security Systems Specialist. Provided oversite for the electronic security system installation.

New Mexico Department of Corrections, Security System Upgrades, Las Lunas, Santa Fe and Las Cruces, New Mexico. Security system engineer for design of physical and electronic security system upgrades to increase security levels at each facility from Level Two to Level Three. The projects have been released for bidding with a total estimated construction cost of approximately $1 million. The bids came in under the state budget, and the security upgrades are now being installed by the contractors.

Orange County, Jail Security System, Orlando, Florida. Security Systems Specialist. Assisted in design for manufacturing of the card access, video surveillance, door control, intercom, paging, sound monitoring, personal duress, vehicle control, and UPS systems.

Salt River Pima-Maricopa Indian Community Detention Center (SRPMIC), Phoenix, Arizona. Security Systems Specialist. Designed the door control, card access, CCTV, intercom, paging, and utility control systems.

Pima County Jail, Tucson, Arizona. Security Systems Specialist. Assisted in the design of the card access, inmate tracking, video surveillance, door control, intercom, paging, sound monitoring, video arraignment, video visitation, personal duress, elevator control, vehicle control, and UPS systems.

Riverside County, Smith Correctional Facility, Banning California. Security Systems Specialist. Designed the door control, intercom/paging, duress, UPS, CCTV surveillance, and video visitation systems using touch screen and programmable logic controllers.

Texas Department of Criminal Justice Detention Facilities, Multiple Locations, Texas. Security Systems Specialist. Assisted in the design for manufacturing of the door control, monitoring, lighting control, and intercom systems.

Theo Lacy Visitation Conversion, Orange County, California. Security Systems Specialist. Designed the door control, intercom/paging, UPS, and controlled visitation systems using graphic control panels and programmable logic controllers. System allowed for visitation time allotments to be controlled by the officer from the control room as well as providing the ability to record all conversations.

Aurora Municipal Detention Center, Aurora, Colorado. Security Systems Specialist. Designed the door control, card access, CCTV, intercom, paging, and lighting control systems.

DANIEL J KASCAK, PE

FIRE PROTECTION SYSTEM DESIGN & COMMISSIONING

Mr. Kascak has over 12 years of experience providing fire protection engineering support in all aspects of fire protection design and by preparing engineering and construction estimates, developing fire protection scope of work, and overseeing fire protection contractors' work.

BACKGROUND

Mr. Kascak acts as Fire Protection Subject Matter Expert, performs code compliance, fire suppression design development of P&IDs thru detail design for underground fire water distribution systems and above ground fire suppression systems (sprinkler, standpipe, water spray fixed, clean agent, foam, and dry and wet chemical systems), fire detection and alarm design, developing design criteria and generating layout drawings, riser diagrams, and input/output matrixes. Perform Fire Risk Assessments and participate in HAZOP and PHA. He also provides manufacturing and mechanical engineering support by performing/preparing design and layout engineering, equipment specifications, equipment procurement and evaluation, material handling requirements and preliminary engineering studies.

TOTAL YEARS EXPERIENCE
12

EDUCATION
Bachelor of Science, Mechanical Engineering, Ohio University

REGISTRATIONS/ACCREDITATION
Registered Professional Engineer, Ohio

VESDA and ASPIRE2 Certification Training

AREAS OF EXPERTISE
Code Consulting

Fire Suppression

Underground Fire water Piping

Fire Pumps

Fire Detection and Alarm

Life Safety

Fire Protection Plan Review

Fire Risk Assessment and PHA

EXPERIENCE HIGHLIGHTS

Department of Veteran's Affairs, Rochester, New York. Lead Fire Protection Engineer. Provided all the Fire/ Life Safety Code analysis for this new outpatient clinic. Performed all the fire protection design and analysis for the new sprinkler service and sprinkler system.

Suncor Energy, Infrastructure Early Works Project, Fort Hills, Alberta. Fire Protection lead actively interfacing with Suncor Energy and AECOM's Denver and Boise offices. Leading effort to define fire protection scope of work, generate engineering estimates, technical deviation notices and change orders, updating progress reports, and managing fire protection budget and schedule.

- Multiple fire protection reports were written for the project. Reports include "Infrastructure fire protection philosophy", "Existing Firewater Main Ring Re-use Study", and "Deep Underground Firewater Piping Design Criteria".
- Performed various code reviews for the project using the Alberta Building and Fire Codes and several NFPA standards.
- Designed and Generated Fire Protection P&IDs for underground piping, created tag list for PIV and Hydrants, and assisted with line lists. Fire Protection Group produced underground fire water drawings, such as underground firewater details and fire hydrant and post indicating valve layout drawings. Team also assisted the piping group with the fire water layout drawings.
- Lead effort to procure firewater piping, hydrants, valves and accessories by writing MRQs, TBEs, MRPs, and TDNs. Also created Specialty Piping Item Data Sheet for the site's new Fire Hydrant Model.
- Generated hydraulic calculations for multiple areas utilizing hardy-cross method for underground fire water distribution system. AECOM was responsible for interfacing with Suncor Energy and other engineering firms to design a practical and functional system.
- Lead effort to design fire detection and alarms in multiple buildings. Fire detection included spot detection (heat and smoke), aspirating smoke detection (VESDA), and video image detection (VID). Produced fire detection and alarm layout drawings, riser diagrams and details, input/output matrixes, VESDA isometrics and calculations, logic diagrams, battery & voltage drop calculations, wiring details, fire detection and alarm

Daniel J Kascak (cont.)

catalog cutsheets, bill of material and points list

- Assisted Cleveland Estimating group with fire protection construction estimate by creating drawings, sketches, and preliminary designs of underground piping and fire detection and alarm systems to facilitate their work.
- Participated in multiple fire water system reviews and PHAs.
- Reviewed vendor drawings and specifications for dry chemical systems being installed in modular buildings.

Solvay Specialty Polymers, RADEL Filtered Resin Tanks Project, Mariette, Ohio. Fire Protection lead for the project which consisted of installing three new large vertical tanks containing flammable and combustible liquids. He coordinated the fire protection design with Solvay Project Team and Fire Chief along with their insurance carrier.

- Performed site walk down to determine that an adequate amount of space was available in the deluge valve house. Also surveyed existing fire protection supports attached to vertical tanks/vessels. Recommended new support utilizing U-bolts, instead of hangers, to the Solvay Fire Chief to better restrain the fire protection piping.
- Analyzed the Fire Hazards in the area to develop the loss prevention criteria with Solvay's Fire Chief and Insurance Carrier. He determined water densities and that the tanks should be protected from a pool fire. The pool fire protection scheme only requires protection up to 40 feet above finished grade. This resulted in a significant cost savings to the project since the entire height of the tanks did not require protection.
- Calculated fire water demand and analyzed the fire water supply and walked down the fire pump house and suction tank to determine that an adequate fire water supply is available.
- Created the preliminary design of a water spray fixed system to protect three vertical tanks and heat exchangers. The preliminary design was used to design the fire protection supports attached to the three vertical tanks and determine the locations of the support. The loads exerted by the sprinkler pipe on the vertical vessel were calculated and communicated to the tank vendor.
- Developed zone drawings and details for water spray fixed system to protect the three vertical tanks and associated heat exchangers.
- Created detail drawings to modify the existing underground fire water distribution system to accommodate new tank layout. Routed and sized mains, designed thrust blocks, and developed underground fire water details.

Case Western Reserve University, Mandel School of Applied Social Science, Cleveland, Ohio. Lead Fire Protection Engineer. Provided all the Fire/Life Safety Code analysis for this renovation of an existing university building. Performed all the fire protection design and analysis for the new sprinkler service, sprinkler system and fire alarm system.

Cleveland Clinic, Health Education, Dental Medical Campus, Cleveland, Ohio. Lead Fire Protection Engineer. Provided all the Fire/Life Safety Code analysis for this new dental building. Performed all the fire protection design and analysis for the new sprinkler service, sprinkler system and fire alarm system.

MICHELLE INOUYE, PLA, LEED AP BD+C
LANDSCAPE ARCHITECTURE DESIGN

With over 20 years of significant public and private experience, Ms. Inouye collaborates on long-range planning studies for major public initiatives and leads multi-disciplinary teams to solve and articulate complex design problems.

BACKGROUND

Ms. Inouye guides the creation of plans, specifications and estimates, coordinating with agencies to streamline project execution. Ms. Inouye also leads public presentations, meetings and workshops to facilitate the public engagement process; conducts construction observation services; pursues, expands and diversifies business opportunities through proposal preparation and cultivation of client relationships. She participates in professional organizations and educational opportunities to promote the landscape architectural profession.

TOTAL YEARS EXPERIENCE
24

EDUCATION
Bachelor of Landscape Architecture, University of Illinois-Champaign-Urbana

REGISTRATIONS/ACCREDITATION
Registered Landscape Architect, Illinois, Indiana, Minnesota

Council of Landscape Architectural Registration Boards (CLARB) certified

LEED Accredited Professional, Building Design and Construction

PROFESSIONAL AFFILIATIONS
University of Illinois - Urbana-Champaign – Resource Committee Member

American Society of Landscape Architects - Illinois Chapter

EXPERIENCE HIGHLIGHTS

Lake County, Courthouse Expansion, Waukegan, Illinois. Provided landscape architecture services to expand the existing county courthouse facility with a $110 million construction budget. Tasks include campus planning, design, construction documents and site observation of public realm spaces related to the construction of a new eight-story high rise courthouse tower, with a new underground tunnel connection to the existing facility and reconstruction of the existing bridge connection which are currently under construction.

Chicago Department of Planning and Development, Resilient Corridors Project, Chicago, Illinois. Currently serves as project manager for planning, design, construction documents development and permitting of stormwater landscapes on City-owned vacant parcels. Community stewards along three City corridors are engaged in discussion to determine passive and active spaces which will capture and store stormwater to mitigate flooding and enhance social liveability. Green infrastructure strategies will be monitored for effectiveness and other co-benefits may also be tracked using smart technologies. Project construction will include workforce development opportunities and community members will provide long-term maintenance.

Chicago Park District, Lakefront Trail Separation, Chicago, Illinois. Currently serves as design manager for planning and needs assessment to separate pedestrians from commuter bike traffic along the City's congested lakefront. Construction documents will be prepared for select segments and coordinated with ongoing design projects along this 18-mile length of regional park space.

WisDOT, I-39/90 Corridor Landscape, Illinois State Line to Madison, Wisconsin. Serves as landscape architect lead for this expansion project of 48 miles of interstate. AECOM is providing the program management for the improvement project. Three separate design consultant teams are coordinating roadway improvements; initial landscape guidelines look to ensure a consistent vision is implemented holistically, as a single corridor. The guidelines preserve and highlight the rich cultural assets of the south-central Wisconsin region by providing a framework to improve the landscape expression while meeting public safety and transportation needs. Design documents incorporate diverse seeding mixes and upper story plantings to address snow drift control, interchanges, bridge structures, noise

Michelle Inouye (cont.)

walls, and retaining walls. Thoughtful installation and maintenance programs will sustain growth of a visually memorable corridor and healthier wildlife network for future generations.

Chicago Park District, Humboldt Park Swimming Beach, Chicago, Illinois. Coordinated landscape development for a naturalized swimming area within a surrounding lagoon system. The existing pond water had been artificially sourced from municipal drinking water. AECOM studied site features, geology and disturbed aspects of the pond to understand water retention and loss, and water quality degradation aspects of the existing pond base. Vegetative buffers provide stormwater runoff treatment and increase plant diversity in this regional park. Working with engineers and ecologists, the pond redesign creates a sustainable swimming beach that enhances both active and passive park uses.

Metropolitan Water Reclamation District of Greater Chicago, Heritage Park, Wheeling, Illinois. Served as Project Manager for landscape architecture services. The stormwater side of the project provided compensatory storage for the Corps of Engineers and the Illinois Department of Natural Resources on the Des Plaines River on property owned primarily by the Wheeling Park District. As part of the Intergovernmental Agreement to complement land use, major site and recreational improvements to the park include a four-plex of ballfields, soccer fields, wetland and naturalized enhancements, a bandshell with viewing amphitheatre and an expansive path system including boardwalk and bridge crossings.

Chicago Park District, North Avenue Beach Planning Study, Chicago, Illinois. Served as Project Manager for a planning study at North Avenue Beach, a premier destination located along Chicago's Lakefront. The entirety of North Avenue Beach is well-known for conflicts between beachgoers, cyclists, pedestrians, and drivers, and although its amenities do generate revenue, this function is not fully optimized leaving prime opportunities untapped. The plan reviews the current conditions at the site, including revenue-generating activities, to propose strategies which would not only relieve circulation conflicts but also enhance all elements within the park. Such strategies will refresh the identity of North Avenue Beach, excite visitors by the diverse array of recreation, dining and shopping experiences and spur higher revenues.

Emmet County, Emmet County Observatory Facility, Emmet County, Michigan. Served as Landscape Architect Lead for site development of a new waterfront facility along the northern Michigan lakeshore. The former site of the McCormick Beach House, the facility is surrounded by woods within the 550-acre Headlands Park, awarded International Dark Sky designation in 2011. Select views of the water carry the visitor to the facility entry where an outdoor amphitheater interplays with the entry terrace and interior assembly room. Path, plaza and surface parking systems are carefully integrated into the rolling landscape to support wider park and Dark Sky programming.

Public Building Commission of Chicago, 31st Street Harbor, Chicago, Illinois. Served as Project Manager, overseeing design, construction documents, permitting and construction observation for a new Chicago Park District harbor. The marina scope included a ½ mile-long open coast stone breakwater designed to shelter the new harbor marina, as well as 1,000 new boat slips, an accessible fishing pier, on-site covered winter boat storage, a fuel dock, a marina store, dedicated shower facilities, and a public access boat launch ramp. A new 3/4-acre green space, was created using on-site fill on a peninsula of land formed by the breakwater.

The landside development included a harbor services building with a 63,000-SF accessible green roof, replete with sculptural shade structures and a great lawn. A new accessible play area that connects the green roof area to the existing beach replaces a smaller, outdated playground. A grade-separated trail underpass improved pedestrian and vehicular circulation, crucial to park accessibility. The development embraces environmental, social and economic sustainability, and received LEED Gold Certification.

City of South Milwaukee, Shoreline Park Planning Project, South Milwaukee, Wisconsin. Served as the landscape architect for site development of a significant 18.5 acres parcel along Lake Michigan. The site was home to the Northwest Barrel Company until the 1960's and ultimately designated a Superfund site because of soil contamination in the 1980's. The City retained AECOM to develop a Park and Ravine Restoration Plan to begin the process of converting the property into a public asset. The plan contains three main components which have been developed concurrently: stormwater management plan, a geotechnical / slope stability analysis for the ravine that traverses the site and, through a public engagement process that explored site issues and opportunities, a preliminary park plan identifying programmed spaces which complement surrounding uses and capitalize on natural site features.

ROGER S. LICHTMAN, AIA

DETENTION FACILITY DESIGN

Mr. Lichtman has been involved with the planning or designing of all types of criminal justice-related facilities totaling approximately 50,000 beds with an aggregate construction value of nearly $5 billion.

BACKGROUND

Mr. Lichtman is an architect and AECOM's Americas justice facility practice leader. Justice has been his specialty for more than 35 years, with 20 of those years as sole practitioner of criminal justice design services for local and state authorities, federal government, as well as for international clients. Mr. Lichtman's work reflects his advocacy for the client, staff, inmates, and the community. He has presented at dozens of workshops, lectures, and national design conferences and has testified as an expert witness for justice litigations

Mr. Lichtman's experience covers all aspects of criminal justice design on projects for jails, prisons, and youth detention centers. This includes architectural programming, needs assessment, studies, site selection analysis, master planning, security design, construction administration and documentation for new construction and for renovation/ rehabilitation projects.

TOTAL YEARS EXPERIENCE
41

EDUCATION
MBA, Business Administration, Rutgers University, 2013

Bachelor of Architecture, Pratt Institute, 1977

REGISTRATIONS/ACCREDITATION
Registered Architect, California, Maryland, Nebraska, New Jersey, New York, Pennsylvania, Ohio, Wisconsin

NCARB Certified

PROFESSIONAL AFFILIATIONS
American Correctional Association (ACA)

Architecture for Justice Committee, AIA (CAJ)

National Chair Emeritus 1996

American Jail Association (AJA)

NJ Chapter, American Correctional Association (NJACA)

Board of Directors 2003- 2004, 2007-Present

EXPERIENCE HIGHLIGHTS

San Mateo County Jail, Redwood City, California. Roger's role included the identification of needs and program, and with Planner, Dennis Liebert, planned and developed the design. The 768-bed jail is planned at a cost of approximately $150 million.

Montgomery County Correctional Facility, Norristown, Pennsylvania. Construction of a new jail facility on the campus of the existing jail, a new Work Release/DUI Facility; Roger's role was Design and Justice Architect for 512 beds. The 100,000 square foot facility was completed in 2011 at an approximate cost of $25,000,000.

Rock County Jail Expansion, Janesville, Wisconsin. Combination of new construction and renovation. Design & Architect; Renovation of 384-bed facility & addition of 6-level, 384-bed unit. Client: Robert Spoden, Sheriff.

City of Philadelphia, Youth Study Center, Philadelphia, Pennsylvania. Roger was charged with Programming and as Design Architect on this project. This included the repurposing and renovation of two buildings of the former Eastern Pennsylvania Psychiatric Institute (EPPI) for use as a juvenile facility. The design-build construction and renovation of the 96-bed facility in Philadelphia was completed in nine months. The 77,000 square foot project was completed in 2008 at an approximate cost of $10,000,000.

Kane County Jail, St. Charles, Illinois. New County Jail – Construction of new jail facility; Design and Justice Architect for 640 beds with shell space. Identified and implemented Design elements to make this facility an exemplary correctional and architectural statement. The facility houses inmates in twin towers consisting of 206,000 square feet. The total budget was approximately $70 million and the project was completed in 2008.

Camden County Youth Center, Blackwood, New Jersey. Programming and Design for new construction and renovation; 96-bed facility of four dual-stacked housing floors. The 64,600 square foot facility was completed in 2005 at an approximate cost of $16,000,000.

Saipan Program Management; Jail/Prison/Juvenile Facility/Public Safety, CNMI, Saipan. New construction of Juvenile, Immigration, & Detention Facilities; Public Safety Complex, including Police, Fire and Corrections. Planning, Design, Architect and Construction Management. Required

Roger S. Lichtman (cont.)

assessment of all facilities, including lockups on outlying islands; development of a full criminal justice master plan including a juvenile facility, adult jail, prison and immigration facility, law enforcement and fire facilities. The $5,000,000 juvenile facility was completed in 2002. The $20,000,000 adult facility was completed in 2008.

Toronto South Detention Centre, Toronto, Ontario, Canada. Roger provided correctional planning and design services to WZMH Architects & PCL Constructors for this design-build competition that was administered by the Ministry of Community and Correctional Services to replace existing jail facilities with a new maximum security centre. The facility consists of 1,650 beds and is expandable. At 360,000 sf, the facility is estimated at $150 million. It was designed for LEED Silver Certification along with the South West Detention Centre (Windsor, Ontario).

Cambria Correctional Center, Philadelphia, Pennsylvania. This is a most unique facility in that it is a medium security correctional facility renovated from a former factory building. Roger was responsible for the design of this facility and managed the construction for the City of Philadelphia. Completed in 2001, this state of the art facility represents a major renovation in an existing building without expanding beyond the original footprint. The facility holds 240 inmates and cost approximately $15 million to renovate.

Curran-Fromhold Correctional Facility, Philadelphia, Pennsylvania. Opening in 1995, the Curran-Fromhold Correctional Facility (CFCF) is the largest PPS facility. CFCF consists of four housing buildings and an administration/ core building. Occupying one full acre of the 25-acre facility is a cook-chill food production facility with the capacity to produce 40,000 meals daily. The project cost approximately $120 million. Roger managed the design process under the program/construction manager, Morse Diesel.

ASD Facility, Philadelphia, Pennsylvania. The City was under a Federal Court Order and this 200-bed facility had to be designed and constructed in record time. With a combination of "hands-on" program, design and construction, Philadelphia's state of the art facility went from concept to occupancy in seven months, and at a cost of approximately $10,000 per bed.

Pennsylvania Design-Build Correctional Facilities: SCI, Albion, Mahanoy, Somerset & Coal Townships, Pennsylvania. As prime and consultant to Morse Diesel/ The Temple Group, four separate 1,000-bed facilities were designed and built within a 600 day time frame contract period in the mid-90's. Roger's team developed the drawings for projects in Northumberland, Schuykill, Erie and Somerset Counties. The projects were all successfully completed, on time and under budget.

Okanagan Correctional Centre, British Columbia, Canada. The Okanagan Correctional Centre is a Partnership BC P3 project with a construction cost of nearly $200 million, located approximately five hours outside of Vancouver, British Columbia. The project includes all levels of inmate security. Based on a series of fundamental operating principles, the facility's design takes advantage of ample natural light; highly durable, low maintenance materials; and efficient staffing patterns. AECOM was the design component of the Design-Build-Maintain and Finance team, and Mr. Lichtman served as leader of the design team. Having been developed in 2013, the design submittals are currently under evaluation.

KRISTINE BISHOP JOHNSON, AIA, LEED AP

COURTHOUSE FACILITY DESIGN

Ms. Johnson has nearly two decades of design experience in the justice sector and understands the planning of courts and other judicial facilities.

BACKGROUND

Her experience with high security building types from programming through construction administration includes courthouses, correctional facilities, the FBI Academy, police substations, and American embassies. Ms. Johnson focuses on engaging the stakeholders to understand the organization's operations and maximize efficiencies.

TOTAL YEARS EXPERIENCE
18

EDUCATION
BA, Design, Clemson University

REGISTRATIONS/ACCREDITATION
LEED Accredited Professional

Registered Architect, Wisconsin, Maryland

PROFESSIONAL AFFILIATIONS
National Association for Court Management

US Green Building Council

National Council of Architectural Registration Boards

American Institute of Architects

PUBLICATIONS
Virginia Department of Education 2018 "Career Success Star" Profile

"Emerging Professional Profile: Kristine Johnson, AIA, "American Institute of Architects Academy of Architecture for Justice Journal, 2014 Second Quarter Issue

"Look At Us Now!," a new series of quick profiles of the success graduates are building on the foundation of their PWCS education. October 8, 2012

"Designing Your Courthouse to Meet a Prescribed Budget." Courts Today, Volume 9, No. 2, April/May 2011

Featured Project: Berkeley County Judicial Center. Blast: News and Notes from the Northern Virginia Chapter of the American Institute of Architects, Volume II, Issue 2, February 2008

EXPERIENCE HIGHLIGHTS

Travis County/ City of Austin, Austin, Texas. Courts architect responsible for consolidating courts program and developing design criteria documents for the consolidated Travis County and City of Austin Courts Complex.

Broward County Judicial Complex, Ft. Lauderdale, Florida. Architectural team member during construction administration for a 740,000 GSF new courthouse housing 74 courtrooms and additional hearing rooms.

Administrative Offices of the US Courts, Various Locations. Program and project manager providing services to the AOUSC including design intent document tasks for facilities located within Washington, DC, change management services and implementation of alternative workplace strategies in District Court/Bankruptcy Court offices in Buffalo, NY, and preparation/configuration of AutoCAD space plans for the Federal judiciary portfolio nationwide for integration into the JSPACE facility database management system.

Indianapolis Consolidated Justice Facility Pursuit, Indianapolis, Indiana. Courts planner for the new 266,000-gross-square-foot courthouse. The courthouse is one of four buildings to be located on the complex comprising over 1.2 million GSF located on over 49 acres. The high-rise courthouse houses 27 courtrooms and 10 hearing rooms on seven levels along with clerk of the court, court violations bureau, jury services, court transfer, and other administrative support areas. The project is a public-private partnership procurement model.

U.S. General Services Administration, Region 3 IDIQ, Various Locations. Project architect and Project Manager on the following two tasks: Judge Davis Chambers Renovation and Abingdon Courthouse Renovation.

- **Judge Davis Chambers Renovation, Garmatz Federal Courthouse, Baltimore, Maryland.** Project Manager and project architect for the tenant improvement of a 2,600-SF Judges Chamber space, including full renovation of all disciplines and extensive, traditionally designed custom millwork. The Judge and his staff have occupied their new space. All work was completed while the Garmatz building was occupied. Some construction activities were completed on off hours to facilitate minimal noise and disruption to adjoining judges' chambers and Bankruptcy courtrooms.

Kristine Bishop Johnson (cont.)

- **Abingdon Federal Building and Courthouse 1st and 2nd Floor Renovations, Abingdon, Virginia.** Project Manager and project architect for the tenant improvements for approximately 8000 SF of court and holding areas to include a grand jury suite, magistrate chambers expansion, jury room, United States Marshals Services administration areas, court holding, and U.S. Attorney space. This project will be constructed while the building is fully occupied and operational.

Montgomery County Department of Public Works and Transportation, Judicial Center Annex, Rockville, Maryland. Program verification and interior architecture team lead for the design of a new $88 million judicial center annex and renovation of the existing judicial center. Project manager during construction administration. The project consists of design of the new 191,000-square-foot courts tower with an additional parking level below grade and renovation of the existing 327,000-gross-square-foot courthouse. The annex was certified LEED Gold.

Maryland Stadium Authority, Baltimore City Circuit Courthouse Feasibility Study, Baltimore City, Maryland. Architectural team member for a feasibility study to determine the future needs of the circuit court system. The project includes updating the existing forecast, judgeship, personnel projections and space needs, as well as conducting a process improvement and visioning session to determine areas where efficiency enhancements can occur to save operational cost. AECOM is also analyzing and selecting various sites for a new criminal court facility and determining options for connectivity between the two existing court structures and the new criminal courts building. The project also includes looking at various funding options for the implementing the project and determining available historic tax credits for the renovations of the existing buildings.

Maricopa County, Criminal Court Tower, Phoenix, Arizona. Courts architect for the new 16-story high-rise courts tower, a 725,000-square-foot tower that will provide 32 criminal courtrooms, including 16 standard or large trial courtrooms and 16 courtrooms and court sets designed to serve the special requirements of the high-volume and specialty courts that so effectively serve the superior court system today. Design will provide appropriate security; separate circulation for judges, the public, and in-custody defendants; public spaces; and holding areas in configurations that accommodate the needs of the Superior Court (and especially the criminal division). The design also includes a new vehicular sallyport and central holding area, campuswide and building control center, in-custody holding areas with a separate secure circulation system, and a new public entrance. These areas will serve as the hub for an improved campus approach to security and safety.

Pima County/City of Tucson, Joint Courts Complex for Pima County and City of Tucson, Tucson, Arizona. Courts architect for the functional layout and design of the courtrooms. Project goals include the consolidation of judicial functions being housed in multiple locations throughout downtown Tucson into a new, 540,000 square foot courts complex; the development of a master plan that would accommodate growth over a 15- to 20-year period; the creation of a facility that would complement the city's downtown core; and the design of a functional, cost effective and energy efficient facility.

Roybal Federal Office Building & Spring Street Courthouse Expansion Study, Los Angeles, California. Architectural team member for six housing alternatives involving the Roybal Federal Office Building, Spring Street Court, and 300 North Los Angeles Street properties. Also managed a follow-on effort to examine in greater detail the scope, cost implications, phasing constructability, and impact to court operations of satisfying the courts requirements through an alternative housing plan.

General Services Administration, Southern Maryland US Courthouse Feasibility Study, Greenbelt, Maryland. Architectural team member for the feasibility study to address the long-term needs of the US court family and related agencies. It examines options responding to the stated 10-year need and identifies methods of expansion to accommodate the 30-year need. The in-depth study deals with issues including operational needs, vehicular and pedestrian loads, site conditions, blocking and stacking scenarios, phasing, constructability, estimated construction costs and leasing scenarios. The new facility will include various sheriff's facilities.

NCRRAF/William A. Jones III Building, Andrews Air Force Base (AAFB), Maryland. Courts planner for the 380,000-SF, five-story building that includes courtrooms, libraries, food kiosks, and a 1,204-space parking lot. The LEED Gold certified facility includes state-of-the-art technology for the Air Force staff.

Oakland County Department of Facilities Management, 52nd District Court Division 3 and Oakland County Sheriff's Substation, Rochester Hills, Michigan. Architectural team member for a new 48,000-square-foot, two-story facility to provide four court sets plus magistrate, public spaces, case processing, probation, holding cells, and support spaces, as well as parking for public, staff, and police. The 16,000-square-foot sheriff's substation will include public space, intake, squad room, detectives' investigations, administration, holding cells, and support space.

04
Budget

Budget

Budget Methodology and Cost Control

AECOM has developed a variety of methods to address the development and management of project budgets and cost estimates. While each project requires a unique approach to the budget and cost management process, the AECOM team has developed two basic strategies that we typically employ for our clients.

In the traditional project delivery design/bid/build approach, we utilize a proactive budget development and cost estimating process. At the commencement of a project, the AECOM team will work with Lake County to establish an overall construction budget that is reflective of your program requirements. Utilizing recent project experience, our AECOM cost database, and national cost information providers (such as RS Means), we will develop a construction budget based on collaboration between the various team members.

Once the design and documentation process is underway, individual cost estimates are developed during each project phase, (schematic design, design development, and construction documentation). The initial step in the budget/cost control process begins at the conclusion of the schematic design phase when the schematic design estimate is prepared. Typically, the estimate is based on square footage costs applied to project areas; it becomes the basis for future estimates. The schematic design cost estimate is reviewed and reconciled with the original project budget prior to proceeding to the next phase of work. At the conclusion of the design development phase, the schematic design cost estimate is revised, updated, and expanded to reflect the larger body of information that is a product of this phase of work. Similarly, the design development estimate is reconciled with the project budget and any required adjustments are made prior to the next phase of work. During the construction document phase, the documents are reviewed, and the cost estimate is revised to reflect the additional detail information available at the 50% completion milestone, with project budget reconciliation at both milestones.

If cost estimates are not in alignment, the project team can utilize a number of different strategies to reconcile budget/cost compliance issues including design revisions, material substitutions, system modifications, project area adjustments and detailed cost estimation verification to confirm the validity of the estimate.

In projects where an integrated project delivery approach is utilized, or when a project team includes a construction manager, the AECOM team typically will utilize a different approach to the budget development and cost estimation process. In projects utilizing IPD or a CM approach, the primary responsibility for the generation of the project budget and all cost estimating activities shifts to the cost manager and/or the construction manager. However, it is critical to the success of the project that the A/E team members are active participants in the process, providing the appropriate level of detail and information to the cost management team to verify this activity is completed accurately and efficiently. Together, the client, A/E firm, and constructor/construction manager will develop a budget and cost estimating process that all team members support. Budget development and cost estimating time lines, key milestone dates, along with information deliverables are reviewed, approved, documented and communicated to all team members.

Typical milestone dates for the project budget development, cost estimate and compliance reviews will be incorporated into the overall project schedule in order to communicate performance expectations for this activity.

AECOM has developed a “dual estimating” approach for large complex projects, where typical cost estimating strategies may not provide the level of detail and accuracy that is desired. In this approach, two cost estimates are developed, one utilizing “internal” AECOM staff and our national database of cost information, and the second estimate generated by a third-party cost estimating consultant. A comparative analysis is completed of both estimates providing key measurements of accuracy and defining where potential information and/or conclusion deficiencies may occur. This approach provides a “checks and balances” system that results in the most accurate information possible for the highly-complex, non-typical project.

Utilizing defined budget development and cost estimating strategies and a proactive approach to the review and compliance of project budgets and estimates, AECOM has developed a consistent track record of success in this aspect of project management.

Schedule Management

A well developed and maintained critical path method (CPM) schedule will serve as the foundation for the project. Our team will employ multiple schedule types and tools to communicate to all stakeholders and project partners the importance and impact of adhering to delivering project elements on time. The management philosophy of the AECOM team is that there can be only one master schedule. Maintenance and updating of the master design schedule is the responsibility of the project manager with weekly updates from the design team. It will reflect all tasks for each project stakeholder and project partner.

The AECOM team will work closely with you to develop and refine a high-level milestone schedule. This collaborative effort will happen immediately after the award of the contract. It is imperative that the milestones are driven by project needs and requirements. We will develop a detailed master schedule that incorporates all necessary activities, multiple phases and will initiate a weekly dialog to maintain alignment.

Value Engineering

We like to approach value engineering in a preemptive manner by redefining the task as Engineered Value. Our team's deep experience allows us to anticipate opportunities for efficiency and cost reduction. The AECOM team considers many factors when trying to engineer value. Elements like first cost, life-cycle cost, economies of scale, maximizing modularity, efficiency, sustainability, durability, and aesthetics all play a role in the design process.

Some ways value can be added to the process is by identifying additive or deductive alternates, understanding construction trade methods and using big picture understanding to make connections between seemingly unrelated issues. Because much of our team has worked together on several past and current projects, there is an understanding that identifying and executing strategies for reduced cost and increased efficiency is fully expected. All of these options get tracked throughout the process using the previously mentioned trend log, resulting in a well-coordinated, efficient and fiscally lean process void of surprises.

Designing to Meet Budgets

For the **Judicial Center Annex and Renovation**, Montgomery County realized the importance of a thorough programming stage as part of the design process. When the judiciary approached the county for funding, the county's budget did not match the court's projections. AECOM worked with the court, county, and other stakeholders to establish a revised program, develop a framework to meet the immediate need for 10 additional courtrooms, and prioritize consolidation needs and space requirements to support those additional courtrooms. The team was then able to explore additional cost saving measures that supported the expansion projections and also made the building complex more user friendly.

For the **Governor George Deukmejian Long Beach Courthouse**, AECOM factored in durability, resilience, and access to the justice system into the building's design, which responds to varying adjacent building heights, expresses the civic purpose of the court, and creates a less stressful experience for those within the building. The project was completed in August 2013, under budget and 11 days ahead of schedule.

Governor George Deukmejian Long Beach Courthouse, Long Beach, California

05

Quality of Documents

Quality of Documents

Our team's goal is to deliver the highest quality on each task and project for Lake County. AECOM is committed to a strong, proactive program of quality assurance and quality control (QA/AC). We have established and implemented a formalized Quality Control Program (QCP) to control project activities. The QCP complies with and is responsive to corporate quality policies, contractual client requirements and applicable regulatory requirements.

The QCP is documented by our AECOM Quality Management System (QMS) and supplementary plans, procedures and instructions specifying quality control requirements and organizational responsibilities for the implementation of these requirements. This QCP will be specifically tailored to Lake County's requirements. Our QCP standards enable our team to provide consistency and effectively manage numerous concurrent task orders.

Quality Management

AECOM offers Lake County a proven quality management system (QMS) that is certified to the internationally renowned ISO 9001:2008 standard, yet sufficiently flexible to address the specific requirements of this project. Quality management is central to our project management approach, and our project team includes individuals assigned to specific quality roles under our system. The general components of AECOM's approach to project quality management, and the parties responsible for them, are depicted below.

Initiating Quality. Quality begins with AECOM's understanding of your project goals and objectives, emphasizing communication with Lake County and a thorough review of project inputs. Assigning technically qualified and experienced personnel to produce and review the work is an important next step. Our initial planning and scheduling activities, including defining the various project work tasks and associated quality activities, are foundational to a successful project.

Producing Quality. AECOM requires a project plan on all projects to define key parameters and guide the work of the team. The plan is discussed at the project team kickoff meeting and updated as needed to inform the team of new developments. As work proceeds, a number of critical technical activities are undertaken, including:

- Proper application of codes, standards and design criteria
- Ongoing oversight and supervision for accuracy and completeness as work proceeds
- Distribution of in-progress documents at defined intervals for quality review
- Coordination among disciplines
- Verification of compatibility and consistency among document types, such as drawings and specifications
- Resolution and closure of in-progress review comments

Confirming Quality. While it is important to build quality into the work as it is performed, formal checking and review are critical QMS activities. Quality checking activities, which are all documented with two-level approvals, include:

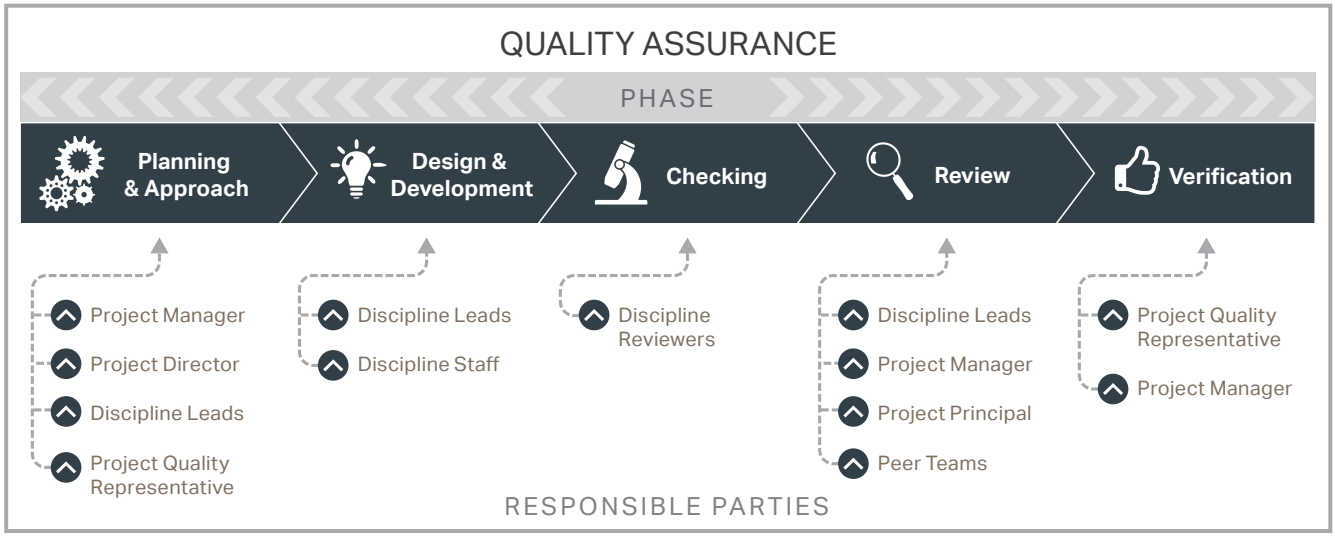
- *Checking calculations* to verify correctness and completeness of mathematics, methodology, selection of software, application of standards and codes, and general approach.
- *Checking drawings* within each discipline to confirm design layout, dimensions and details. Potential

interferences, conflicts and interface issues are resolved through interdisciplinary reviews.

- *Checking specifications* for content and application, as well as compliance with the prescribed format, and for consistency throughout the specifications.
- *Checking studies/reports* for content, logic, clarity and soundness of recommendations, as well as grammar, punctuation and format.

Delivering Quality. All deliverables undergo a final verification check before they are submitted. An independent reviewer evaluates the deliverable for completeness and consistency, adherence to quality requirements, and resolution of comments. The reviewer then signs a Deliverable Release form and transmits it to our project manager, who is then responsible for the final overlook, approval and submittal. This final independent evaluation assesses the submittal's state of readiness, without diminishing the project manager's accountability for the quality of the work being released. As a check-and-balance activity, this review pairing helps AECOM consistently deliver quality and value to our clients.

Improving Quality. A key component of AECOM's quality program and ISO 9001 is continuous improvement. We learn from our experiences and apply those lessons to future work through a formal, iterative process. The true focus of this process is to generate client satisfaction, one of AECOM's core values.



06

Appendix

Appendix: Forms

General Information Sheet

AUTHORIZED NEGOTIATORS:

Name: Bane Gaiser Phone #312-373-6644 Email: bane.gaiser@aecom.com

Name: _____ Phone #_____ Email:_____

RECEIPT OF ADDENDA: The receipt of the following addenda is hereby acknowledged:

Addendum No. 1, Dated September 10, 2018

Addendum No._____, Dated_____

In submitting this statement of interest, it is understood that the County reserves the right to reject any or all submittals, to accept an alternate submittals, and to waive any informalities in any submittal.

BUSINESS ORGANIZATION: (check one only)

____ Sole Proprietor: An individual whose signature is affixed to this proposal.

____ Partnership: State full names, titles, and addresses of all responsible principals and/or partners on attached sheet.

X Corporation: State of Incorporation: Illinois

____ Non-profit Corporation

____ 501c3-- U.S. Internal Revenue Code

By signing this proposal document, the proposer hereby certifies that it is not barred from bidding on a contract as a result of a violation of either Section 33E-3 or 33E-4 of the Illinois Criminal Code of 1961, as amended.

AECOM Services of Illinois, Inc.
Business Name

Signature

Bane Gaiser, AIA, LEED AP, NCARB
Print or Type Name

Vice President
Title

October 18, 2018
Date

References

Provide FIVE (5) references for projects. Governmental references are preferred over others. (Attach additional pages as needed)

Entity: Lake County

Address: 18 N County Street, 9th Floor

City, State, Zip Code: Waukegan, Illinois 60085

Name of Contact Person Kurt Schultz

Email Address: kschultz@lakecounty.gov

Telephone Number: 847-377-2461

Description of Services Provided: Architecture, Engineering

Date of Service: 07/____/2014 To Present/_____/_____

Entity: City of Chicago, Department of Fleet and Facility Management (2FM)

Address: 30 North Lasalle Street, Suite 1610

City, State, Zip Code: Chicago, Illinois 60602

Name of Contact Person Sean Neuert, RA, LEED AP

Email Address: sean.neuert@cityofchicago.org

Telephone Number: 312-744-5542

Description of Services Provided: Architecture, Engineering, Design, Construction, Permitting, Sustainability

Date of Service: 8/5/17 To Present/_____/_____

Entity: Kane County

Address: 1666 Albion Street

City, State, Zip Code: Denver, Colorado 80220

Name of Contact Person James Robertson, Owner's Representative

Email Address: robertson.vrjs@gmail.com

Telephone Number: 303-588-8018

Description of Services Provided: Mechanical/electrical/plumbing engineering, fire protection, physical and electronic security (AECOM), Architecture, design (Lichtman Associates)

Date of Service: ___/____/2008 To _____/_____/2008

Entity: Utah DOC, Central Utah Correctional Facility-Gunnison

Address: 14717 S. Minuteman Drive

City, State, Zip Code: Draper, Utah 84020

Name of Contact Person Steve Turley

Email Address: sturley@utah.gov

Telephone Number: 801-545-5633

Description of Services Provided: Architecture, structural and mechanical engineering, construction administration

Date of Service: 5/1/2014 To 4/21/2016

Entity: State Court Administrator (former Court Administrator Montgomery County, MD)

Address: 580 Taylor Avenue

City, State, Zip Code: Annapolis, Maryland 21401

Name of Contact Person Pamela Harris

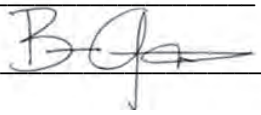
Email Address: pamela.harris@mdcourts.gov

Telephone Number: 410-260-1295

Description of Services Provided: Architecture, Interior Design, Building Engineering, Fire Protection, LEED Consulting, Construction Administration, Commissioning

Date of Service: 4/21/2011 To 5/31/2014

COMPANY NAME AECOM Services of Illinois, Inc.

AUTHORIZED SIGNATURE 

TITLE Vice President

DATE October 18, 2018

FIRM QUALIFICATIONS

Name and Address of Office from which this contract will be administered
(ATTACH ADDITIONAL PAGES AS NEEDED)

Name: AECOM Services of Illinois, Inc. (ASI)

Address: 303 E Wacker Drive, #1400
Chicago, IL 60601

Phone: 312-373-7700 Fax: 312-373-6800

Email Address bane.gaiser@aecom.com

Project Manager: Bane Gaiser (Principal in Charge/Vice President)

 # Years in Business: 23 (ASI) **Number of Employees**: 80,000 (AECOM)

Annual Sales: $ 18.2B (AECOM) **Dunn & Bradstreet #:** 961570798

Indicate if firm is a certified M/W/DBE and attach certification: _____

List employees who will be dedicated to the Project: (Attach additional pages as necessary)

NAME	POSITION TITLE	NUMBER OF YEARS	AREA OF RESPONSIBILITY/TASK EXPERIENCE
George Geldis	Project Manager	25	Overall project management and point of contact
Kevin Eagan	Security and Fire Alarm	22	Security and fire alarm system design
Daniel Kascak	Fire Protection	12	Fire protection system design
Michelle Inouye	Landscape Arch	24	Landscape architecture design and planning
Roger Lichtman	Detention Facility	41	Design of detention facilities
Kristine Johnson	Courthouse Facility	17	Design of courthouse facilities

About AECOM

AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organizations in more than 150 countries. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and environments, to stable and secure nations, our work is transformative, differentiated and vital. A *Fortune* 500 firm, AECOM had revenue of approximately $18.2 billion during fiscal year 2017. See how we deliver what others can only imagine at aecom.com and @AECOM.

aecom.com

Contract No. 18089