

experienced team | integrated design | secure and flexible solutions

A&E Services Capitol Campus Security Project Req# GSD126428

West Virginia Department of Administration General Services Division

Prepared by: AE Works Ltd. 101 W. Station Square Drive Fourth Floor Pittsburgh, PA 15219





February 7, 2012



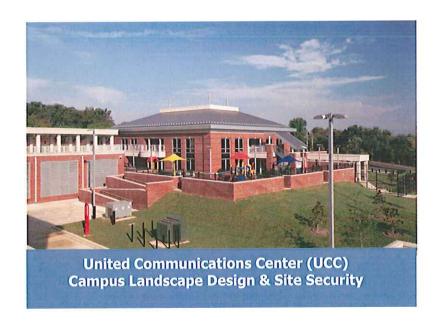
		LETTER OF TRAN	SMITTAL					
TO: Attn:	Ms. Krista Ferrell	FROM:	A Ework	S				
COMPANY:		DATE:						
Purchasir	ng Division		2/7/2012					
PHONE NUM	G COVER: pies EOI,							
FAX NUMBE	R:		sender's reference number: Req.#GSD126428					
			A&E Services for Ca Project	pitol Campus Security				
RE:		YOUR R	EFERENCE NUMBER:					
☐ URGEN	T	/ ☑ FOR YOUR USE	☐ PLEASE REPLY	☐ PLEASE COMMENT				
☐ SHOP D	PRAWINGS 🗆 L	ETTER □PRINTS	☑ OTHER					
Copies Date Description								
1	2/7/2012	1 original EOI for Req#GSD126428						
5	2/7/2012	5 copies EOI for Req#GSD126428						

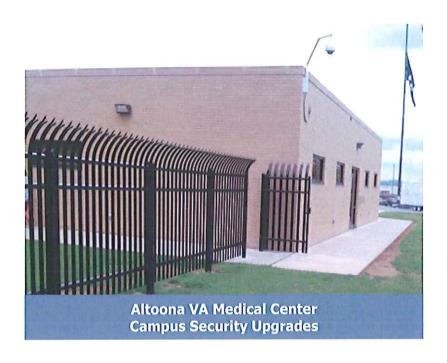
Notes/Comments:

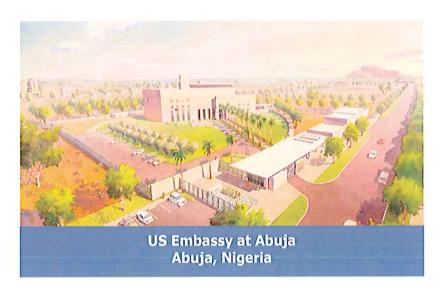
Nearly all of A|E Works' project experience has been planning and designing projects for 24/7 mission critical campuses for healthcare, government and science and technology communities.

With experience ranging from medical campus security and critical power design to secure government facilities and specialized healthcare and research building design design, our team's technical knowledge and resourceful design abilities will provide the service needed and solutions designed to meet the requirements of this Capitol Campus Security project.













February 7, 2012

West Virginia General Services Division Purchasing Division Attn: Ms. Krista Ferrell 2019 Washington Street, East Building 15 Charleston, WV 25305

SUBJECT:

Req# GSD126428, A&E Services for Capitol Campus Security Design

Dear Ms. Ferrell,

On behalf of AE Works Ltd. and our teaming partners, I am pleased to submit our proposal and indicate our interest to provide architectural and engineering services and serve the West Virginia General Services Division. We believe the extensive experience and subject matter expertise our team possesses will prove beneficial in order to ensure the successful completion of this critical Capitol campus security design. Our team possesses sufficient staff capacity and is able to mobilize immediately on this project and meet your desired schedule. For your consideration, we offer the following key qualifications:

- A Team with Deep Security Design Experience and Expertise: All A|E Works team members bring
 proven security planning and design qualifications. Highlighted significant experiences include the
 planning and design of over 20 public safety facilities; security assessment and threat evaluation
 for 15 Federal Courthouses; and multiple State Capitol and perimeter security projects. This
 relevant past project experience of our individual team members will provide invaluable insight and
 knowledge to deliver a durable, secure and aesthetically appealing design solution for this project.
- A Board Certified Physical Security Professional (PSP) and Registered Communications
 Distribution Designer (RCDD) Security Specialist: Security Specialist Anthony Frassetta, PSP, RCDD
 has devoted his career to security planning and design. Not only has Anthony designed and
 implemented security measures for government campuses, public safety and correctional
 institutions, but during his career he has also provided security assessment and threat evaluation
 for the NJ State House Campus and technology design for the Pennsylvania Criminal Justice
 Center perimeter protection.

As a former firefighter and regional firefighter trainer, Mr. Frassetta is not only dedicated to his profession, but he also brings direct understanding of the importance of implementing these designs to keep communities safe.

 Understanding of Designing, Operating, and Supervising Critical 24/7 Environments: Nearly all of A|E Works' project experience has been planning and designing projects for 24/7 mission critical environments for healthcare, government and science and technology communities. WV GSD A&E Services for Capitol Campus Security Project February 7, 2012 Page 2

Moreover, our team of professionals and consultants includes Firefighters and Trained Nuclear Power Plant Operators. These rare qualifications further demonstrate our team's understanding and ability to provide design solutions that meet the needs of complex operations with multiple and simultaneous demands.

A Landscape Architect with Proven Skill in Designing Secure, Welcoming and Vibrant Government
Campuses: At the onset of his career, proposed landscape architect, Jeff Lee from Lee and
Associates (lai), traveled to Mogadishu, Somalia to design the first prototype Embassy for our
government—based upon the Inman Commission recommendation for site setbacks and other
security measures; a mission that was a direct response to the bombing of the Marine Barracks in
Beirut.

Since that time, lai has completed several Pentagon projects and worked closely with the US Department of State to meet the challenges of creating secure site designs for global embassies. Of recent significance, lai led a Design Build Team to win The Pentagon 9-11 Memorial project. All of these projects, especially the memorial, came under intense scrutiny of multi-level, multi-jurisdictional security. Also of note, A|E Works has a current and ongoing working relationship with lai.

• An Integrated Design Team: A|E Works offers a full service, integrated architecture and engineering design team with proven campus security experience. We offer the West Virginia General Services Division a seasoned team with the collective knowledge necessary to ensure successful planning and design for this Capitol Campus Security project.

The design team outlined in this proposal offers extensive qualifications designing secure, welcoming and flexible designs for high-profile government clients and campuses. With national security credentials and experience ranging from medical campus security and embassies to State Capitol security assessments and public safety facility design, our team's extensive technical knowledge and resourceful design abilities will provide the service needed and design solutions fitted to meet the requirements of this Capitol Campus Security project.

We appreciate this opportunity to present our qualifications. We look forward to further discussing our qualifications during the personal interviews. Please do not hesitate to contact me should you have any questions regarding our proposal.

Sincerely,

Michael Cherock, PE, LC, RCDD, LEED AP

Principal, Founder and Owner mcherock@ae-works.com

412.287.7333

Table of Contents

Section	Tab
Signed EOI Documents:	1
Concept	2
Firm / Team Qualifications	3
Project Organization	4
Demonstrated Experience in Completing Projects of a Similar Size and Scope	5





RFQ COPY

AE Works Ltd.

Fourth Floor

TYPE NAME/ADDRESS HERE

101 W. Station Square Drive

Pittsburgh, PA 15219

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

Request for Quotation

GSD126428

ÞΛ	GF		
	40		
		L	

ADDRESS CORRESPONDENCE TO ATTENTION OF:

KRISTA FERRELL 304-558-2596

DEPARTMENT OF ADMINISTRATION GENERAL SERVICES BUILDING 1 ROOM MB60 1900 KANAWHA BOULEVARD, EAST CHARLESTON, WV 304-558-2317 25305-0123

Attn: Michael Cherock, 412.287.7333

DATE PRINT	ED	TER	MS OF SALE		SHIP VI	١		F.O.8,		FREIGHT TERMS
01/09/	2012									
BID OPENING DATE:		02/09/	2012			BID	<u>OPENIN</u>	G TIME	01	: 30PM
LINE	QUA	YTITY	UOP	ÇAT. NO.	ITEM NUMI	BER	į	JNIT PRICE		AMOUNT
0001		1	LS		906-07					
	A&E SE	RVICES	CAPI	TOL C	AMPUS SECU	ORITY P	ROJECT			
				EXPR	ESSION OF (EO)		ST			
r'	AGENCY	, THE	WEST	VIRGI	E PURCHASI	ON OF	GENERA	FOR THE L SERVIC	ES,	
	ARCHIT	ECTURA	L AND	ENGI	ONS OF INT NEERING SE SURES LOCA	RVICES	FOR C	AMPUS		
	VIRGIN	IIA STA	TE CA	PITOL	COMPLEX :	IN CHAR	LESTON	, WEST		
	BE SUE WEST V	MITTED IRGINI	IN W A STA	RITIN TE PU	NCERNING G TO KRIS RCHASING I AIL AT KR	TA FERR DIVISIO	ELL IN	THE FAX AT		
	DEADL		ALL	TECHN	ICAL QUES				•	
	ANY TE	ECHNCIA	L QUE	401T2	S RECEIVE	D WILL SSUED A	BE ANS	SWERED BY	1	
	DEADL I	INE HAS	LAPS NICAT	ED. ION:	ANY VERB	AL COMM	 UNCIAT	ION BET	VEEN	
	ONLY 1	INFORMA	TION	ISSUE	TE PERSON D IN WRIT ADDENDUM	ING AND	ADDEL) TO THE		
	BINDI					ecused by MacCollege				
	11/1	12	//	SEF DE	VERSE SIDE FOR TO	RMS AND CO	I NDITIONS			L
SIGNATURE	Irles	LE	1	- O.S.C 111		TELEPHONE 412.287.			DATE	2.7.12
TITLE Principal	NAME OF THE PARTY	F	^{EIN} 26-35	588925				ADDRESS CH	ANGES	TO BE NOTED ABOVE



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

Request for Quotation

GSD126428

ADDRESS CORRESPONDENCE TO ATTENTION OF:

KRISTA FERRELL 304-558-2596

DEPARTMENT OF ADMINISTRATION GENERAL SERVICES BUILDING 1 ROOM MB60 1900 KANAWHA BOULEVARD, EAST CHARLESTON, WV 25305-0123

304-558-2317

VENDOR	RFQ COPY TYPE NAME/ADDRESS HERE
Y	AE Works Ltd.
ND	101 W. Station Square Drive
R	Fourth Floor
	Pittsburgh, PA 15219
	Attn: Michael Cherock, 412.287.7333

01/09/	2012							
OPENING DATE:		02/09/	2012		BID	OPENING	TIME 01	:30PM
LINE	QUA	YIITA	UOP	CAT, NO.	ITEM NUMBER	UNI	PRICE	AMOUNT
	PERMIT STATE OF THE SOLE (TTED WI BUYER. BID.	THOUT VIO THE FOR	THE LATIO STAET ANY A	VENDOR AND THE EXPRESS WRITTEN N MAY RESULT IN BUYER NAMED ABO ND ALL INQUIRIES	CONSENT THE REJE VE IS TH	OF THE CTION IE	
	EXHIB	(T 10			DEGUIETTION	NO +		
					REQUISITION	NU.:		'
	ADDENI	DUM ACK	NOWLE	DGEME	NT			
	ADDENI	DUM(S)	AND H	AVE M	ECEIPT OF THE FO ADE THE NECESSAR /OR SPECIFICATIO	Y REVIS	CHECKED ONS TO	
		DUM NO.	d 1/17	/2012	Molas	2		
	NO. 2	Receive	d 1/33	/2012	Mohale	2	u)	
	NO. 3		• •					
	NO. 4							
	NO. 5							
	I UND	ERSTAND DDENDUM	THAT	FAIL AY BE	URE TO CONFIRM CAUSE FOR REJEC	THE RECE	IPT OF BIDS.	
	REPRE ORAL	SENTATI DISCUSS	ON MA	DE OR	DERSTAND THAT AN ASSUMED TO BE N ETWEEN VENDOR'S L IS NOT BINDING	MADE DUR REPRESE	ING ANY NTATIVES	
	~//		1	SEE RE	 VERSE SIDE FOR TERMS AND CO			
NATURE	Clas	1	/		TELEPHONE 412.2	287.7333	DATE	2.7.12
E Principal	المناه و المار	F	EIN	358892) F	AD	DRESS CHANGE	S TO BE NOTED ABOVE



RFQ COPY

AE Works Ltd.

Fourth Floor

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

Request for Quotation

GSD126428

PAGE

ADDRESS CORRESPONDENCE TO ATTENTION OF:

KRISTA FERRELL

\$ H - p T O

DEPARTMENT OF ADMINISTRATION GENERAL SERVICES BUILDING 1 ROOM MB60 1900 KANAWHA BOULEVARD, EAST CHARLESTON, WV

25305-0123 304-558-2317

Attn: Michael Cherock, 412.287.7333

TYPE NAME/ADDRESS HERE

Pittsburgh, PA 15219

101 W. Station Square Drive

DATE PRIN	LED	TER	MS OF SAL	Ė	SHIP VI	١	F.O.B.		FREIGHT TERMS
01/09/	2012								
BID OPENING DATE:		02/09/	2012			BID	OPENING TIM	1E 01	:30PM
LINE	QUAI	NTITY	YOP	CAT, NO.	ITEM NUM	3ER	UNIT PRIC	ΣĒ	AMOUNT
	INFORM SPECIF	ATION ICATIO	ISSUE) NS BY	D IN AN O		DENDUM ACAS SI	D TO THE IS BINDING	G. /	
					AE W	orks Ltd. C0	MPANY		
					2.7.12		TE		
	A CONTRACTOR OF THE PARTY OF	THIS A		UM AC	KNOWLEDGEI	MENT SH	OULD BE SU	вміттег	
	REV. 0	9/21/2	009						
	FOR BA	NKRUPT	CY PR L AND	OTECT VOID	ION, THE :	STATE M	ONTRACTOR AY DEEM TH SUCH CONTR	E	
	(1) HE THE BITHE BITHE BITHE	OR SHOOL OR ALL ODER, LODER LODER HODER HO	E IS NY DO (2) T N A C AS PR	AUTHO CUMEN HAT H ONTRA OPERL	RIZED BY TS RELATE: E OR SHE CTUAL REL	THE BID D THERE IS AUTH ATIONSH RED WIT	TIFYING TH DER TO EXE TO ON BEHA ORIZED TO IP, AND (3 H ANY STAT	CUTE LF OF BIND) THAT	
	A SIGN	NED EOI	MUST	2	ICE UBMITTED	TO:			
		10	1	ø see re	VERSE SIDE FOR TO	ERMS AND CO	DNDITIONS		
SIGNATURE	111.11	1/1		Z. 13575 175		TELECHONE	12.287.7333	DATE	2.7.12
TITLE	//CV	A Company	CINI					20 011110	
TITLE Principa	3]	F	EIN 26	-35889	925		ADDRES	SS CHANGES	S TO BE NOTED ABOVE

Principal FEIN 26-3588925 ADDRESS CHANGES TO BE NOTED A



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

REQ NUMBER GSD126428

ADDRESS CORRESPONDENCE TO ATTENTION OF:

KRISTA FERRELL 304-558-2596

DEPARTMENT OF ADMINISTRATION GENERAL SERVICES BUILDING 1 ROOM MB60 1900 KANAWHA BOULEVARD, EAST

CHARLESTON, WV 25305-0123

304-558-2317

RFQ COPY TYPE NAME/ADDRESS HERE AE Works Ltd. 101 W. Station Square Drive Fourth Floor Pittsburgh, PA 15219 Attn: Michael Cherock, 412.287.7333

DATE PRINT	ED	TER	MS OF SAI	E.	SHIP VI	V:	F.O.8,		FREIGHT TERMS
01/09/	2012								
BID OPENING DATE:		02/09/	2012			BID	OPENING TIME	01	:30PM
LINE	QUA	NTITY	UOP	CAT. NO.	ITEM NUME	BER	UNIT PRICE		AMOUNT
4	F E 2	PURCHAS BUILDIN 2019 WA	ING D G 15 SHING	IVISI TON S	INISTRATIO ON TREET, EAS 5305-0130				
	THE ECTHE EN	IVELOPE	LD CO OR T	NTAIN HE EO	THIS INFO I MAY NOT	ORMATIO BE CON	N ON THE FACE SIDERED:	OF	
	BUYER				KRISTA FE	RRELL-	FILE 21		
	EOI. N	10.:			GSD126428	3			
	EOI OF	PENING	DATE:		02/09/20	12			
	EOI OF	PENING	TIME		1:30 PM				
	то сон		OU RE		UMBER IN (NG YOUR E		IS NECESSARY		
	S. 1653 ESS 5.				PRINT CLI 2.287.7333	EARLY):			
	M/	1/2	//,	/ SEE RE	VERSE SIDE FOR TE			DATE	
SIGNATURE	Mcla	LLL	//		1	412.287.	7333	UATE	2.7.12
TITLE Principal	1000	F	EIN 26-3	588925			ADDRESS CH	ANGES	S TO BE NOTED ABOVE



State of West Virginia Department of Administration Purchasing Division 2019 WashIngton Street East Post Office Box 50130 Charleston, WV 25305-0130

Request for GSD126428

GSD126428

ADDRESS CORRESPONDENCE TO ATTENTION OF

KRISTA FERRELL 304-558-2596

RFQ COPY TYPE NAME/ADDRESS HERE AE Works Ltd. 101 W. Station Square Drive

Pittsburgh, PA 15219

Fourth Floor

Attn: Michael Cherock, 412.287.7333

DEPARTMENT OF ADMINISTRATION GENERAL SERVICES BUILDING 1 ROOM MB60 1900 KANAWHA BOULEVARD, EAST CHARLESTON, WV 25305-0123 304-558-2317

	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	TEA	MS OF SAL	E	\$HIP VI	Ą.	F.O.8;	FREIGHT TERMS
	17/2012							
BID OPENING	G DATE:	02/09/2	012	100000000000000000000000000000000000000		BID O		:30PM
LINE		QUANTITY	UOP	OAT, NO.	ITEM NUM	BER	UNIT PRICE	AMOUNT
				ADDEN	DUM NO. 1			
				l IDD DI	2011 1101 2			
							RESSION OF	
					ICH WAS U		IONALLY	
	TIMO	TED FROM	THE C	RIGIN	AL SOLICI	PATION.		
	AT CC	MO OLVD	TEV I	UE DI	D ODENING	משני א	ND TIME IN	
		ION 1.16				DAIE A	אוז מויודו מא	
)	DECI	TOM TITO	CHED		LAURINI			
1	EXPR	ESSIONS O	F INT	EREST	OPENING I	DATE IS	FEBRUARY 9,	
		AT 1:30					*	
	Pr. 184 St. 202					ordanocida i condizionen	tier - Francisco September 100	.
	* * * *	*****	****	*** E	ND ADDEND	JM NO.	1 *********	
001		L	S	9	06-07			
		1						
	A&E	SERVICES	CAPIT	OL CA	MPUS SECUI	RITY PR	OJECT I	
			i i					
1								
				Ì				
							· ·	
	****	** THIS	IS TH	E END	OF RFQ (	GSD1264	28 ***** TOTAL:	
1								
				1				
W.								
Υ								
	مر ا			SEERE	VERSE SIDE FOR T	ERMS AND CO	NOITIONS	
SIGNATURE	M	let l				TELEPHONE 41	2.287.7333 DAT	2.7.12
TITLE Pri	incipal	F	EIN 26-	3588925	i			ES TO BE NOTED ABOVE
L						ADDRESS	IN SPACE ABOVE LABE	LED 'VENDOR'



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

### Request for REQNUMBER Quotation

GSD126428

PAGE 1

ADDRESS CORRESPONDENCE TO ATTENTION CO KRISTA FERRELL 304-558-2596

A E Works 101 W. Station Sqaure Dr Pittsburgh, PA 15219

Attn: Michael Cherock, 412.287.7333

DEPARTMENT OF ADMINISTRATION GENERAL SERVICES BUILDING 1 ROOM MB60 1900 KANAWHA BOULEVARD, EAST CHARLESTON, WV 25305-0123 304-558-2317

01/31/2012  BID OPENING TIME 01:30PM  LINE QUANTITY UOP CAT NO MEMNUMBER UNIT PRICE AMOUNT	
	V. (2. (A. (A. (A. (A. (A. (A. (A. (A. (A. (A
THIS ADDENDUM IS ISSUED TO PROVIDE ANSWERS TO ALL TECHNICAL QUESTIONS SUBMITTED IN ACCORDANCE WITH THE PROVISIONS OF THE ORIGINAL EXPRESSION OF INTEREST (GSD126428).	
EOI OPENING DATE REMAINS: 02/09/2012 EOI OPENING TIME REMAINS: 1:30 PM	•
**************************************	•
001 IS 906-07  A&E SERVICES CAPITOL CAMPUS SECURITY PROJECT	
***** THIS IS THE END OF RFQ GSD126428 ***** TOTAL:	
SEE REVERSE SIDE PORTERING AND CONDITIONS  TELÉPHONE 412,287,7333  DATE 2.7.12	
Principal FEIN 26-3588925 ADDRESS CHANGES TO BE NOTED ABOVE	

GSD	1	20	6	4.	2	8
4 1 1 2		64	.,		2507	•

RFQ No.	 

## STATE OF WEST VIRGINIA Purchasing Division

### **PURCHASING AFFIDAVIT**

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

#### **DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

'Debtor' means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law, or any public body charged by law with the performance of a povernment function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE	
Vendor's Name: MCNAR CHER	CR
Authorized Signature:	Date: 131 12.
State of PENNSYTYANIA	• 1
County of AllEgreny, to-wit:	
Taken, subscribed, and sworn to before me this 3 da	y or JANUARY 2012
My Commission expires April 14	
AFFIX SEAL HERE	NOTARY PUBLIC TO UMM TO

NOTARIAL SEAL
JOANN RIZZO
Notary Public
PITTSBURGH CITY, ALLEGHENY COUNTY
My Commission Expires Apr 14, 2015

Purchasing Affidavit (Revised 12/15/09)

Provide a discussion of the project, anticipated concepts and your firm's proposed methods of addressing the concerns and concepts as explained in the Background, General Requirements and Project Description

Public facilities play an important role in our communities, benefiting both citizens and government with open, accessible venues to promote the advancement of the political process. Many campuses today face real security challenges, which necessitate the need to address safety concerns. Often, safety concerns are addressed to the detriment of the grandeur and aesthetics of our historic buildings. Defensive checkpoints, gates and barriers should not be the persisting impression of these important facilities. It is crucial that the beauty and wonder of the grounds and historic architecture remain the key visual elements of these prestigious campuses.

A|E Works believes that it is important to balance safety with public accessibility in efforts to attain a responsible security level. Working closely with the governing agencies, the A|E Works team will establish a comprehensive threat and vulnerability analysis of the existing campus and submit for review our recommendations for the most cost effective measures to mitigate the identified potential risks. The applied methodologies the team will utilize in our assessment and mitigation suggestions, where applicable and appropriate, will reference and incorporate the following recognized standards:

- CARVER Methodology For Target Analysis and Vulnerability Assessments
- FEMA 452 A How-To Guide to Mitigate Potential Terrorist Attacks Against Buildings
- FEMA 426, Reference Manual to Mitigate Terrorist Attacks Against Buildings
- FEMA 430, Site and Urban Design for Security Guidance against Potential Terrorist
- Unified Facilities Criteria, DOD Minimum Antiterrorism Standards for Buildings (UFC 4-010-01)
- Unified Facilities Criteria, Entry Control Facilities/Access Control Points (UFC 4-022-01)
- Unified Facilities Criteria, Selection and Application of Vehicle Barriers (UFC 4-022-02)
- Unified Facilities Criteria, Design and O&M: Mass Notification Systems (UFC 4-021-01)
- US General Services Administration (GSA) "The Site Security Design Guideline Manual"
- NIST- FIPS-201 FEDERAL INFORMATION PROCESSING STANDARDS
- Crime Prevention Through Environmental Design (CPTED)

Of note, applying the principles of CPTED will allow A|E Works to achieve the proper balance of safety and public accessibility by taking into account existing landscape and built environment elements, analyzing lines of sight to provide good visibility, while at the same time helping in minimizing the inclination to deploy overwhelming security applications. CPTED strategies rely upon the ability to influence offender decisions through natural surveillance and access control to prevent and minimize criminal acts. By combining the concepts of CPTED with the recommendations of the other recognized standards a mitigation plan will evolve that will deliver the desired balance of safety and public accessibility.

#### **Anticipated Concepts**

Possible design elements to be included in our assessment, planning and design efforts, include but are not limited to the following features and strategies:

- Vehicle Barriers
- Traffic Studies and Circulation
- Video Surveillance Systems
- Security Lighting
- Access Control Systems

Streetscape and landscape elements incorporated in our assessment, planning and design efforts may include the following features:

- Planters
- Signage
- Plazas and Fountains
- Trees, Shrubs

- Curbs
- Gates
- Benches
- Street and Parking Setbacks
- Vehicle Barriers
- Light-poles and flags
- Bike Racks

#### **Proposed Methods of Design and Project Sequence**

Government campuses embody the open political processes. Security design for these campuses must reflect vigilance and an accessible design that seeks to engage, not threaten community participation. The A|E Works team brings broad experience in government, institutional and critical healthcare security applications. Our approach to such projects includes:

- Understanding who the stakeholders are and making sure that they are included early on in the planning and design process.
- Facilitating an interactive planning and design process, working collaboratively with stakeholders to define goals and expectations.
- Insuring that there is a bottom up data gathering process layered on top of a top down decision making process.
- Being attentive to the project schedule so decisions are made in a timely fashion.
- Making budget a priority realizing that other funds are not readily available and being vigilant about design costs and how they translate to final construction costs.
- Providing alternative solutions to help the team better determine the "Best Value" solution.

#### Planning and Programming Phase

In an effort to better understand requirements and operational concerns for the Perimeter Security improvements, A|E Works will focus on the engagement of key West Virginia General Service Division (GSD) and JITEC's stakeholders, as well as state technical and first responder representatives in active discussions to define and assess project requirements and goals. This information will then be evaluated, filtered, prioritized and translated into project requirements that will guide the design. In preparation for developing appropriate design solutions, this interactive planning process is the first crucial step in defining project goals, objectives, and requirements.

CPTED will be only one of the critical aspects in these discussions. Attention to natural surveillance, access control, territoriality and maintenance effort will be important tools in enhancing the Capitol Complex, providing a welcoming yet secure campus that incorporates recommended practices identified by the applied standards and codes. The design features incorporated into the Security Design will be selected to harmonize with the aesthetics of the existing surroundings and facilities. Managing risk with a flexible and maintenance affordable solution, the A|E Works design will provide visual management and control of the entire State Capitol Campus.

Our use of CPTED will focus on four key considerations:

- 1. **Surveillance**: We will investigate ways to increase visibility to enhance the ability of security personnel to see what is going on in and around the Capitol. We will make note of landscape and architectural elements that threaten visual control of the campus.
- Access Control: The design team will analyze traffic circulation and volume, including foot and vehicular traffic.
   Multiple barrier points will be considered and discussed for different levels of security and types of traffic, including deliveries, pedestrians and vehicle traffic.
- 3. Territoriality: The A|E Works team will investigate incorporating a fence, shrub or other perimeter barrier to clearly identify where the campus, secure space begins. Visible security such as this helps to alert that adverse actions are likely to be spotted and result in law enforcement action.
- 4. Maintenance: Without proper maintenance, security measures often become futile. A|E Works' goal is to provide a safe and open campus that supports, not challenges the activities of the government. Our team understands that the perimeter security design should enrich the campus, not deter from the beauty and prestige of the Capitol. We try to avoid systems that have not been tested over time in similar facilities and therefore, costly to repair and/or maintain. Our team has ongoing relationships with national security vendors and can bring to bear our resources to the WV GSD advantage.

Design possibilities that result from our use of CPTED may include the following systems and strategies:

- Addition of windows or openings in walls
- Replace walls with fencing that blends into the landscape
- Design features such as plantings and fountains that serve dual purposes to enhance aesthetics and provide site barriers
- Eliminate hardscape elements that attract attention to spaces with limited security visibility
- Obstruct access to areas with limited visibility
- Convex Mirrors
- Physical patrols
- Electronic Surveillance

In conjunction with the initial CPTED, recommended practices and standards-based planning effort, A|E Works will lead key WV GSD stakeholders through a threat and vulnerability analysis. Within the context of the proposed site and adjacencies, certain criteria may be positively affected or compromised requiring a more detailed review of needs and specific measures to be implemented. Mitigation measures will be evaluated with the WV GSD to determine the most critical to be incorporated in the design of the new security measures and upgrades.

The following items, among others, will be discussed as a part of the planning and design for these facilities:

#### Site Planning

- Stand Off Distance/ Force Protection
- Access Control

- Delivery and Service Entries
- Security and Site Monitoring

#### **Architectural Design**

- Appropriate Design Statement for the Capital
- Increased Strength of Glazing and Glass Framing Systems
- Passive Security (architectural) Design vs. Active Security (Electronic) Design

In addition to the concepts and methodologies outlined above, in order to further assist the team in better understanding, developing and executing the project, A|E Works will utilize the S.W.O.T. methodology in project analysis. The technique helps in the identification of key strategies, processes, goals and risks.

#### S.W.O.T. Project Analysis

- Strengths: will be the characteristics of the technologies, current infrastructure, environment and existing conditions, installation processes, schedule, and site accessibility that will bring advantages relative to the success of the project.
- Weaknesses (or Limitations): will be the characteristics of the technologies, current infrastructure, environment and existing conditions, installation processes, schedule, and site accessibility that are perceived disadvantages relative to the success of the project.
- Opportunities: will be the chances to improve system performances, facility operations, overall safety and security of the campus based on selection of technologies, available infrastructure, prevailing environmental conditions, or installation processes.
- Threats: could be internal or external elements to the project process which can negatively impact project schedule, operations of the facility or disruption of construction services (i.e. equipment lead times, lay-down space, continuity of Government, access to site, labor disputes).

#### Design Phases

After clearly defining project goals during the Planning and Programming Phase, the A|E Works team will develop several design solutions that feature different site and security arrangements that optimize budget while fulfilling project requirements and addressing project phasing needs. The entire team will review and discuss the alternate design solutions and phasing approach, selecting an appropriate option and sequence of work. With a well-defined approach, and appropriate approach to phasing, the project strategy is finalized, continuing to balance, cost, quality, scope and time alongside client goals and expectations.

As A|E Works moves through design phases, our project team is managed through the development and monitoring of a detailed work plan that outlines regular/planned meetings throughout the development and completion of the design with appropriate participants, including owner representatives. The constant communication and milestone cost estimates will assure the WV GSD that the design of these systems, integration with other systems, and cost are all monitored in a fluid process as the design evolves.

#### **Bidding and Procurement Phase**

The bidding and procurement phase is a critical phase of this Security project. A|E Works will work closely with the project team to establish the needed bidding documents and assist in the development of the bid packages. Responses to bidders' requests for information and timely addenda releases will provide the flow of information required in a compressed project schedule. Lastly, we will assist with evaluating bidders following receipt of bids in order to assist the WV GSD with an award to the most responsible bidder.

Concept Tab 2

#### **Construction Administration Phase**

Careful administration of construction contracts is instrumental to delivering a quality project on time. Our team has experience with many government campus and security projects and places a priority on formalizing communication procedures for job meetings, correspondence, schedules, notices, requisitions, etc. to ensure that construction moves along smoothly and is coordinated with the daily operations of the facility.

A|E Works Project Manager, Anthony Frassetta, PSP, RCDD will closely monitor the construction schedule to ensure that shop drawings and other contractor submittals are submitted and processed in a timely manner. We will use a computerized log to track the dates when clarification is requested, issued, received, and sent back to the contractor. During this phase, A|E Works typically visits the site at intervals appropriate to the stage of construction. Our team will develop a punch-list of non-conforming work that must be completed or corrected.

Our post-construction services will address the final completion of the project and completion of the punch-list. All deliverable documents from the Contractor will be monitored for compliance to the requirements. "As-built" information will be obtained from the Contractor which documents changes in the project from the contractors' ongoing records. This information will be used in the creation of "record documents" to be subsequently issued to the WV GSD for their use and facility operations and maintenance.

#### Discussion of Similar Previous Projects and How These Issues Were Resolved

With concentrated expertise and experience on relevant government and healthcare campus security projects, we are uniquely qualified to fulfill the requirements of planning and design for security and public safety facilities. Backed by a team of technical leaders with proven government and mission critical design in the deployment of fully integrated security management and site perimeter security platforms - from correctional and healthcare campuses to 911 centers and emergency operations facilities, we have the necessary qualifications to provide fully integrated, secure design solutions employing open architecture based technologies in a competitive procurement forum.

A|E Works' recent experience includes campus-wide security upgrades for 3 VA Medical Center campuses, totaling over 3 million square feet. Moreover, proposed Project Manager and Security and Technology Specialist, Anthony Frassetta's portfolio of experience prior to joining A|E Works includes threat and vulnerability assessments and security and technology design for high-profile government campuses, including nationwide Administrative Office U.S. Courts locations; NJ State Capitol; Cabell County, WV Emergency Response Center; Williamsport, PA Army Reserve Readiness Center; as well as multiple state and local correctional institutions.

Our extensive campus security experience has included projects that needed to embody vigilance while addressing the importance of privacy and dignity in patient-centered environments. For example, the Altoona VA Medical Center Security Upgrade introduces new systems and improves existing technology that directly impacts overall operations at over 7,000 points. A|E works was careful to avoid systems that had not been tested over time in similar facilities and therefore, costly to repair and/or maintain. A|E Works was also vigilant to incorporate design elements that were contextual to the existing campus design, making sure that the security design enhanced operations, not challenged them.

In addition to the Altoona VA Campus upgrades, A|E Works served an integral role for Campus-Wide Security Upgrades at the Bath VA Medical Campus. To make use of precious, limited budget while integrating sustainable design aspects in a contextual manner, A|E Works design integrates with the campus' current system while providing a modern approach to security. Wireless mesh systems are used to provide cost effective, sustainable solutions that do not impact the visual

appeal of this historic medical government campus.

Proposed Principal-in-Charge and Project Manager, Richard Witt, AIA and Anthony Frassetta RCDD, PSP have completed security and public safety projects prior to joining A|E Works, including Correctional Campus Perimeter/Access Control Design, Emergency Services / 911 Centers and Mission Critical Emergency Operations Centers. Our team brings demonstrated ability in delivering durable, secure design solutions that embrace an open, accessible environment. With Richard and Anthony's technical and management expertise, along with their past relevant experience prior to joining A|E Works, they are well-suited to lead the A|E Works team in meeting WV GSD and JITEC's goals for this project.

In addition, the A|E Works team includes Lee and Associates (lai), a landscape architect with proven skill in designing secure, welcoming and vibrant government campuses. LAI has completed several Pentagon projects and worked closely with the US Department of State to meet the challenges of creating secure site designs for global embassies. As a Washington, DC firm, LAI has addressed security in many forms locally and abroad. They are strong proponents of security measures should blend into the site and be sensitive to the scale, character and context of the surroundings while still fulfilling the requirements of the site security. The following examples highlight LAI's ability to integrate security measures in thoughtful and welcoming campus landscape designs.



**Department of Transportation Headquarters** - Site security was paramount at the DOT headquarters in Washington, DC. LAI designed plantings, a wall and water feature which not only provided an amenity, but also provided a site barrier.

Tab 2



At the **Unified Communications Center in Washington DC**, site security was addressed with a perimeter fence, but also with a landscape wall that blends into the landscape.



At the Walter Reed Army Medical Center, LAI designed a landscape and boulder placement that provide a perimeter control at the 16th Street entrance gate as well as an enhancement to the existing landscape.

Tab 2

The design team outlined in our proposal offers extensive experience designing secure, durable and flexible campus designs. In addition to completing several critical, correctional, governmental, hospital and laboratory projects as well as emergency operations and communications projects, our team brings national security design credentials.

With experience ranging from campus security, landscaping, lighting and critical power systems design to redundant systems and specialized applications for correctional, governmental, healthcare and research facilities design, our team's extensive technical knowledge and resourceful design abilities will provide the service needed and design solutions fitted to meet the requirements of this Campus Security project.

Provide the name, address, phone number e-mail address and signature of the firm's contact person responsible for the project and having full authority to execute a binding contract on behalf of the firm submitting the proposal.

Michael Cherock, PE, LC, RCDD, LEED AP - A|E Works Principal, Founder and Owner 101 W. Station Square Drive, 4th Floor Pittsburgh, PA 15219 Ph: 412.287.7333 mcherock@ae-works.com

Signature:

Michael Cherock, PE, LC, RCDD, LEED AP - A|E Works Principal, Founder and Owner

Provide the names, function and resume of individuals within the lead firm's organization who will be assigned to this project.



#### Qualifications of Key A | E Works Personnel

For the Capitol Campus Security project, A|E Works presents a team of seasoned, licensed professionals with extensive relevant experience with security design standards for high profile government campus settings and mission critical facilities. For this project, key team members and corresponding roles include:

- Anthony Frassetta, PSP, RCDD: Project Manager, Security and Technology Specialist
- Richard Witt, AIA: Principal-in-Charge and Lead Architect
- Scott Kraynak, PE, LEED AP: Engineering Principal-in-Charge and Electrical Engineer

These A|E Works team members bring national security credentials and the following key professional registrations and certifications that are directly applicable to this project.



#### Board Certified Physical Security Professional by ASIS International

The intent of this certification is to provide employers a means of knowing that an individual has a high level of knowledge pertaining to physical security.



#### Registered Communications Distribution Designer (RCDD)

Established in 1984, RCDDs demonstrate knowledge in the design, integration and implementation of information technology systems (ITS) and related infrastructure components.



#### Registered Architects with the American Institute of Architects (AIA)

The AIA has been the leading professional membership association for licensed architects, emerging professionals, and allied partners since 1857.



#### **Professional Engineers**

The term Professional Engineer and the actual practice of professional engineering is legally defined and protected by a government body.



#### LEED Accredited Professionals by the U.S. Green Building Council (USGBC)

LEED addresses all building types and emphasizes state-of-the-art strategies in five areas: sustainable site development, water savings, energy efficiency, materials and resources selection, and indoor environmental quality.

With concentrated expertise and extensive experience on relevant campus security and public safety projects, we are uniquely qualified to fulfill your program requirements. The chart on the following summarizes our project team and technical leaders' key qualifications.

Key A   E Works Team Qualifications							
Name	Role	Years of Exp.	Campus/Facility Security Projects	Government & Mission Critical Projects	Threat & Vulnerability Planning Expertise	Proficiency with security systems technology	Special Qualifications
Tony Frassetta, PSP, RCDD	Project Manager / Security & Technology Specialist	35	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	Board Certified Physical Security Profession, Registered Communications Designer. Career devoted to security design – projects ranging from Federal Courthouses to State Capitols. Firefighter for 20 years.
Richard Witt, AIA	Principal-in- Charge and Lead Architect	23	<b>V</b>	<b>✓</b>	<b>/</b>	<b>✓</b>	Registered Architect. Involved in the planning & design for 20+ public safety facilities.
Scott Kraynak, PE	Engineering Principal, Electrical Engineer	21	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	Registered PE; LEED Accredited; Trained Nuclear Power Plant Operator. Proven leader.

### A|E Works Firm Introduction

AE Works Ltd. (AE Works) is a full-service architectural and engineering firm with broad experience planning and designing mission critical buildings. Our experience ranges from government campus security designs and municipal support facilities to mission-critical training and specialized hospital facilities design. Of note, our team is currently providing technical and design solutions for three VA Medical Center campus security upgrades which encompass over 3 million square feet. Highlighted recent, relevant A|E Works' projects include:

- Altoona VA Medical Center Campus Security Enhancements, Altoona, PA
- Altoona VA Medical Center Main Hospital Community Living Center, Altoona, PA
- Altoona VA Medical Center Rehabilitation Department Addition, Altoona, PA
- Armed Forces Retirement Home Infrastructure Upgrade and IT Center Relocation, Washington, DC
- Bath VA Medical Center Campus Wide Security Upgrade, Bath, NY
- Beaver Falls Municipal Authority Maintenance Support Facility, Eastvale, PA
- EQT Office and Control Room, Pittsburgh, PA
- Lebanon VA Medical Center New Generator, Main Hospital Building, Lebanon, PA

- Martinsburg VA Medical Center Substance Abuse Treatment Program Domiciliary, Martinsburg, WV
- Philadelphia VA Medical Center Campus Wide Security Re-key, Philadelphia, PA
- Philadelphia VA Medical Center Main Medical Lab Renovation – Phase I & II, Philadelphia, PA
- Pittsburgh VA Healthcare System Building 51 Inpatient Renovations, Pittsburgh, PA
- US Army Corps of Engineers Fort Totten Army Reserve Center Training Renovations and SCIF, Bronx, NY Communications Room
- US Army Corps of Engineers, Jefferson Parish Stormproofing, LA
- US Coast Guard Rescue Swimmer Training Facility, Elizabeth City, NC

#### The A | E works Difference

A|E Works was founded on three core principles - Leadership, Integrity, and Craftsmanship. We will utilize these principles to provide the West Virginia General Services Division with the highest level of Architectural and Engineering services.

In addition to our proven mission critical planning and design experience, we believe that A|E Works offers the following unique qualifications to successfully complete this Capitol Campus Security project:

- A Proven Multi-disciplinary Team: A|E Works offers a full service, integrated architecture and engineering design firm. While our firm is relatively new (formed in 2007), our team includes seasoned, licensed professionals with requisite experience on complex campus security and mission critical projects. We invite you to review the individual resumes that follow in this section to see the work of each team member while at A|E Works, in addition to relevant campus security experience prior to joining A|E Works. We will provide the West Virginia GSD with a collaborative team architects and architectural engineers working closely every day.
- Cross Discipline Training: We require our staff in all disciplines to receive continuing education in design
  fields outside of their own expertise. This unique training program, which we call "cross-training," aids in
  our overall QA/QC process and allows our project documents to be fluid, adaptable and highly coordinated.
- A Balanced Approach: We utilize a "3 principal structure" principal-level direction for architecture, project
  management, and engineering, assuring the West Virginia GSD of proven technical expertise from project
  inception through close-out.
- Innovative Use of Smart Building Technology: A|E Works is one of the only small firms offering complete BIM (Building Information Modeling) capabilities with an in-house team dedicated to REVIT Architecture and REVIT MEP.

Key A|E Works resumes follow this page with consultant team member qualifications to follow in section C of this Tab.

## Anthony Frassetta, PSP, RCDD

Project Manager and Security and Technology Specialist

#### Years of Experience: 35

#### Education

Associate / Mechanical Engineering

#### Registrations

- Physical Security Professional (PSP)
- Registered
   Communications
   Distribution Designer
   (RCDD)
- NICET Level III, 1994
- NFPA 1001 Firefighter
- NFPA 1002 Fire Apparatus Driver/Operator
- Department of the Navy - Ship Board Firefighting
- Department of the Navy - Aircraft Crash/Rescue
- Philadelphia Electric Company – Fire Training Academy
- Amtrak Training Facility
   Railcar Firefighting and Rescue

#### **Publications**

- Contributing Author, BICSI Electronic Safety and Security Design Reference Manual 2nd Edition(ESSDRM), 2009
- Contributing Author, BICSI Electronic Safety and Security Design Reference Manual 3rd Edition(ESSDRM), 2012
- Published Author, BICSI News, Specifications and Contracts March/April 2010

Mr. Frassetta has devoted his career of thirty-five years to security planning and design. His expertise covers a broad range of applications in physical security and telecommunications and spans both the contracting and professional consulting industries.

As a board certified Physical Security Professional (PSP) and Registered Communications Distribution Designer (RCDD), Anthony has designed and managed an extensive list of government and institutional projects. He has conducted training seminars for local code officials and specifying engineers in the application of new life safety, security, and network technologies as well as instructional seminars on installation techniques and code applications to electrical contractors for special systems applications and installation.

In addition to Mr. Frassetta's achievements in the engineering profession, he brings a long history of serving his community. An active firefighter with the Warminster, PA Fire Department from 1974 to 1994. Anthony's specialized training covered not only basic fire fighter skills, but also included advanced training in heavy rescue and ladder company operations.

As an active firefighter, Mr. Frassetta has had numerous opportunities to train at many regional fire training facilities including Bucks County, PA; Montgomery County, MD; PECO and the U.S. Navy. Anthony's dedication to his profession and his strong commitment to his community has provided a greater level of experience and knowledge to all his project assignments.

#### **Highlighted Experience**

Anthony has served in significant senior technical and management roles for the following projects, among others:

Bath VA Medical Center Campus Wide Security Upgrades, Bath, NY: Security design to upgrade campus wide security, adding access controls to 10 buildings.

Philadelphia VA Medical Center Campus Security Upgrade, Philadelphia, PA: This project upgrades the keying system at the entire medical campus, which includes over 1.5 million square feet.

USAR and ARNG Readiness Center, Department of Military and Veterans Affairs Williamsport, PA: Provided technology designs for perimeter protection, access control, network and SIPRNET communications fire alarm, and mass notification systems for a new 67,491-SF readiness center and a new 7,276 –SF vehicle maintenance facility.*

*Completed prior to joining A|E Works

## Anthony Frassetta, PSP, RCDD

Project Manager and Security and Technology Specialist

#### **Professional Affiliations**

ASIS BICSI NFPA

#### **Manufacturer Training**

Video Surveillance Systems: BOSCH, VICON, PELCO, AXIS

Access Control Systems: LENEL, Hirsch, DSX, S2

Fire Alarm and Mass Notification Systems: Siemens Pyrotronics, Notifier, Fire Control Instruments, Federal Signal

Aspiration Fire Detection: VESDA, FAAST

Intercommunications Systems: Rauland Borg, Dukane, Ai-Phone, TOA, Talk A Phone: Administrative Office U.S. Courts (AOUSC), Washington, DC: National security consultant to U.S. Courts. Provided Security assessment and threat evaluations of Thurgood Marshall Federal Judiciary Building and the 2nd, 3rd, 4th, 6th and 11th circuit Federal Courthouses.*

**New Jersey State Capital, Trenton, NJ:** Provided Security assessment and threat evaluation for the State House Campus and prepared all design development documents and cost estimates for the proposed security mitigation requirements.*

Cabell County Emergency Response Center, Huntington, WV: This new 13,000-SF Emergency Response Center includes all facilities required to support the County Emergency Operations Center, 911 Call Dispatch Center and Emergency Management Staff.*

Pennsylvania Criminal Justice Center, Harrisburg, PA: Provided technology design for perimeter protection, access control, video surveillance, network communications, fire alarm, and media management systems for the 9 story 325,000-SF facility.*

Plaquemines Parish Detention Facility Davant, LA: In cooperation the with FEMA provided the designs and project management for the installation of a new campus-wide integrated security management platform, new perimeter security upgrades, video surveillance, automatic license plate recognition(ALPR), mass notification and data\telecommunication systems .*

Chatham County Detention Center Expansion, Savannah, GA: Provided designs and project management for the installation of a new campus-wide integrated security management platform, new perimeter security upgrades, video surveillance, mass notification and data\telecommunication systems.*

Monmouth County Correctional Institution, Multiple Projects, Freehold, NJ: Multiple projects include main entrance ballistic hardening and vehicle sally port gate and fence replacement.*

Mercer County Criminal Courthouse, Trenton NJ: Provided security Master Planning and design for perimeter protection, access control, video surveillance, network communications, fire alarm, and media management systems for the 143,335 SF Court House and contiguous perimeter. *

^{*}Completed prior to joining A|E Works

#### Years of Experience 23

#### Education

Bachelor of Architecture

#### Registrations

Registered Architect, West Virginia and 9 additional states NCARB Certified

#### **Affiliations**

American Institute of Architects

#### **Public Safety Studies**

Cambria and Somerset Counties, 911 Needs Analysis*

City of Cambridge, Police Dept. Needs Assessment, Cambridge, MA*

City of New Orleans, Needs Assessment for the Relocation of the City Police Dept. Headquarters* Mr. Witt is an A|E works Principal and seasoned architect and project manager. He has worked on a broad range of municipal, government and public safety projects throughout his career including Emergency Communications and Emergency Operations Centers.

Richard is well-versed in providing design solutions for critical 24/7 public safety facilities. His proficiency in conducting threat and vulnerability assessments will prove invaluable in the development of the design for this Capitol Security project.

Richard will serve as Principal in Charge and Lead Architect, leading the project team to plan and develop a design that embraces operational integrity and efficiency.

#### **Highlighted Experience**

Richard has served in significant senior technical and management roles for the following projects, among others:

Philadelphia VA Medical Center Campus Security Upgrade, Philadelphia, PA: This project upgrades the keying system at the entire medical campus, which includes over 1.5 million square feet.

Altoona VA Medical Center 6th Floor, Altoona, PA: This critical 13,000-SF main hospital renovation provides new in-patient and exam rooms.

Altoona VA Medical Center Rehabilitation Department, Altoona, PA: This 9370-SF main hospital addition expands the prosthetic department.

Cabell County Emergency Response Center, Huntington, WV: This new 13,000-SF building includes all facilities required to support the County Emergency Operations Center, 911 Call Dispatch Center and Emergency Management.*

**Beaver County Emergency Services Center, Ambridge, PA:** This new 18,500-SF 911/Emergency Services Center features hardening and systems redundancy for survivability of the 24/7 mission-critical activities.*

**York County Emergency Services Center, York, PA:** This new 36,500-SF facility combines an emergency operations and call center with an emergency response center, including a state-of-the-art dispatch and response center. *

Steuben County 911 Center, Bath, NY: This new 11,000-SF facility includes an Enhanced 9-1-1 System, primary backup center, and Mobile Operations Center.*

^{*}Completed prior to joining A | E Works

## Scott Kraynak, PE, LEED AP

Engineering Principal and Lead Electrical Engineer

#### **Years of Experience 23**

#### Education

Bachelor of Science – Electrical Engineering

#### Registrations

Professional Engineer – Electrical LEED Accredited

#### Additional Mission Critical Experience

Wyoming Co. 911 Center, Wyoming, PA*

US Airways Emergency Operations Center, Pittsburgh, PA*

Livingston County Jail, Geneseo, NY*

Rensselaer County Jail, Albany, NY*

Butler County Jail, Butler, PA*

Indiana County Jail, Indiana, PA*

Plaquemines Parish Jail Plaquemines Parish, LA*

SCI Smithfield Correctional, Huntington, PA* Mr. Kraynak is an experienced electrical engineer and project manager with broad facility planning, design, construction and operations experience. With over 20 years devoted to upgrading and designing new electrical systems, his project experience ranges from campus security and correctional facilities to mission critical telecom and security design.

Most recently, Scott has been involved with several VA Medical Center Campus Wide Security Upgrades. In addition, as a trained Nuclear Power Plant Operator for the US Navy, he brings extensive experience in the operations, maintenance and supervision of mission critical facilities.

Scott will lead the engineering team and coordinate with Security Specialist, Anthony Frassetta to deliver a design that provides the West Virginia Capitol with a secure and accessible campus.

#### **Highlighted Experience**

Scott has served in significant senior technical and management roles for the following projects, among others.

Bath VA Medical Center Campus Wide Security Upgrades, Bath, NY: Security design to upgrade campus wide security, adding access controls to 10 buildings.

Philadelphia VA Medical Center Campus Security Upgrade, Philadelphia, PA: This project upgrades the keying system at the entire medical campus, which includes over 1.5 million square feet.

*SCI Smithfield Correctional, Huntingdon, PA*: Provided design and project management for the installation of new integrated security management platform for new housing units and entire perimeter site security upgrades.*

Cabell County Emergency Response Center, Huntington, WV: New 13,000-SF Emergency Response Center.*

York County Emergency Services Center, York, PA: New 36,500-SF emergency operations and call center. *

Standby Generator/Normal Power Upgrade, Harrisburg, PA: Emergency distribution system and normal system upgrade for the Tele-communications provider serving all 911 services and emergency response communications for the PA State Capitol.*

^{*}Completed prior to joining A|E Works

Provide information on all other project consultants, sub consultants and firms proposed to be employed by the lead firm for this project.

#### **Consultant Team Member Introductions**



#### Lee and Associates (lai) - Landscape Architecture

Lee and Associates, Inc. (lai) offers twenty-five years of comprehensive landscape architecture, urban design and land planning services. lai specializes in innovative security-driven projects throughout the country and abroad, designing perimeter security for Memorials, and campus designs for Embassies, and other diplomatic facilities. In fact, lai is currently working in West Virginia on the Construction Administration phase of the FBI Biometrics Facility—a design that centered around intensified security concerns, and environmental initiatives, to create a completely off-the-grid facility.

Of relevance to this project, Principal, Jeff Lee, traveled to Mogadishu, Somalia in the start of his career to design the first prototype Embassy for our government—based upon the Inman Commission recommendation for site setbacks and other security measures. Since that time, lai has continued to provide landscape architectural services for security-driven work, working closely with the US Department of State to meet the challenges of creating secure site designs, and completing important US Embassy Commissions globally.

Also of note, lai has completed three major projects at The Pentagon: The Pentagon Remote Facility, The Pentagon Metro Entrance Facility, and The Pentagon Athletic Center. Most recently, lai led a Design Build Team to win The Pentagon 9-11 Memorial Project. All of these projects, especially the memorial, came under intense scrutiny of multi-level, multi-jurisdictional security.

A further example of lai's ability to provide accessible, secure government campuses the US Department includes Transportation (US DOT) Headquarters. lai's design overcame site and security challenges, exampled by the parks and plazas that were designed to incorporate a mandatory 50 foot setback security requirement from the curbside. Their design used bollards, bollard furnishings and site furnishings deterrents-all to meet the security requirements, and earning the project a Design Excellence Award.



**US DOT Campus** 

Other lai security-driven experience includes the following projects:

- The Perimeter Security Study for The Jefferson Memorial
- Perimeter security retro-fit design for the IMF HQ Building II
- The White House Area Transit Study
- Ft. Belvoir Community Hospital campus

#### S&S Engineers, Inc. — Civil Engineering and Land Surveying

S & S Engineers is a local Charleston, West Virginia firm. Formed in 1980 to provide consulting engineering and surveying services, S&S Engineers has an impressive portfolio of local civil and surveying work for several state and local West Virginia agencies. With over 30 years of experience in the local region, S&S brings unparalleled knowledge of the local construction climate that will undoubtedly benefit our team as this project moves from planning to design and construction



#### Qualifications of the A|E Works Consultant Team

For the Capitol Campus Security project, A|E Works presents a consultant team of seasoned, licensed professionals with extensive relevant experience with security design standards for high profile government campus settings and mission critical facilities. For this project, key team members and corresponding roles include:

- Jeff Lee, FASLA: Landscape Architect Principal
- Rhonda Dahlkemper, RLA, ASLA: Landscape Architecture Project Manager
- Ashok Sanghavi, PE, DEE, QEP: Lead Civil Engineer
- Jessie Parker, Jr., PE: Civil Engineer
- Randy Brooks Crace, PS: Land Surveyor

These A|E Works team members bring proven West Virginia project experience as well as government campus security projects and the following key professional registrations and certifications that are directly applicable to this project.



phases.

#### Registered Landscape Architect and ALSA Council of Fellows Honor by the American Society of Landscape Architects

The American Society of Landscape Architects (ASLA) is the national professional association representing landscape architects. Elevation to the ASLA Council of Fellows is among the highest honors a landscape architect may receive. The designation of Fellow is conferred upon individuals in recognition of exceptional accomplishments over a sustained period of time. Members of the Council of Fellows may use the suffix "FASLA" to denote this high honor.



#### **Professional Engineers**

The term Professional Engineer and the actual practice of professional engineering is legally defined and protected by a government body.



#### **Registered Professional Surveyors**

Licensing requirements for professionals vary by state, but they generally have components of education, experience and examinations.

With concentrated expertise and extensive experience on relevant campus security and public safety projects, we are uniquely qualified to fulfill your program requirements. The following chart summarizes our consultant team and technical leaders' key qualifications.

Key Consultant Qualifications								
Name	Role	Years of Exp.	Campus Security Projects	Government & Mission Critical Projects	Design of accessible, secure landscapes	Local Experience	Special Qualifications	
Jeff Lee, FASLA	Landscape Architect Principal	30	<b>✓</b>	<b>V</b>	<b>✓</b>	<b>✓</b>	ASLA Fellow. National credentials with secure campus design. Extensive secure government landscape design.	
Rhonda Dahlkemper, RLA, ASLA	Project Manager – Landscape Architect	16	<b>V</b>	<b>/</b>	<b>V</b>	<b>V</b>	Registered Landscape Architect. Project manager for numerous security-sensitive government projects.	
Ashok Sanghavi, PE, DEE, QEP	Engineering Principal, Electrical Engineer	42	<b>✓</b>	<b>✓</b>		1	Registered PE. Experience as an Owner and Designer. Extensive WV State and local experience.	
Jessie Parker, Jr., PE	Civil Engineer	9	1	<b>/</b>		<b>/</b>	Registered PE. Extensive WV State and local experience.	
Randy Brooks Crace, PS	Land Surveyor	37	<b>V</b>	<b>✓</b>		1	Registered Professional Land Surveyor. Extensive WV State and local experience.	

Resumes resumes follow this page for the above referenced consultant team members. An organization chart follows in Tab 4.

#### Education

BS, Landscape Architecture, School of Architecture, 1978

#### **Affiliations**

Fellow, American Society of Landscape Architects (FASLA)

Task Force Member, Security & Urban Design In The Nation's Capital. National Capital Planning Commission

Member, The Dean's Forum, UVA School Of Architecture

Vice Chair & Life Member, Committee of 100 on The Federal City

#### **Unique Qualifications**

Panel Member: "Security Design: Between Building and the Street" 2nd Annual TISP Congress. Infrastructure Security for

the Built Environment.
Washington, DC. 2003

Instructor: ASLA: National Continuing Education Seminar: "Security and Design in the Public Realm" Washington, DC. 2002 Jeff S. Lee, FASLA is widely recognized for his specialty in green infrastructure and sustainable city design; as well as security-sensitive site planning, and is a frequent speaker and panelist on these topics.

#### **Highlighted Experience**

Jeff Lee has served in significant senior technical and management roles for the following projects, among others:

**FBI Biometrics Facility, WV:** The design carefully balanced grading challenges, stormwater treatment, and program requirements. Security concerns were critical; as were landscape treatments to create an off-the-grid facility.

Unified Communications Center at St. Elizabeth's Hospital Campus, Washington, DC: This design served to develop a functional layout with design highlights that included the use of indigenous plantings and radial site security.

Ronald Reagan Building, International Culture & Trade Center, Washington, DC: The design defined the last piece of vacant land along Pennsylvania Avenue as a secure mixed-use complex for US Trade activates.

Columbus Plaza at Union Station, Washington, DC: Preservation of this historical landmark's character was accomplished by incorporating site secure plaza expansions with historically appropriate bollards, and site furnishings.

**US Embassies, Abidjan, Core D' Ivories' & Abuja, Nigeria:** Both site plans created ordered and interesting experiences for staff and visitors, methodizing creative solutions to site security requirements.

*Jefferson Memorial, Washington, DC:* The Master Plan addressed intensified security concerns of this popular monument.

**Department of Transportation Headquarters, Washington, DC:** Streetscape elements and public plazas innovatively incorporated planters, bollards, and fountains to achieve required perimeter security setbacks for this campus.

**Pentagon Remote Delivery Facility, Arlington, VA:** The firm designed this prime ceremonial space with secure intensions.

Jacob J. Javits Federal Building, New York, NY: lai established a perimeter seating wall and landscape buffer surround the complex—creating cohesive character and serving as necessary security.

International Monetary Fund Headquarters Site Security Upgrade, Washington, DC: Development of a streetscape plan for this high profile building, intended to promote safety by increasing vehicular setback to the site.

### Rhonda S. Dahlkemper, RLA, ASLA

Landscape Architect Project Manager

#### Education

B.S. Landscape Architecture w/ Honors, 1989

#### Registrations

Registered LA, W.VA (#20015) Registered LA, MD (#353)

#### **Affiliations**

Member, American Society of Landscape Architects Rhonda S. Dahlkemper is a Senior Associate, Landscape Architect, and Project Manager with Lee and Associates, Inc. She offers two decades of experience as a registered landscape architect, and brings a site sensitive and creative design approach to each project.

Rhonda has worked on projects of various size and scale, from public planning processes, to large scale corporate and government sites. Of note, she is current overseeing the Construction Administration phase of the FBI Biometrics Facility, in West Virginia, and has served as project manager to numerous other security-sensitive government projects.

#### **Highlighted Experience**

Rhonda has served in significant senior technical and management roles for the following projects, among others:

**FBI Biometrics Facility, WV:** The Design carefully balanced grading challenges, stormwater treatment, and building program requirements of this remote site. Security concerns were critical to this project; as were landscape treatments to create an off-the-grid facility.

Unified Communications Center (UCC), at St. Elizabeth's Hospital Campus, Washington, DC: This design served to develop a functional layout with design highlights that included the use of indigenous plantings and radial site security.

Ronald Reagan Building, International Culture & Trade Center at Federal Triangle, Washington, DC: The design completed the development of Federal Triangle, and defined the last piece of vacant land along Pennsylvania Avenue as a secure mixed-use complex for US Trade activates.

Columbus Plaza at Union Station, Washington, DC: Preservation of historical character of this downtown landmark was accomplished by incorporating site secure plaza expansions with historically appropriate bollards, and site furnishings.

US Embassies, Abidjan, Core D' Ivories' & Abuja, Nigeria: Both site plans created ordered and interesting experiences for staff and visitors, methodizing creative solutions to site security requirements by the GSA.

## Ashok Sanghavi, PE, DEE, QEP

**Lead Civil Engineer** 

#### Education

M.S.C.E. (Major – Environmental Engineering)

#### Registrations

Registered Professional Engineer, WV and 3 other states

Diplomat, American Academy of Environmental Engineers

Qualified Environmental Professional, IPEP

#### **Affiliations**

West Virginia Rural Water Association

Water Pollution Control Federation (President, WV Section, 1987-88) (National Director 1989-92)

American Water Works Association

#### **Awards**

Arthur Sidney Bedell Award, Water Environment Federation, (1993) Mr. Sanghavi brings forty-two years of professional experience with West Virginia state and local environmental, water, civil and mining engineering projects. Having worked for state government, as well as private firms, he brings an owner's perspective to the design process that has been invaluable to completing successful projects.

#### **Highlighted Experience**

Ashok has served in significant senior technical and management roles for the following projects, among others:

Chelyan PSD, Cabin Creek, WV: Planning, design and construction management of 35 miles of sewers, twenty-nine (29) pumping stations. This complex project involved telemetry system, inter-municipal agreements, upgrading of wastewater treatment plant, and land acquisitions to provide services to multiple communities, including Witcher Creek, Diamond, Carroll Branch, Shrewsbury, Dry Branch, Ronda, Sharon, Miami, Dawes, Giles, Leewood and Eskdale, Town of Cedar Grove and Town of East Bank.

Project cost \$22M funded by USEPA, WVWDA, HUD-CDBG, ARC, Kanawha County Commission, Infrastructure Council, and Quincy Coal Company.

City of Charleston Sanitary Board, WV: Planning, design, and construction management of Oakvale Road Sewer Extensions.

Yeager Airport Expansion, Charleston, WV: Surveying, mapping, utilities, design, and construction inspection for Terminal Expansion Project.

West Virginia State Health Department - Review of numerous projects throughout the State of West Virginia: Projects included groundwater and surface water sources. Various degrees of treatment including flocculation, mixing, sedimentation, filtration, chlorination and fluoridation, operator training, troubleshooting, O & M manuals, and administrative regulations for public water supplies.

West Virginia Division of Highways-Route 10 Man to Logan: Preparation of a portion of Environmental Impact Statement for 12.5 miles of proposed highway. Data collection, field visits, public meetings, draft EIS, and final EIS.

West Virginia Division of Highways-Eldora/S. Fairmont 1-79 Interchange: Preparation of a portion of Environmental Assessment for a new interchange. Data collection, field visits, draft EA and final EA.

# Randy Brooks Crace, PS

**Land Surveyor** 

# Education

BA, Major Industrial Technology

OSHA 40 Hour Hazardous Materials

AGC/WSDOT: Construction Site Erosion and Sediment Control Certification

Environmental Site
Assessment:
Commercial Real Estate
Certification
ASTM E-1527 & E-1528
ASTM E 1527-05 Phase I
and USEPA AAI

West Virginia Department of Environmental Protection: Approved Person - Mining Permits

Putnam County Schools, Hurricane, WV: Real Estate Law, 90 Hour certificate

ACSM Surveying Instrumentation and Coordinate Computation Certificate

#### Registrations

Professional Surveyor: West Virginia, OH, KY

# **Affiliations**

West Virginia Association Land Surveyors American Congress on Surveying & Mapping National Society of Professional Surveyors Associate, American Institute Architects, WV Randy is a professional surveyor with thirty-seven years of surveying and technical experience. He brings extensive West Virginia state and local experience, including countless projects in Charleston.

# **Highlighted Experience**

Randy has served in significant senior technical and management roles for the following projects, among others:

WV Department of Transportation Statewide: GPS and conventional field control surveys and target placement for various aerial photography projects throughout West Virginia.

National Park Service, New River Gorge Visitors Center: Topographic mapping, cross sections, profiles, control surveys and field location of geotechnical investigations over 200 acre development.

Marathon/Ashland Group, West Virginia Statewide: Surveying, mapping and descriptions on commercial sites for development of convenience stores and gas stations throughout West Virginia.

*Embassy Suites, Charleston, WV*: Construction layout of foundation, floors, and site stakeout for \$38 million Embassy Suites in Charleston, West Virginia.

USDA - Capitol Soil Conservation Service, Charleston and Beckley, WV: Surveying, mapping and descriptions for land and right-of-way descriptions on flood control and road way relocation projects in Charleston, WV and Little Whitestick Creek Channel Relocation Project; Beckley, WV.

Kanawha County Schools, WV: County wide land surveying services including topographic mapping, flood elevation certificates, construction stakeout, expert witness on boundary, and utility planning.

*Mariner's Trust, Kanawha County, WV*: Property survey of 10,000± acre property in trust account.

Central West Virginia Regional Airport, Kanawha County, WV: Surveying, mapping, erosion and sediment control plans, NPDES permits, GPS / RTK / GIS surveying.

## Education

M.S. Engineering B. S. Civil Engineering

# Registrations

Registered Professional Engineer, West Virginia

#### **Affiliations**

Water Environment Federation American Society of Civil Engineers Mr. Parker is a registered civil engineer with 9 years of experience in the West Virginia construction climate. Having worked with Contractors, government representatives, as well as regulatory and funding agencies, he has proven his ability to move projects forward in a professional, cost-effective and timely manner.

# **Highlighted Experience**

Jessie has served as civil engineer for the following projects, among others:

South Putnam PSD, Putnam County, WV: Shawnee Estates/Teays Pointe Business Park Sewer Extension Project. Design and construction management of twelve (12) miles of sewers, six (6) pumping stations, twelve (12) grinder pumping stations, and river crossing to provide service along US Route 35 from Cannery Lane to Teays Pointe Business Park.

**South Putnam PSD, Putnam County, WV**: Midway Phase II Sewer Extension Project. Construction management of two (2) miles of sewers to provide service in the community of Midway.

**Yeager Airport, Kanawha County, WV:** Runway 23 and Taxiway A Expansion Project. Design of stormwater and drainage control structures along with calculations for WVDEP NPDES Storm Water Permit, and design and preparation of Stream and Wetland Mitigation Plan for WVDEP 401 Water Quality Certification and USACOE 404 Permit.

Yeager Airport, Kanawha County, WV: Planning and preparation of environmental audit for Rent-A-Car facility.

Chelyan PSD, Kanawha County, WV: Cabin Creek Sewer Extension Project, Phase II. Construction management of ten (10) miles of sewers, five (5) pumping stations, telemetry system, upgrading of wastewater treatment plant to provide services to the communities of Giles, Ohley, Eskdale and Leewood.

Chelyan PSD, Kanawha County, WV: Winifrede Sewer Extension Project. Planning and design of five (5) miles of sewers, three (3) pumping stations and telemetry system to provide service to the residents along Winifrede Hollow Road.

Provide a statement of the firm's ability to handle the project in its entirety.

The A|E Works Team brings the depth of capacity and technical expertise to complete this project from planning through construction close-out. Our team has a proven track record for accomplishing work within the required time constraints. This is evidenced by the high volume of repeat work from multiple government agencies as well as from our many private clients.

Last year, we delivered on 68 projects with construction costs ranging from \$20,000 to over \$6,000,000. These projects included campus security wide upgrades, specialized medical and research facilities and government support facilities.

We have a proven track record of successfully delivering complex, mission critical projects and will apply the same technical and management proficiency to deliver this Capitol Campus Security project to meet the WV GSD's goals as well as budget and schedule requirements.

Provide a statement of the firm's acceptance and full understanding that any and all work produced as a result of the contract will become property of the Agency and can be used or shared by the Agency as deemed appropriate.

A|E Works accepts and is fully aware that any work produced as a result of this contract will become property of the Agency and can be used or shared by the Agency as deemed appropriate.

Signature:

Michael Cherock, PE, LC, RCDD, LEED AP - A | E Works Principal, Founder and Owner

Provide a description of any litigation or arbitration proceedings, including vendor complaints filed with the State's Purchasing Division, disputes with other Agencies of the State of West Virginia that involved legal representation by either party relating to the firm's delivery of design services, if applicable. Also, any disputes with other Agencies of the State of West Virginia that involved legal representation by either party.

A|E Works has been involved with **zero** Professional Liability claims or Litigation. We have **no** vendor complaints filed with the State's purchasing division or disputes with other Agencies of the State of West Virginia.

Provide information on the personnel who will manage and persons proposed to be assigned to the project. Provide locations of the firm's offices and indicate from where the project will be managed and the work performed. Provide a project organizational chart including key personnel and the proposal organization of the team.

# **Team Organization and Project Management Approach**

During the planning and design process we will provide an integrated design and engineering team. Key A|E Works team members have been involved with numerous campus security projects, including correctional institutions, government facilities and hospitals as well as public safety facilities. Our technical and management team's experience with every aspect of public safety design - communications, technology, operations and facility management - ensures operational effectiveness for this Capitol Campus Security project.

Our team understands that this project needs to combine safety, durability and accessibility with technology and cost effective, sustainable solutions. We stand ready to provide a collaborative team familiar with the very distinctive demands that are placed upon such a campus.

The A|E Works team practices a "no excuses" attitude toward meeting our clients' critical milestones. Following are some of the key aspects of our project management approach that maintain consistency from project inception through close-out:

- Same key project leadership involved throughout the project.
- Project Basis of Design reviewed and updated with each milestone deliverable.
- Quality assurance in design documents.
- Verification that the original design intent and project criteria have been met.
- Coordination of utility requirements to equipment.
- Technical coordination among disciplines.

Richard Witt, AIA will serve as Principal in Charge and Lead Architect, leading the project team to develop a design that embraces operational integrity and efficiency. He will be responsible for leading the architectural production team as well as assisting the Project Manager and Security Specialist, Anthony Frassetta, with the planning and design of the upgrades along with the management and coordination of team resources required for the project.

Richard will also meet regularly with members of the West Virginia General Services Division team and the A/E team to assure that appropriate team resources are being allocated and that there is a high degree of satisfaction with the work produced by the design team.

With a portfolio of over 20 recent public safety facilities, Richard brings the proven technical expertise to provide a fluid, cost effective design that meets the WV GSD's requirements for this Capitol Campus Security project. Of note, his recent project experience while with another firm includes an Emergency Services Center in Cabell County, West Virginia along with an Emergency Services Center for Beaver County, PA. These projects combine emergency operations and a call center within a single facility. He brings proven abilities in conducting threat and vulnerability assessments for diverse government facilities in order to deliver secure, cost effective designs.

Anthony Frassetta, PSP, RCDD will serve as the Project Manager. He will be involved in all project-related activities from initiation throughout close-out, including but not limited to schedule development and maintenance; coordination of all project documents and deliverables; and implementation of the QA/QC process. Pivotal to this role, Anthony will maintain constant communications with your internal project team and the A|E Works design team, ensuring that all team members have the most current project information and that all design needs are addressed in a timely fashion.

To ensure that our team meets WV GSD budget and schedule requirements, Anthony will develop a detailed work plan that will establish schedule requirements, coordinate the efforts of the A/E team and ensure that time is allotted for cost estimating, quality assurance reviews, and interdisciplinary coordination. Anthony will update the work plan frequently so that potential schedule issues can be identified early and mitigated.

Anthony has devoted his career of thirty-five years to security planning and design. He is intimately familiar with staff allocation, scheduling, and maintaining communication in respect to contracts such as this Capitol Campus Security project. In addition, he, Richard and Scott have had the opportunity to work together at a previous firm.

Anthony understands the complexity of campus security projects. His established security credentials have resulted in him being appointed as a National Security Consultant to U.S. Courts where he provided Security assessment and threat evaluation for 15 Federal Courthouses while at another firm. Not only has Anthony designed and implemented security measures for government campuses and correctional institutions, but he has also recently conducted a security assessment and threat evaluation for the NJ State House Campus.

As a former firefighter and regional firefighter trainer, Mr. Frassetta is not only dedicated to his profession, but he also brings direct understanding of the importance of implementing these designs to keep communities safe. Anthony will apply the same leadership, management and technical expertise to provide the WV GSD with a project that meets all program requirements.

Also, of importance, as Electrical Engineering is critical to security design, A|E Works brings core strength in Electrical Engineering and designing security and critical power systems. Our Engineering Team will be led by Scott Kraynak, PE. Scott is a registered professional engineer with broad facility planning, assessment, design, construction, and operations experience.

Scott's exceptional portfolio includes mission critical facility projects ranging from 911 centers and correctional facilities to hospital campus security upgrades and specialized research facility design. In fact, Scott served as Electrical Engineer for the recent Cabell County 911 Center in Huntington, WV and Beaver County PA 911 Center while at another firm – projects that he, Richard and Tony all worked on together while at another firm.

Also of relevance to this project, Scott brings a significant engineering background in nuclear operations, including operating nuclear reactors, power plant shutdown, as well as corrective and preventative maintenance during shutdown periods. Scott understands the infrastructure and operations needs of complex operations with multiple concurrent demands requiring attention to detail at every step.

Also, critical to the aesthetics of the State Capitol campus is landscape architecture. A|E Works has selected Lee and Associates (lai) to provide this pivotal role. Not only does lai have an extensive portfolio of secure government campus designs, but we are also currently working together on the Martinsburg VA Medical Center Domiciliary Renovation, which provides public spaces and healing gardens on this secure medical campus.

Also, of note, lai principal, Jeff Lee brings national credentials with landscape design for secure sites. He has managed the planning and design for multiple embassy and Pentagon projects, all of which came under intense scrutiny of multi-level, multi-jurisdictional security measures.



Ronald Reagan Building Site and Landscape Design

# Location - A Local Team Ready to Mobilize

Headquartered in Pittsburgh, A|E Works is less than 4 hours from Charleston, West Virginia. We are familiar with the construction climate having worked in the area for the past five years.

We are accustomed to providing prompt onsite services to clients in West Virginia and beyond. Our team will be onsite whenever the project's technical or administrative goals can be more effectively advanced with in-person collaboration or if a site review is required. Given our close proximity and with current project activities throughout the region, we are able to quickly react and respond.

The map on the following page indicates the locations of the A/E Works' team.

A|E Works Headquarters - Pittsburgh, PA .

 A|E Works Team Member Office – lai, Washington, DC

WV Capitol A | E Works Team Member Office –S&S, Charleston, WV

A|E Works offers the WV GSD a team of highly qualified architects and engineers. Our team will be organized in a manner that encourages communication and collaboration, as illustrated in the organizational chart on the following page.

# Organizational Chart of Proposed Team West Virginia General Services Division A|E Works Richard Witt, AIA Principal-in-Charge A|E Works Anthony Frassetta, PSP, RCDD Project Manager

# Security & Technology Architecture

A | E Works Anthony Frassetta, PSP, RCDD Richard Witt, AIA

# **Landscape Architecture**

Lee and Associates Jeff Lee, FASLA Rhonda Dahlkemper, RLA, ASLA

# Engineering Surveying

A | E Works Scott Kraynak, PE, LEED AP

S&S Engineers Ashok Sanghavi, PE, DEE, QEP Jessie Parker, Jr., PE Randy Brooks Crace, PS

The organizational chart and resumes in Tab 3 reflect the key team members.

Additional staff will be assigned as needed to complete this project.

Provide a statement or evidence of the firm or team's ability to provide services.

Nearly all of A|E works' project experience has been planning and designing projects for 24/7 mission critical campuses for healthcare, government and science and technology communities. With experience ranging from medical campus security and correctional institutions to embassies and specialized memorials and monuments design, our team's extensive technical knowledge and resourceful design abilities will provide the service needed and solutions designed to meet the requirements of this Capitol Campus Security project.

Further demonstrating our team's ability to deliver this project not only with the requisite technical expertise, but also to meet budget and schedule requirements, the following sections provide specific examples of our abilities to successfully plan and design a wide range of challenging government projects. Tab 5 will include specific projects examples that will speak to our technical abilities.

# Flexible, Cost Effective Designs for Municipal and Government Clients

Our team has significant critical campus planning and design experience which provides a good variable sense of construction costs, and we have received consistently high marks for delivering projects within our clients' budgets over the years. By practicing value management early in each project, we effectively manage project costs.

Working with West Virginia General Services Division, a cost model for the project will be developed early on and vetted to ensure "buy-in." The cost model assures that each organization with a stake in the project has a common understanding of the development of the budget, including contingency and escalation factors.

The cost model also confirms that each area of work has a clearly identified and realistic cost goal. The model will be then updated at each submittal, and value management will be performed to keep the project cost within in the project budget. We track project costs throughout the progress of the design, not simply at project milestones.

We work with our clients and consultants to develop affordable designs that do not compromise programmatic goals.

The chart on the following page demonstrates our commitment to cost control.

Recent Cost Control Examples								
Project	Estimate	Bid/Award	Difference					
VA Lebanon New Generator	\$1,048,905.00	\$1,094,000.00	4.3%					
VA Altoona Building Addition	\$495,004.00	\$462,124.00	-6.6%					
VA Altoona—FCA Security Enhancements	\$326,797.00	\$293,000.00	-10.3%					
VA Altoona Correct Safety Deficiencies	\$77,500.00	\$39,000.00	-49.7%					
SPI 25kV Campus Distribution (Electrical Only)	\$3,250,000.00	\$2,800,000.00	-13.8%					
North Strabane Park 13kV Distribution	\$1,500,000.00	\$1,225,000.00	-18.3%					
BFMA Maintenance Facility	\$300,000.00	\$298,592.00	-0.5%					
VA Altoona Move and Expand Rehab	\$3,016,200.00	\$2,464,000.00	-18.3%					
VA Community Living Center	\$2,704,372.00	\$2,325,000.00	-14.0%					

# **Additional Recent Case Studies:**

- 1. Philadelphia VA Medical Center Lab Phase I
  - Bids received September 2011 Estimated Construction Cost: \$5,910,000
    - o Bid: \$5,800,000

# 2. Altoona VA Medical Center Community Living Center

- Bids received June 29, 2011 Estimated Construction Cost: \$2,704,372
  - o Bid #1: \$2,325,000 (-14.0%) / Bid#2: \$2,499,000 (-7.6%) / Bid #3: \$2,797,632 (+3.4%)

A|E Works is consistent in our approach to construction cost control. We focus our energy and attention on solving technical issues in the most timely and effective manner possible, keeping the best technical interests of the project in clear focus. We have found that this always results in the highest possible quality and the lowest possible cost construction.

# **Proven Project Management Skills to Meet Schedule**

A|E Works maintains a "no excuses" attitude toward meeting critical project schedules. At project inception, we will develop a project specific work plan. Our detailed work plan will also set schedule requirements, coordinate the efforts of the A/E team and ensure that time is allotted for cost estimating, quality assurance reviews, and interdisciplinary coordination. Our schedules typically include input points for related tasks such as client reviews and permitting reviews. We update the work plan frequently so that potential schedule issues can be identified early and mitigated.

# The following chart highlights recent examples of A | E Works' commitment to schedule compliance.

Project	Anticipated Design Duration (calendar days)	Actual Design Duration (calendar days)	% Change	
Martinsburg VA Renovate Row	22	30	-33%	
Altoona VA CLC	150	153	+2%	
Altoona VA Rehab	150	135	-10%	
Altoona VA FCA Deficiencies	120	113	-5.8%	
Altoona VA Replace Trailer #3	91	91	0%	
Altoona VA GEMs	153	120	-21.5%	
Altoona VA DB	46	46	0%	
Pittsburgh VA Prosthetics	121	121	0%	
Philadelphia VA Lab 95%	35	20	-42%	
Submission				

Also, exhibiting our commitment to meeting schedule requirements, for the Martinsburg VA Medical Center Renovate 200 Row Contact, we developed a detailed project plan and allocated requisite resources to deliver the project in 91 days, which is 11 days earlier than the allotted contract timeframe. We made this commitment to provide the Martinsburg VA with additional time to meet their internal deadlines. Similarly, we are committed to meeting the schedule requirements of the Capitol Campus Security project.

Provide descriptions of relevant projects demonstrating the firm's ability to execute projects similar to those described in this EOI. Firm's managing personnel for this project must have at least five years of experience in evaluating and designing similar projects.

# A | E Works Unique Qualifications for this Capitol Campus Security Project

We believe that our team and team members offer the following distinctive qualifications that will ensure successful project completion that meet the budget, schedule and aesthetics needs of the West Virginia General Services Division:

- Senior Technical and Management Leaders with Security Planning and Design Expertise
- Understanding of 24/7 Campus and Facilities Security Requirements
- Proficiency in Integrating Technology Systems into Building Infrastructure
- A Landscape Architect with Proven Skill in Designing Secure, Welcoming and Vibrant Government Campuses

# Senior Technical and Management Leaders with Security Planning and Design Expertise

All A|E Works team members bring proven security planning and design qualifications. With concentrated expertise and experience on relevant security, science and technology, and government projects, we are uniquely qualified to fulfill the requirements of planning and design for this campus security project. Backed by a team of technical leaders with proven security and mission critical design - ranging from State Capitol perimeter security design and correctional facilities to emergency operations facilities and threat and risk assessment for federal courthouse, we have the necessary qualifications to provide integrated, secure design solutions.

In fact, proposed project manager and security specialist Anthony Frassetta, PSP, RCDD has devoted his career to security planning and design. Not only has Anthony designed and implemented security measures for government campuses, correctional institutions, but he has also provided security assessment and threat evaluation for the NJ State House Campus and technology design for the Pennsylvania Criminal Justice Center perimeter protection prior to joining A|E Works.

In addition, Proposed Principal-in-Charge and Lead Architect, Richard Witt, AIA has completed nearly 20 recent public safety projects, including Emergency Services / 911 Centers and Mission Critical Operations Facilities prior to joining A|E Works.

Key A|E Works team member qualifications at and prior to joining the firm include the following:

- Board Certified Physical Security Professional
- Campus Security upgrades for 3 VA Medical Centers
- Planning and Design for 10+ Correctional Institutions
- Registered Communications Distribution Designer
- Contributing Author, BICSI Electronic Safety and Security Design Reference Manual 2nd and 3rd Edition(ESSDRM), 2009 and 2012
- Design of 20+ Local, State Public Safety, including 911 and Emergency Operations Centers
- Security Assessment for the NJ State Capitol
- 90+ Normal and Emergency Power Upgrades

Each A|E Works' managing personnel has over 20 years of experience with security planning and design projects. We have the proven technical and management expertise to execute this project.

# Understanding of 24/7 Campus and Facilities Security requirements

A|E Works' recent experience includes campus-wide security upgrades for 3 VA Medical Center campuses, totaling over 3 million square feet. We bring proven experience with critical campus and facility access control and assessing threats and vulnerabilities.

In addition, nearly ninety percent of A|E Works' project experience has been planning and designing projects for 24/7 mission critical environments for healthcare, government and science and technology communities.

Highlighted projects include the following:

# Altoona VA Medical Center

Move and Expand Rehab Building Community Living Center FCA Security Enhancements New Building Addition B-2 Correct FCA Deficiencies

# **Bath VA Medical Center**

Security Upgrade

# **Butler VA Medical Center**

FM Storage Facility

## Martinsburg VA Medical Center

**Domiciliary Renovation** 

#### Pittsburgh VA Healthcare System

Prosthetics Relocation Radiology Power Quality Study Community Living Center



# **Bath VA Medical Center Campus**

# Philadelphia VA Healthcare System

Main Medical Lab Renovation Re—Key Medical Center

## Lebanon VA Medical Center

New Generator, Main Hospital

# **Armed Forces Retirement Home**

Chiller Relocation Project IT Relocation Project Each of these projects has required 24/7 operations and tailored security measures. Our flexible, secure designs ensure support of critical government and clinical operations.

Moreover, our team of design professionals and registered engineers will bring to bear the following unique qualifications and certifications:

- Trained Nuclear Power Plant Operators from the US Navy
- Department of the Navy Aircraft Crash/Rescue
- Philadelphia Electric Company Fire Training Academy
- NFPA 1001 Firefighter

- NFPA 1002 Fire Apparatus Driver/Operator
- Department of the Navy Ship Board Firefighting
- Amtrak Training Facility Railcar Firefighting and Rescue

These roles have afforded our team first-hand experience with safety and security planning and design for mission critical and public safety facilities. We understand not only the required technical skills for this project, but moreover, we understand the first-hand operations and implementation importance of these security upgrades.

Our team understands and can execute the security needs around the campus and operations of the West Virginia Capitol. We proactively use our past experiences to provide secure, accessible designs that provide long term functionality yet provide maintenance staff a clear concise methodology to perform maintenance in order ensure operational efficiency.

## Proficiency in Integrating Technology Systems into Building Infrastructure

The A|E works team of professional engineers and registered communications distribution designers appreciate the relationship between telecommunications systems and a campus infrastructure and operations. We are proficient in integrating complex systems, cabling and networks seamlessly into a campus regardless of physical and power system limitations. Security cameras and wires should not be the lasting images of these important campuses. It is crucial that the beauty and wonder of the grounds and historic architecture remain the key visual elements.

As designers and telecomm users, we understand the importance of designing infrastructure that accommodates current needs while providing flexibility for future modifications. Our team of RCDDs and Professional Engineers understand the nuances of technology and translating it into flexible infrastructure that will last for years.

# A Landscape Architect with Proven Skill in Designing Secure, Welcoming and Vibrant Government Campuses

Lee and Associates, Inc. (lai) is an award-winning landscape architecture firm, known for their expertise in integrating security measures into thoughtful, open campus designs that attract attention for their splendor. In fact, lai principal Jeff Lee is a well-regarded speaker on weaving security measures into critical campuses and government facilities. After his first embassy design in Mogadishu, Jeff and lai have developed a specialty with landscape security-drive work.

Highlighted lai security work includes the following:

- The Pentagon Remote Facility
- The Pentagon Athletic Center
- US Department of Transportation
- The White House Area Transit Study
- Ft. Belvoir Community Hospital campus
- US Embassy, Abuja, Nigeria
- US Embassy, Abidjan, Ivory Coast
- Embassy of Pakistan, Washington, DC
- Embassy of Turkey, Washington, DC

- The Pentagon Metro Entrance Facility
- The Pentagon 9-11 Memorial
- The Perimeter Security Study for The Jeffe Memorial
- Perimeter security retro-fit design for the IMF HQ
- FBI Biometrics Facility
- US Embassy, Moscow, Russia
- US Embassy, Yaounde, Cameroon
- Korean Ambassador's Residence

All of these projects, especially the memorial, came under intense scrutiny of multi-level, multi-jurisdictional security. Lai has shown proven creative design abilities in responding to varying security requirements to created added beauty for these grounds.



# Department of Transportation

Site security was paramount at the DOT headquarters in Washington, DC. LAI designed plantings, a wall and water feature which not only provided an amenity, but also provided a site barrier.

The following pages contain detailed examples of recent mission critical, government and security projects.

# Bath VA Medical Center Campus Wide Security Upgrades Bath, NY

# **Key Project Features:**

- Critical 24/7 campus
- 11 campus buildings
- Security / Access controls upgrade:
  - Perimeter / Site
  - Microwave technology
- Project phased to meet operational demands
- Anticipated construction cost: \$1.5M

# Services Provided:

A|E Works: Security Consultant and Electrical Engineer

# Date of Completion:

Phase 1 Completed 2011 / Phase 2 April 1, 2012

#### Owner:

Bath VA Medical Center

## Reference:

Jacob Yoder 76 Veterans Avenue, Bath, NY 14810 607-664-4000



**Bath VA Campus** 

The Bath VA Medical Center is a 24/7 government medical campus with more than 30 buildings located on over 200 acres. Many of the facility buildings are eligible for inclusion on the historic register. Currently, most access control is accomplished by-key, with some combination locks used.

At the project onset, the A|E Works team surveyed existing conditions and conducted a threat and vulnerability assessment, meeting with key user groups including the Police and Fire Chiefs and other critical operations staff.

To accommodate campus operations, the project is phased. The first phase of this project includes the fast-track design to upgrade domiciliary security. Prior to the upgrade, the buildings had existing, though limited visual monitoring of hallways and access points using cameras monitored in the domiciliary office. It was critical for patient safety and dignity that the design was fast tracked.

The following phases upgrade physical security of 10 critical campus buildings that have at least 45 to 60 essential security points. The design adds access controls and CCTV, integrating with the campus' current system.

Moreover, in efforts to save the client money, A|E Works' design includes microwave technology to use less conduit and wire.

Abuja, Nigeria

# **Key Project Features:**

- Secure, campus-like setting
- Radial design creates durable and secure site and grounds
- Use of indigenous plantings requires less maintenance
- 9.5 acres
- \$60 Million

## Services Provided:

Lai: Landscape Architecture

# Date of Completion: 2003

# Owner:

**US Department of State** 

## Reference:

Alan DeVergie
US Department of State
Overseas Building
Operations
Washington, DC 20522
703.875.4548





The overall intent of the landscape design for the US Embassy site in Abuja, Nigeria is to create a formal and welcoming appearance to visitors, dignitaries, and the staff that complements the architecture of the region, while creating and strengthening usable outdoor space in a secure, campus-like setting. The new site included three new office buildings, quarters for the marine guards, two support buildings, and parking facilities serving the most populous sub-Saharan nation.

Because the site encompasses such a large amount of space, there are three varying levels of landscape intensity, focused from the center of the site outwards; and treated with simple, broad plantings that are indigenous so as to require less maintenance. This radial design technique provides durable, but attractive site security to the embassy site and grounds.

# Administrative Office U.S. Courts (AOUSC) **Security Consulting**

**Various Locations** 

# **Key Project Features:**

- Threat and vulnerability assessments
- Size: Various
- Construction Cost: N/A

#### Services Provided:

Threat and vulnerability assessments

# Date of Completion:

2006



Kathleen Desmond, Courthouse Program Manager at US Courts Thurgood Marshall **Federal Judiciary** Building 1 Columbus Cir NE Washington, DC 20002 kathleen_desmond@ ao.uscourts.gov

This project represents the prior experience of proposed Project Manager, Anthony Frassetta, PSP, RCDD prior to joining A/E Works.



Image credit Wikipedia.org

On September 11 the Judicial Conference had begun its 141st session at the Supreme Court building when Chief Justice William H. Rehnquist was informed that the building must be evacuated. Within minutes an emergency center was set up at the Thurgood Marshall Federal Judiciary Building which houses Administrative Offices of the United States Courts (AOUSC). The AOUSC is the central support entity for the Judicial Branch, which provides a wide range of services to meet the needs of judges and more than 32,000 employees working at over 800 locations nationwide.

Acting in concert with the AOUSC to protect the judicial process, the United States Marshals Service (USMS) - Judicial Security Division (JSD), is tasked with ensuring the safe and secure conduct of judicial proceedings and protecting federal judges, jurors and other members of the federal judiciary. Their critical mission is accomplished by anticipating and deterring threats to the judiciary, and development and deployment of innovative protective applications.

After the tragic events of 911, the AOUSC in cooperation with the USMS - JSD determined that all Federal Judiciary Facilities needed to be evaluated. To expeditiously facilitate this critical task, the AOUSC called upon existing contracted A/E consultants with the unique experience and expertise to conduct in-depth threat and vulnerability assessments. Prior to 2001, the only recognized standard practices manual was the DOJ Vulnerability Assessment of Federal Facilities Report of June 28, 1995.

The contracted teams were tasked with performing threat and vulnerability assessments based on the DOJ Vulnerability Assessment of Federal Facilities Report criteria. Evaluations included assessment of the structural conditions related to progressive collapse, ballistic and explosive resistance, vehicle access and set-backs, visitor control, mechanical and electrical system as well as fire alarm, security detection, video surveillance and mass notification systems.

As part of the overall design team, Anthony Frassetta, PSP, RCDD provided security assessment and threat evaluations of the Thurgood Marshall Federal Judiciary Building and the 2nd, 3rd, 4th, 6th and 11th circuit Federal Courthouses.

# Altoona VA Medical Center Campus Security Upgrade

Altoona, PA

# **Key Project Features:**

- Critical 24/7 campuses
- Over 3-Million square feet
- Security / Access control:
  - Door access
  - Duress alarm
  - Exterior cameras
  - Police mobile radios
  - Integration of technology

# Services Provided:

A|E Works: Prime, Full A/E Services, including Security Consulting

# **Date of Completion:**

2011

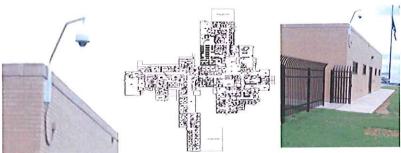
#### Owner:

Altoona VA Medical Center

# Reference:

Jerry Metzgar Altoona VA Medical Center 2907 Pleasant Valley Blvd Altoona, PA 16602 814.943.8164 ext. 7246





This project updates the existing security at the James E. VanZandt Medical Center by introducing new systems and improving existing technology that directly impacts overall security operations at over 7,000 points of this 24/7 government medical campus. A|E Works' threat and vulnerability assessment revealed concrete systems and points where to improve security for this sprawling, open campus.

The renovation also corrects life safety and fire egress issues, including exterior door replacement and minor partition work. A delayed egress system at private exterior doors was implemented.

A|E Works' security design embodies vigilance while addressing the importance of privacy and dignity in this patient-centered environment.

# **Plaquemines Parish Detention Facility**

Davant, LA

# **Key Project Features:**

- Construction Cost: \$111 Million
- Technology Cost: \$4.5 million
- Size: 205,635 SF
- Perimeter security and access controls for critical correctional campus



#### Services Provided:

Key proposed team members provided electrical engineering and security and technology consulting prior to joining A | E Works.

# Date of Completion:

In construction, est. completion Summer 2014

## Owner:

Plaquemines Parish

# Reference:

Chief Anthony Smith 104 Avenue G Belle Chasse, LA 70037 Phone: (504) 394-0649

This project represents the experience of proposed Project Manager, Anthony Frassetta, PSP, RCDD and Lead Engineer, Scott Kraynak, PE prior to joining A | E Works. This new correctional facility project replaces Plaquemines Parish's existing correctional facility damaged by Hurricane Katrina with a new permanent correctional facility, constructed 22 feet above sea level. The new facility will provide services and support for 870 inmates.

To meet both budget limitations and challenging FEMA above sea-level elevation improvement requirements, the design minimizes the site footprint with a single building facility. In an effort to minimize operational costs, security enhancements are also a critical aspect of this project.

The housing of inmates warrants infrastructure development that is significantly different than typical modular construction due to operational and security requirements. Key security features for outdoor recreation, housing, office and other support areas include the following:

- TCP/IP video surveillance
- PLC based HMI touch screens
- · Biometric door access control

Moreover, of note and relevance to this project, a critical aspect of the correctional campus design includes dual perimeter fencing with intrusion detection and automatic license plate recognition (ANPR) systems.

This project demonstrates the ability of Proposed Project Manager, Anthony Frassetta, to plan and deploy perimeter security and technology measures for challenging, critical campus settings.

# Martinsburg VA Medical Center Renovate 200 Row

Martinsburg, WV

# **Key Project Features:**

- 24/7 healthcare campus
- 28,700-GSF fast-track project
- Critical life safety systems
- Outdoor gardens and controlled access
- A|E Works and Lai teaming experience
- \$4.1M construction cost



A|E Works: Prime, Architecture and MEP Engineering, Post Design Services

Lai: landscape architecture

# **Date of Completion:**

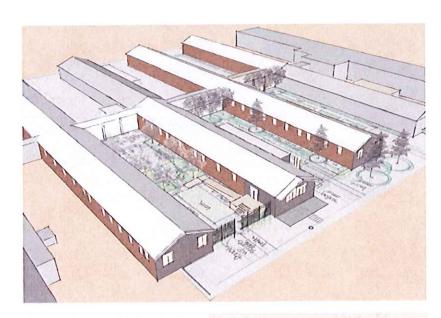
Design Completed February 2012

#### Owner:

Martinsburg VA Medical Center

## Reference:

Ms. Kathryn Leatherman Martinsburg VA Medical Center 510 Butler Avenue Martinsburg, WV 25405 304.263.0811





This critical VA Medical Center project completely renovates several existing buildings to provide new domiciliary buildings for this 24/7 healthcare campus.

In addition, the design includes several outdoor gardens to enhance the experience of visitors and patients. The design of these gardens includes controlled access as it is critical for patient safety and participation in the program. The A|E Works team's design of the landscape and site elements carefully blends into the existing campus settings.

# USAR and ARNG Readiness Center Department of Military and Veterans Affairs

Williamsport, PA

# **Key Project Features:**

- Threat and vulnerability assessment
- Security upgrades including perimeter protection
- · Government campus
- 74,900-SF of new facilities

#### Services Provided:

Security and technology consulting

# Date of Completion: 2010

# References:

Dept .of Military and Veterans Affairs, Bureau of Military Construction and Engineering Fort Indiantown Gap Bldg 0-10, Annville, PA

- Richard Regan SBCT Project Team 717 861 8869 c-rregan@pa.gov
- LTC Andrew Gregorio (717) 861-6882 adegrego@pa.gov

James Orr III, LTC, AR, PAARNG Branch Chief, AT/FP (J-34), Joint Force Headquarters - PA National Guard (717)861-9729 james.e.orr@us.army.mil

This project represents the experience of proposed Project Mgr, Anthony Frassetta, PSP, RCDD prior to joining A|E Works.





On September 8, 2005, the Defense Base Closure and Realignment Commission recommended certain realignment actions, including the closing of the existing US Army Reserve Center and Organizational Maintenance Shop in Williamsport, PA. The Commission recommended that these facilities be consolidated and relocated into a new Armed Forces Reserve Center on a 15.2 acre tract of land in Williamsport, owned by the Commonwealth of PA Department of Military and Veterans Affairs, and used by the PA Army Reserve National Guard.

A threat and vulnerability assessment was conducted in preparation of the new 67,000-SF 2-story Readiness Center and 7,900-SF maintenance and storage building. The security assessment determined the appropriate security mitigation applications. The proposed systems included:

- Perimeter Protection
- Data, VoIP and SIPRNET communications network
- Electronic Access Control
- Fire Alarm
- Mass Notification Systems

The design and installation of all systems was based on the following appropriate design criteria, among others:

- FEMA 426, Reference Manual to Mitigate Terrorist Attacks Against Buildings
- FEMA 430, Site and Urban Design for Security Guidance against Potential Terrorist
- Unified Facilities Criteria, DOD Minimum Antiterrorism Standards for Buildings (UFC 4-010-01)
- Unified Facilities Criteria, Selection and Application of Vehicle Barriers (UFC 4-022-02)
- Unified Facilities Criteria, Design and O&M: Mass Notification Systems (UFC 4-021-01)
- Department of the Army, Technical Guide for the Integration of Secret Internet Protocol Router Networks (SIPRNET)

This project demonstrates the ability and expertise of Anthony Frassetta, who served as the security and technology specialist on the overall design team for this project, to work with multiple state, local and federal agencies to design and deploy security systems that meet all security requirements on a critical government campus.

# Philadelphia VA Medical Center Campus Wide Security Upgrades

Philadelphia, PA

# **Key Project Features:**

- Critical 24/7 campus
- Threat & vulnerability assessment, study and design
- Design will upgrade entire 20 building campus and perimeter: 1.5M-SF
- Security / Access control:
  - Door access
  - Duress alarm
  - Exterior cameras
  - Police mobile radios
- Est. construction cost: \$7.5M

#### Services Provided:

A|E Works: Full A/E Services, including security consulting

# Date of Completion:

2012 – in final study phases now with design to follow

## Owner:

Philadelphia VA Medical Center

# References:

Phil Hatsis and Brian Murdock Philadelphia VA Medical Center 3900 Woodland Avenue Philadelphia , PA 19104 215-823-5800







This project upgrades the campus perimeter security and keying system at the Philadelphia VA Medical Center, which includes over 20 buildings and 1.5 million sq. ft.

As a part of this phased project which involves study and design phases, A|E Works is investigating various systems for securing rooms and making recommendations to the VA Medical Center Staff. The campus presents many challenges as it is on an open, downtown site with many angles. To combat such challenges, the study and investigation phase includes an involved threat and vulnerability assessment with the design phase to incorporate study recommendations.

# United Communications Center (UCC), at St. Elizabeth's Hospital Campus

Washington, DC

# **Key Project Features:**

- Historic Campus Setting
- Site Security & Stormwater Treatment mutually addressed in design
- GSA Security Level C
- 11.8 Acres
- \$43 Million

# Services Provided:

Lai - Landscape Architecture

# Date of Completion:

2006

# Owner / Reference:

John Miller, AIA Vice President DMJMH+N Architects 1525 Wilson Boulevard Suite 1100 Arlington, VA 22209 703.807.2817





The landscape design for the United Communications Center along Martin Luther King Avenue provides an opportunity to enhance the St. Elizabeth's Hospital Campus image. The design is a clear, functional layout which responds to the existing conditions, and insightfully addresses future connections to the surrounding context.

Martin Luther King Avenue is elevated to the level of a prominent boulevard through the new tree plantings and aesthetically-pleasing sidewalk treatments. The simple combination of a berm and a swale allows objectives of both site security, and stormwater treatment to be mutually and gracefully addressed along sidewalk spaces.

Indigenous canopy and understory of tree plantings reforest the slopes that were affected by site grading along the perimeter of the site. A low curved wall, generous walkways, and a layering of flowering trees create a public entry point and gathering place for visitors.

# **Chatham County Detention Center Expansion**

Savannah, GA

# **Key Project Features:**

- Construction Cost: \$71
   Million (Total); \$8.5
   Million (Technology
   Budget)
- Size: 400,000 SF
- Number of beds: 2,360
   Expandable to 3,128



Key proposed team members provided security and technology consulting prior to joining A | E Works.

# **Date of Completion:**

Fall 2013

# Owner:

Chatham County

## Reference:

Parveez Yousuf
Project Engineer and
Construction Manager
Chatham County
Engineering Dept.
124 Bull Street, Room 430
Savannah, GA 31412
(912) 652-7800
pyousuf@chathamcounty.org

This project represents the prior experience of proposed Project Manager, Anthony Frassetta, PSP, RCDD prior to joining A | E Works.



Image credit: www.chathamsheriff.org

With limited capacity of 1,224 beds, the existing Chatham County Detention Center is dealing with severe overcrowding. Given these conditions, the planning study/needs assessment suggested a two-phase expansion to support the ultimate 20-year projected need for 3,128 beds.

The needs assessment also determined that all existing electronic security and data\telecommunications systems had reached a point of obsolesce or failure which could seriously jeopardize the security and safety of the staff, occupants and the surrounding community. Subsequently, Phase I of the project called for the complete upgrade of all existing security management components, including electronic door locks, perimeter fence and gate systems.

As part of the building design team, Mr. Frassetta served as the security and technology specialist. His key objective was to design, document and implement all security system upgrades while maintaining the facility's operational integrity and preserving the safety and security of the staff and community.

Key technology applications included the following:

- 23 PLC Based Networked Security Management Control Processors w/Redundant CPU's
- 28 HMI Touch Screen Terminals
- 2 Independent Fault Torrent (Token Ring) Security Network Backbones
- 2 Independent Perimeter Fence Detection Systems
- 11 Controlled Vehicle Gates w/dual phased volumetric motion detection
- 700+ TCP\IP surveillance cameras w/integrated automatic camera callup and 24/7 recording
- 1300+ Biometric Access Controlled door readers to reduce HMI traffic and improve occupant movement
- 175 Video Visitation Stations w/ standalone visitation building and remote off site community access

The following chart summarizes A|E Works' experience and qualifications with mission critical and security projects.

# A | E Works and Consultants Public Safety Experience

Project	24/7 Critical Environment	Security/ Access Control	Phased Project	Threat & Vulnerability Assessments	Integration of Technology	Public Spaces	Sustainable Design	Flexible Design
Bath VA Medical Center Campus Wide Security Upgrades	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
US Embassy at Abuja	<b>V</b>	<b>✓</b>			<b>V</b>	<b>✓</b>		<b>✓</b>
Altoona VA Medical Center Campus Security Upgrades	✓	<b>✓</b>		✓	<b>✓</b>	✓		<b>√</b>
Martinsburg VA Renovate Row	<b>V</b>	1			<b>✓</b>	1	<b>✓</b>	<b>✓</b>
United Communications Center	<b>✓</b>	<b>✓</b>	/		<b>✓</b>	<b>✓</b>		<b>✓</b>
Philadelphia VA Campus Security Upgrades	1	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>

# A|E Works' Staff Relevant Experience prior to joining A|E Works

Project	24/7 Critical Environment	Security/ Access Control	Phased Project	Threat & Vulnerability Assessments	Integration of Technology	Public Spaces	Flexible Design
Administrative Office U.S. Courts (AOUSC) Security Consulting	<b>/</b>	<b>✓</b>		✓	<b>✓</b>	✓	<b>✓</b>
Plaquemines Parish Detention Facility	<b>V</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
USAR and ARNG Readiness Center	<b>✓</b>	<b>✓</b>		<b>✓</b>	<b>V</b>	<b>✓</b>	<b>✓</b>
Chatham Co. Detention Center	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	✓	<b>✓</b>

Our team offers expertise in government, mission critical and security design, a proven ability to deliver projects ontime and on-budget, a local presence and regional knowledge of working in West Virginia. We are ready to mobilize on behalf of the WV GSD to provide a design that responds to requirements for this Campus Capitol Security project. Provide References for the last five clients for whom the firm has conducted projects of a similar size and type; include the name of the contact person along the addresses, telephone numbers and short description of the project.

In all of our projects the key to success is the relationships that we establish with our clients and our partnering firms. The level of cooperativeness that is needed on projects relies heavily on each entity working together to get the job done in a way that is beneficial to everyone involved. We have seen the value of this by the many projects that have come about from our previous work.

Of note, in a recent A|E Works performance survey, a client commented that we cooperated with the Government in providing flexible, proactive and effective recommended solutions to critical solutions during projects.

A|E Works prides itself on its reputation and that of its principals. As registered professional architects and engineers, we are committed to our profession and providing design solutions that meet client needs.

A|E Works is actively involved in the design community. The article shown to the right showcases our team's innovative lighting capabilities, which were paramount in helping to write the recent City of Pittsburgh Lighting Ordinance which targets minimum performance requirements in conjunction with 2008 Pittsburgh Climate Action Plan.

A|E Works' Principals are also active in the community and technical profession. Owner and Principal, Michael Cherock has served on the Centennial Board for the Soldiers and Sailors Museum in Pittsburgh, acts as the technical resource for the City of Pittsburgh's LED Street lighting project and established curriculum for the IEC's Professional Electrician's Program for the Centre County Electrical Contractors Association.

Prioritizing community and professional involvement has translated into the firm's success and recognition as a Best Places to Work in Western Pennsylvania for 2010.

"Lighting designers and architects at AE Works Ltd. in Station Square use simulations like this one to see how lighting will disperse on a development project."



Pittsburgh Post Gazette, Sunday, August 28, 2011

# **5 Highlighted Recent Client References**

Bath VA Medical Center Campus Security Upgrades (A|E Works, 2011 – 2012): Threat and vulnerability
assessment and design for security upgrade for 11 buildings on this 200 acre 24/7 government medical
campus.

Reference: Jacob Yoder 76 Veterans Avenue Bath, NY 14810 607-664-4000

Altoona VA Medical Center Security Upgrade (A|E Works, 2011): This project updates the existing security
at the James E. VanZandt Medical Center by introducing new systems and improving existing technology
that directly impact overall security operations at over 7,000 points.

Reference: Jerry Metzgar 2907 Pleasant Valley Blvd Altoona, PA 16602 814.943.8164 ext. 7246

Philadelphia VA Medical Center Security Upgrade (A|E Works, 2011-2012): This project upgrades the
keying system at the Philadelphia VA Medical Center, which includes over 20 buildings and 1.5 million sq. ft.
Also of note, A|E Works is also currently working on a laboratory renovation at the Philadelphia VA Campus.

References: Phil Hatsis and Brian Murdock 3900 Woodland Avenue Philadelphia, PA 19104 215-823-5800

 Martinsburg VA Medical Center Renovate 200 Row (2011-2012, A|E Works and lai): Renovations and campus landscape and site upgrades to meet healing and security requirements.

> Reference: Ms. Kathryn Leatherman 510 Butler Avenue Martinsburg, WV 25405 304.263.0811

 Abuja Embassy (lai): Landscape design for the US Embassy site in Abuja, Nigeria to create a formal and welcoming appearance to visitors, dignitaries, and the staff while creating and strengthening usable outdoor space in a secure, campus-like setting.

> Reference: Alan DeVergie US Department of State Overseas Building Operations Washington, DC 20522 703.875.4548

• United Communications Center at St. Elizabeth's Hospital Campus (lai, 2006): Landscape design to accommodate the new building and enhance the historical campus with a secure, yet accessible design.

Reference: John Miller, AIA Vice President DMJMH+N Architects 1525 Wilson Boulevard Suite 1100 Arlington, VA 22209 703.807.2817

The design team outlined in this proposal offers extensive qualifications designing secure, welcoming and flexible designs for high-profile government campuses. With national security credentials and experience ranging from medical campus security and embassies to State Capitol security assessments and public safety facility design, our team will provide the service needed and design solutions fitted to meet the requirements of this Capitol Campus Security project.





